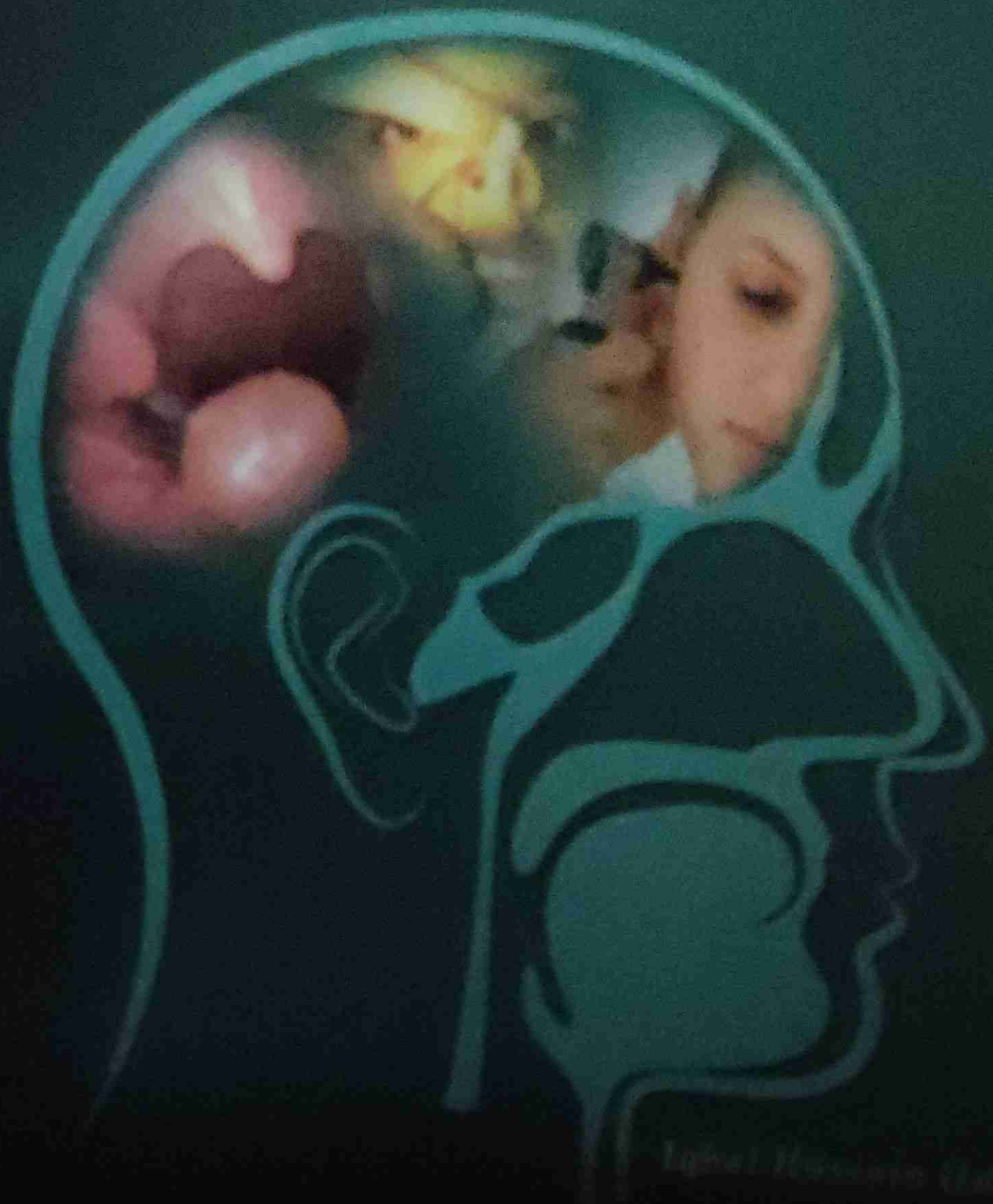
OSCE Stations in Oto-Rhino-Laryngology



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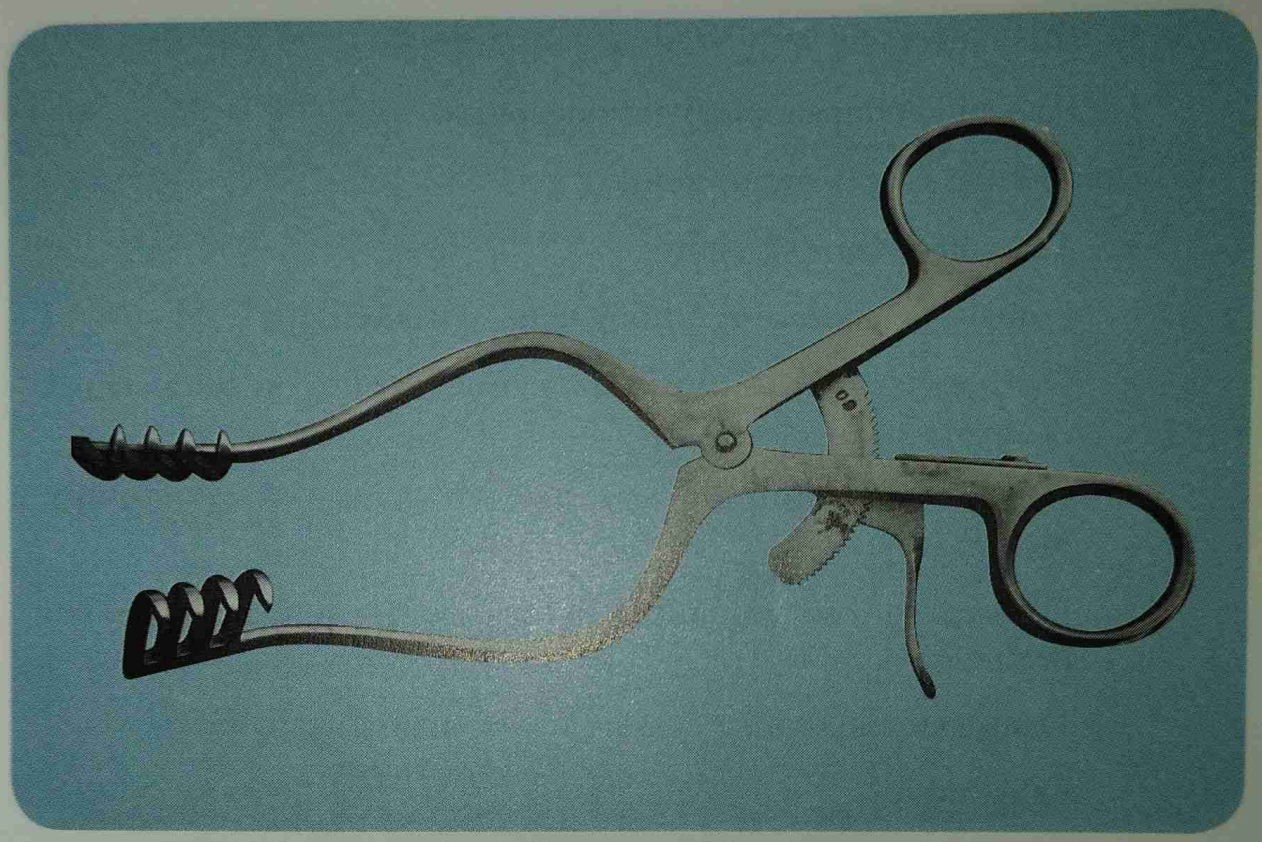
SECTION 01

EAR

OSCE Station No 01



Observe the above photograph of an instrument and answer the following questions:

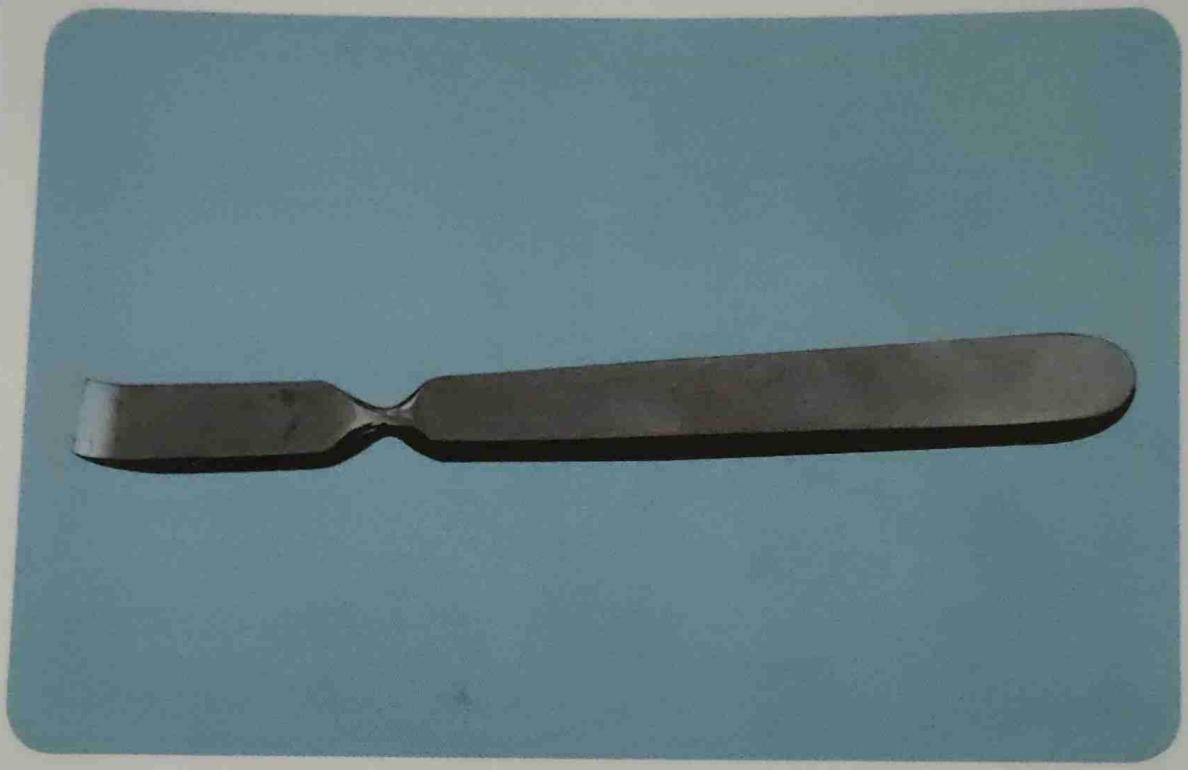
Questions

1. Name the given instrument.
2. Name the surgical operations where this instrument is used.
3. Enlist complications of these operations.

Answers

1. Name of the instrument:
   - Mollison's self retaining Mastoid Retractor.
2. Operations:
   - Mastoidectomy.
   - Post-aural tympanoplasty/myringoplasty.
3. Complications of mastoidectomy:
   - Anaesthetic complications.
   - Damage to facial nerve leading to facial paralysis.
   - Damage to dural plate and dura mater leading to intra-cranial complications.
   - Damage to sinus plate and sigmoid sinus causing profused bleeding.
   - Damage to ossicles and ossicular joints causing conductive deafness.
   - Damage to internal ear causing sensori-neural deafness.
   - Labyrinthitis.
   - Other complications like wound infection, peri-chondritis, non-healing wound etc may occur.

OSCE Station No 02



Observe the above photograph of an instrument and answer the following questions:

Questions

1. Name the given instrument and what is its use?
2. Name three surgical operations where this instrument is used.
3. What are the different surgical operations to treat chronic suppurative otitis media?

Answers

1. Name of the instrument:
   - Farabeuf Periosteal Elevator.
   - It is used to elevate the periosteum from the underlying bone.
2. Operations:
   - Mastoidectomy.
   - Caldwell Luc's operation.
   - Mandibulectomy.
3. Surgical operations for chronic suppurative otitis media:
   - Following are the different surgical operations used to treat chronic suppurative otitis media depending on the extent and nature of the disease:
     a. Canal wall up procedures: It includes:
        - Simple mastoidectomy.
        - Posterior tympanotomy or combined approach tympanoplasty.
     b. Canal wall down procedures: It includes:
        - Modified radical mastoidectomy.
        - Radical mastoidectomy.
        - Atticotomy.

OSCE Station No 03

Observe the above photograph of an instrument and answer the following questions:

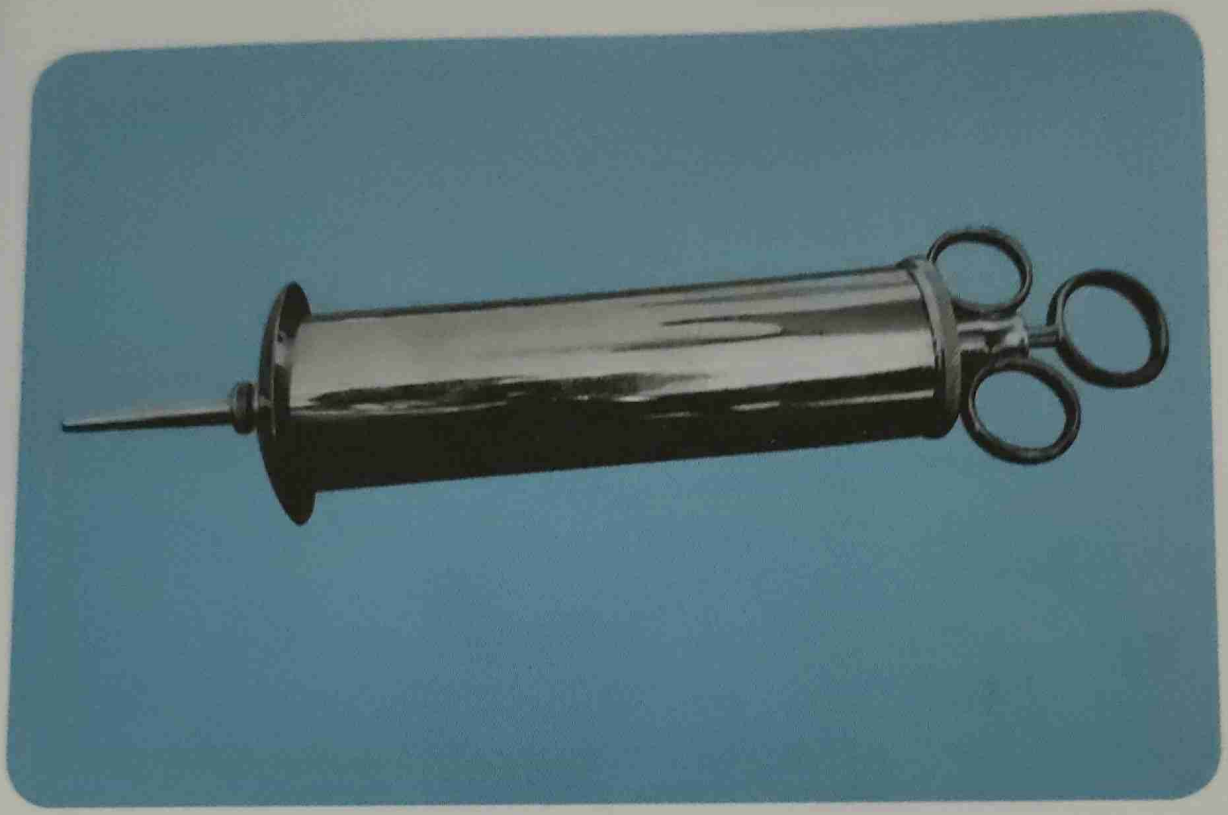
Questions

1. Name the given instrument.
2. What is the use of this instrument?
3. What is the purpose of the hole which is marked by the arrow?
4. Name any three diseases that can be diagnosed by this instrument.

Answers

1. Name of the instrument:
   - Otoscope.
2. Use of the instrument:
   - An Otoscope is used to see the tympanic membrane and the external auditory canal under magnification.
3. Purpose of the hole:
   - A tubing with a bulb can be attached through this hole. Mobility of the tympanic membrane is assessed by increasing air pressure in the external auditory canal by compressing the bulb.
4. Three diseases diagnosed by this instrument are:
   i. Acute suppurative otitis media by seeing the congested and bulging tympanic membrane.
   ii. Chronic suppurative otitis media by seeing the discharge, perforation or cholesteatoma.
   iii. Otitis media with effusion by seeing the retracted tympanic membrane or fluid level in the middle ear through the tympanic membrane.

OSCE Station No 04



Observe the above photograph of an instrument and answer the following questions:

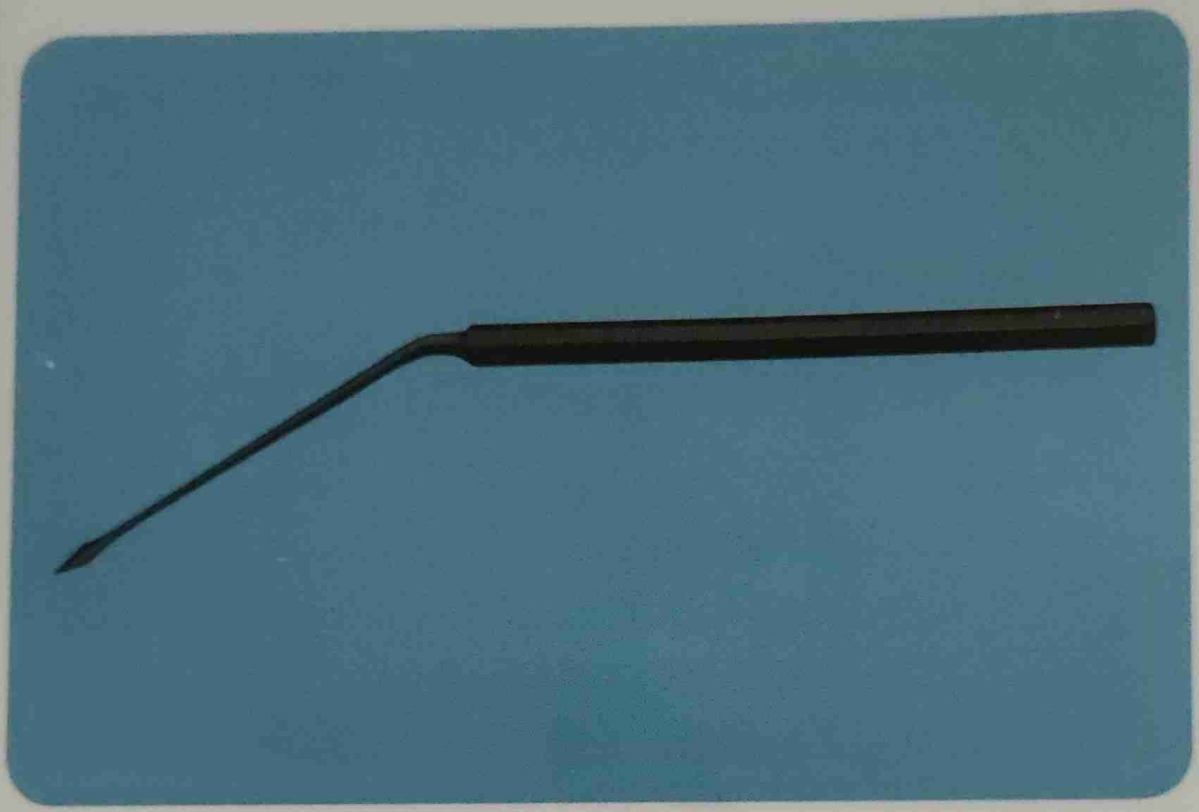
Questions

1. Name the given instrument.
2. What is the use of this instrument?
3. Outline the steps of the procedure where this instrument is used.

Answers

1. Name of the instrument:
   - Ear Syringe.
2. Use of the instrument:
   - It is used for performing syringing of the external auditory canal. Syringing of the ear is indicated mostly for the removal of wax but sometimes for removal of foreign body or fungal debris from the external auditory canal.
3. Procedure:
   - Ear syringe is filled with normal saline at body temperature.
   - Saline is warmed to body temperature to prevent thermal stimulation of the labyrinth, which will cause vertigo to the patient.
   - Light is focused on the ear and pinna is pulled upwards and backwards in adult patients.
   - Nozzle of the syringe is introduced in the external auditory canal directing to postero-superior wall of the external auditory canal.
   - Saline is pushed on the postero-superior wall, which runs over the eardrum and flows out along the floor.
   - The returned fluid is collected in a kidney tray held under the ear.

OSCE Station No 05



Observe the above photograph of an instrument and answer the following questions:

Questions

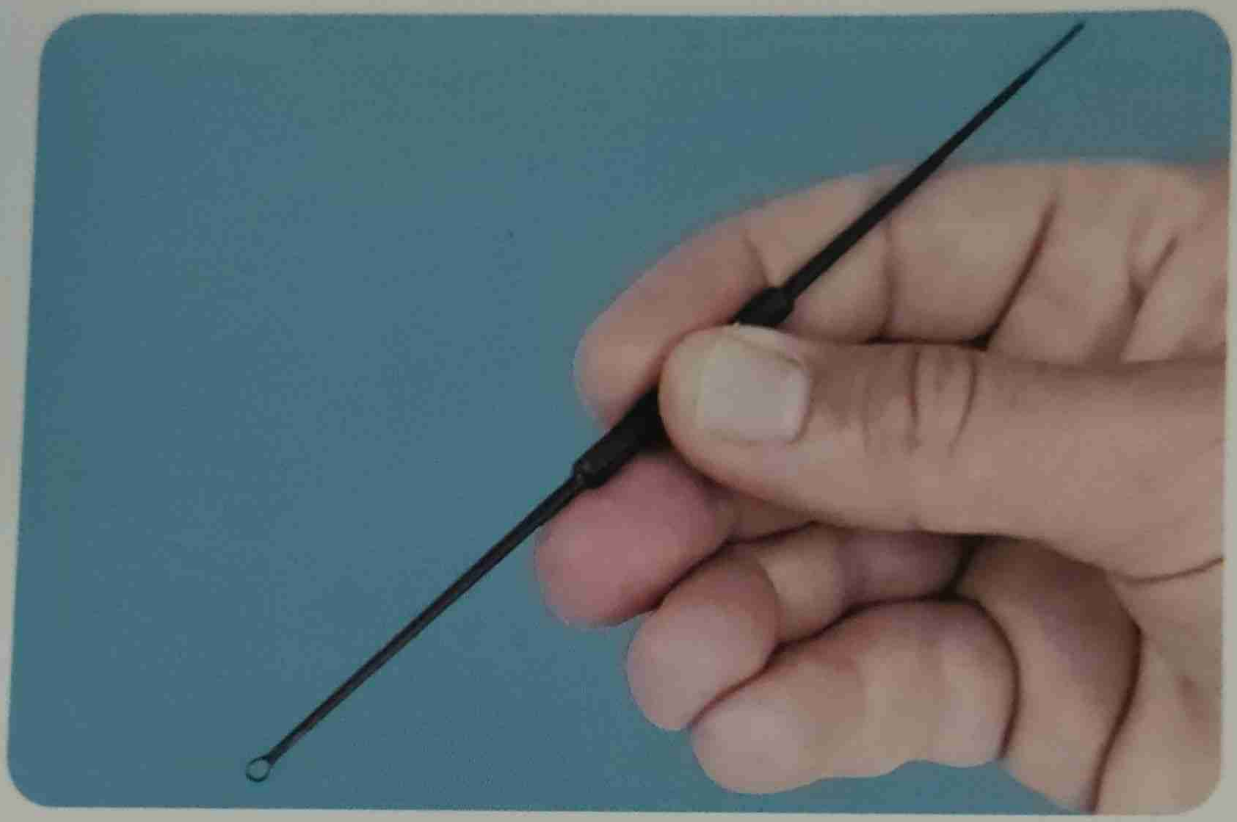
1. Name the given instrument.
2. What is the use of this instrument?
3. Name two conditions or diseases in which this instrument is used.
4. Briefly outline the procedure in each of these two conditions.

Answers

1. Name of the instrument:
   - Myringotomy knife or Myringotome.
2. Use of the instrument:
   - It is used for performing myringotomy. It is the surgical operation where an incision is made on the tympanic membrane to drain pus or fluid from the middle ear.
3. Two conditions:
   - Acute suppurative otitis media where pus is present in the middle ear with bulging tympanic membrane.
   - Otitis media with effusion where fluid is present in the middle ear.
4. Procedure:
   i. Acute suppurative otitis media:
      - In ASOM, myringotomy is done to drain pus from the middle ear.
      - Incision is given in the postero-inferior quadrant.
      - Radial or circumferential incision is given in this condition.

   ii. Otitis media with effusion:
      - In otitis media with effusion, myringotomy is done to drain fluid in the middle ear.
      - Incision is made in the antero-inferior quadrant.
      - Radial incision is given.
      - Grommet is also inserted in this condition.

OSCE Station No 06



Observe the above photograph of an instrument and answer the following questions:

Questions

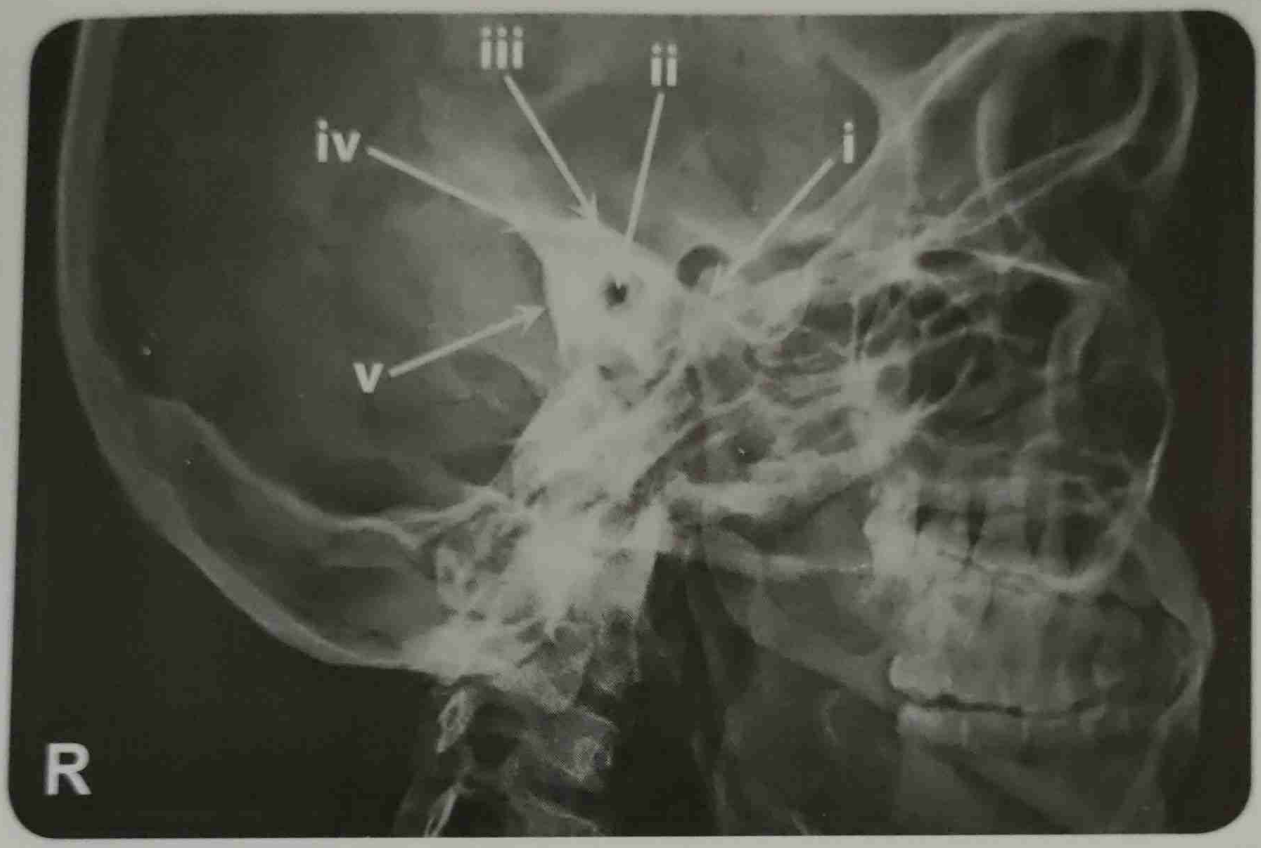
1. Name the given instrument.
2. Name four uses of this instrument.
3. Which end of the instrument is used for each of the above mentioned uses?

Answers

1. Name of the instrument:
   - Jobson Horne Probe or Ring Probe or Ear Probe.
2. Four uses of the instrument:
   - Cleaning of external auditory canal.
   - Probe test in the nose and ear.
   - Removal of foreign bodies from the nose and ear.
   - Removal of hard and impacted wax from the ear.
3. Use of ends of the instrument:
   i. Pointed end:
      - Cleaning of external auditory canal.
      - Probe test in the nose and ear.

   ii. Rounded (ring) end:
      - Removal of foreign bodies from the nose and ear.
      - Removal of hard and impacted wax from the ear.

OSCE Station No 07



Observe the above photograph of a radio-imaging film and answer the following questions:

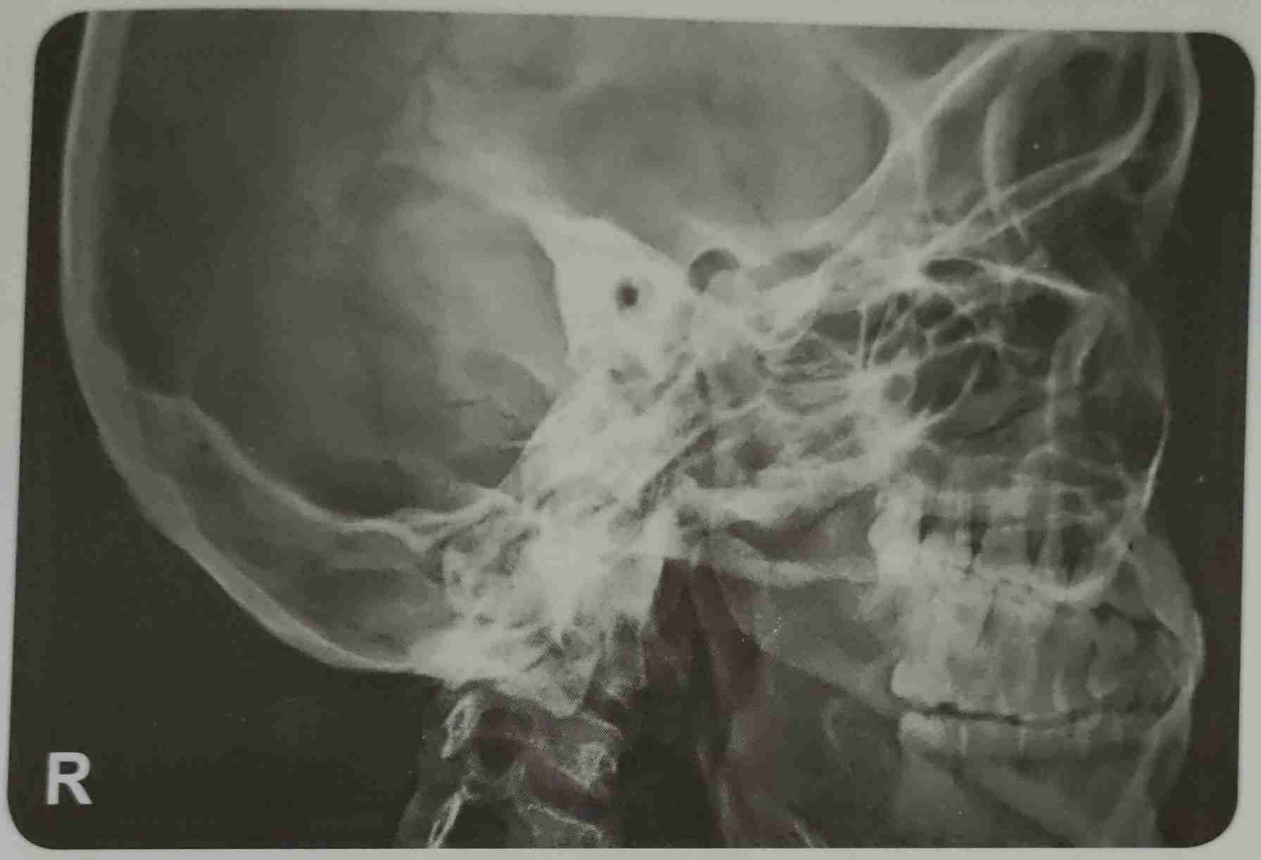
Questions

1. Name the type, site and view of the above film.
2. Name the structures labelled as i to v.

Answers

1. Name of the film:
   - Type: Plain X-ray.
   - Site: Mastoid region.
   - View: Oblique lateral or Law's view.
2. Names of the structures:
   i. Condyle of the mandible and temporo-mandibular joint.
   ii. External auditory canal.
   iii. Dural plate. This is the roof of the mastoid antrum and the middle ear.
   iv. Sino-dural angle.
   v. Sinus plate. This is the bone between the mastoid air cells and the sigmoid sinus.

OSCE Station No 08



Observe the above photograph of a radio-imaging film and answer the following questions:

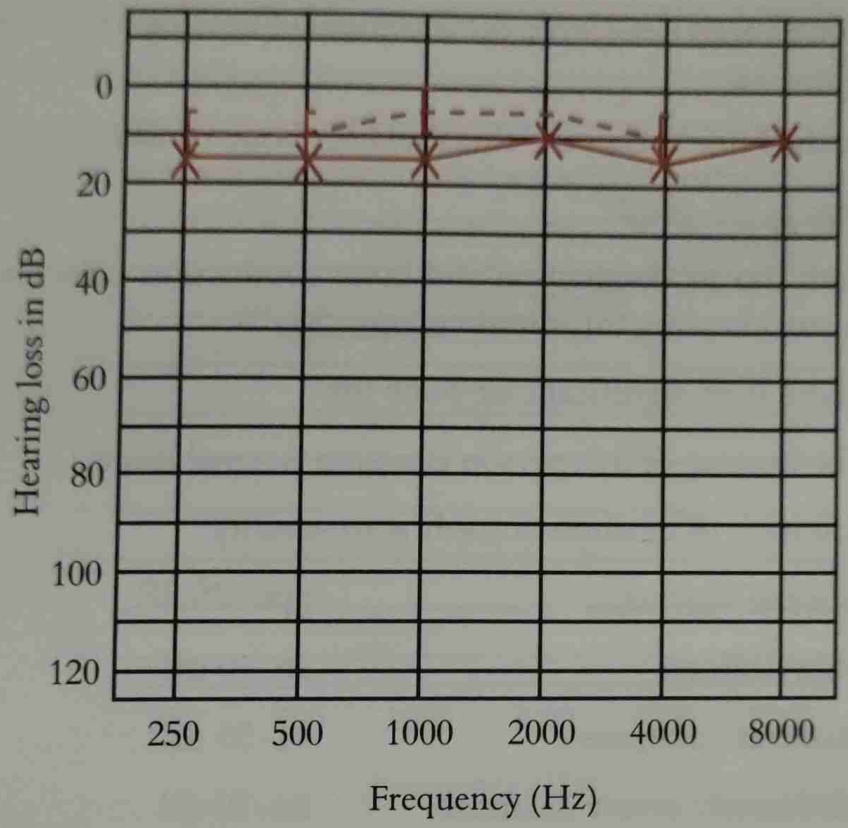
Questions

1. Name the type, site and view of the above film.
2. Outline the findings visible in the above film.
3. What is the most likely disease in which such findings are present?
4. Name the surgical operation required in this condition.

Answers

1. Name of the film:
   - Type: Plain X-ray.
   - Site: Mastoid region.
   - View: Oblique lateral or Law's view.
2. Findings visible in the film:
   - There is loss of the normal mastoid air cells.
   - Whole of the mastoid region is sclerotic.
   - Sinus plate and dural plate are present in its normal position.
   - There is no bone erosion or cavity in the mastoid.
3. Most likely disease:
   - These findings are seen in cases of chronic mastoiditis due to chronic suppurative otitis media-tubo-tympanic type without cholesteatoma.
4. Surgical operation:
   - Simple mastoidectomy or Canal wall up mastoidectomy is required in such cases with tympanoplasty.

OSCE Station No 09



Observe the above graph and answer the following questions:

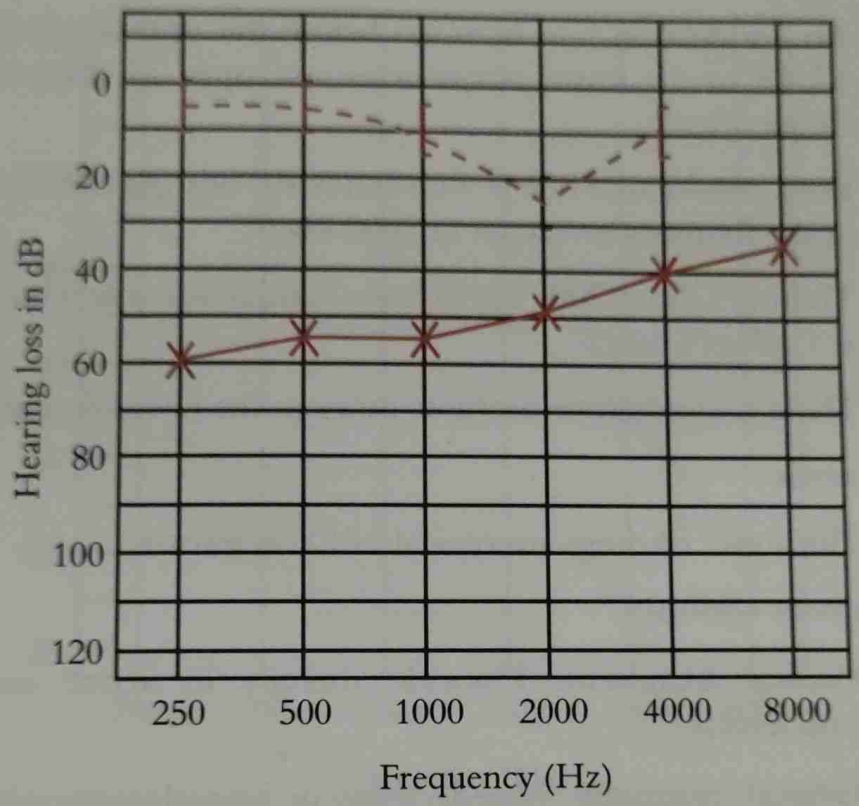
Questions

1. What is the name of this test/investigation?
2. What is the meaning of the two lines in the graph?
3. Describe the findings of this graph.
4. Outline the classification of deafness according to its severity.

Answers

1. Name of the test/investigation:
   - Pure tone audiometry/pure tone audiogram.
2. Meanings of two lines:
   - Continuous line shows the threshold of hearing for air conduction in that ear.
   - Dashed line shows the threshold for bone conduction in that ear.
3. Findings in the graph:
   - Both the air conduction and bone conduction lines are showing normal hearing threshold i.e. upto 25 dB.
   - There is no significant air-bone gap.
   - The hearing of this person is within normal limits.
4. Classification of deafness according to severity:
   - Normal hearing — upto 25 dB
   - Mild deafness — 26–40 dB
   - Moderate deafness — 41–55 dB
   - Moderately severe deafness — 56–70 dB
   - Severe deafness — 71–90 dB
   - Profound/stone deafness — > 91 dB

OSCE Station No 10



Observe the above graph and answer the following questions:

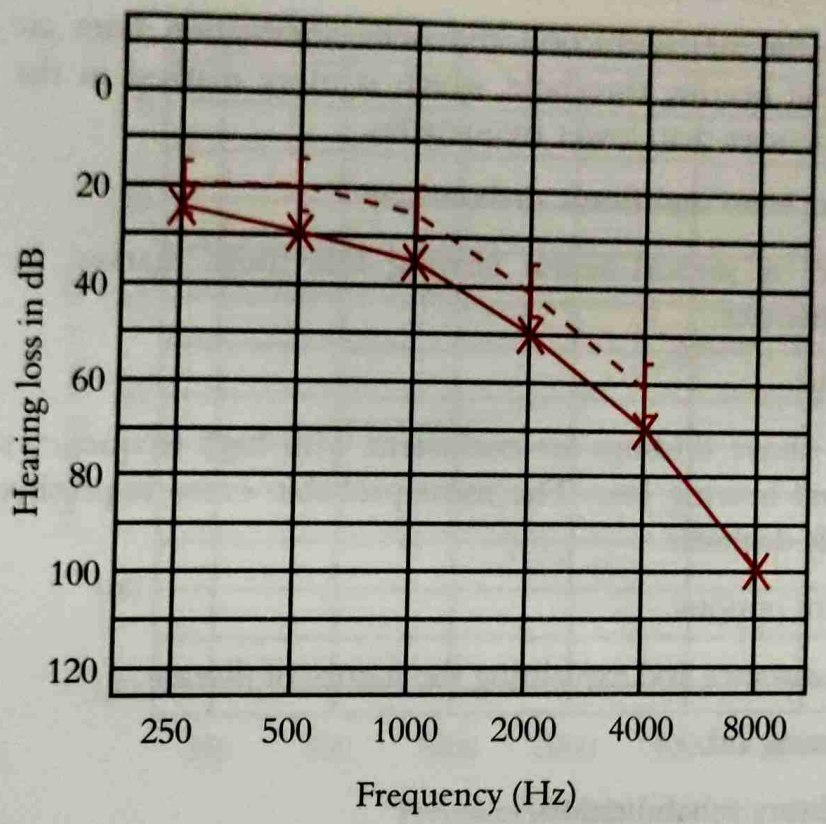
Questions

1. What is the name of this test/investigation?
2. Describe the findings of this graph.
3. What is the diagnosis in this patient?
4. Enlist the treatment options available in this case.

Answers

1. Name of the test/investigation:
   - Pure tone audiometry/pure tone audiogram.
2. Findings in the graph:
   - Air conduction line is much below the normal threshold upto 60 dB in the lower frequencies and upto 35 dB in the higher frequencies.
   - Bone conduction line is within normal hearing threshold in most of the frequencies except in 2000 Hz.
   - There is a dip at 2000 Hz in bone conduction line which is known as Carhart's notch.
   - There is conductive deafness more in the lower frequencies.
3. Diagnosis:
   - The above findings are typical of Otosclerosis.
4. Treatment options:
   - Medical treatment: Fluoride therapy in active and cochlear otosclerosis.
   - Surgical treatment: Stapedectomy or Stapedotomy with insertion of a prosthesis/piston.
   - Hearing aid and rehabilitation: In cases where surgery is not possible.

OSCE Station No 11



Observe the above graph of a 68-year-old man. Answer the following questions:

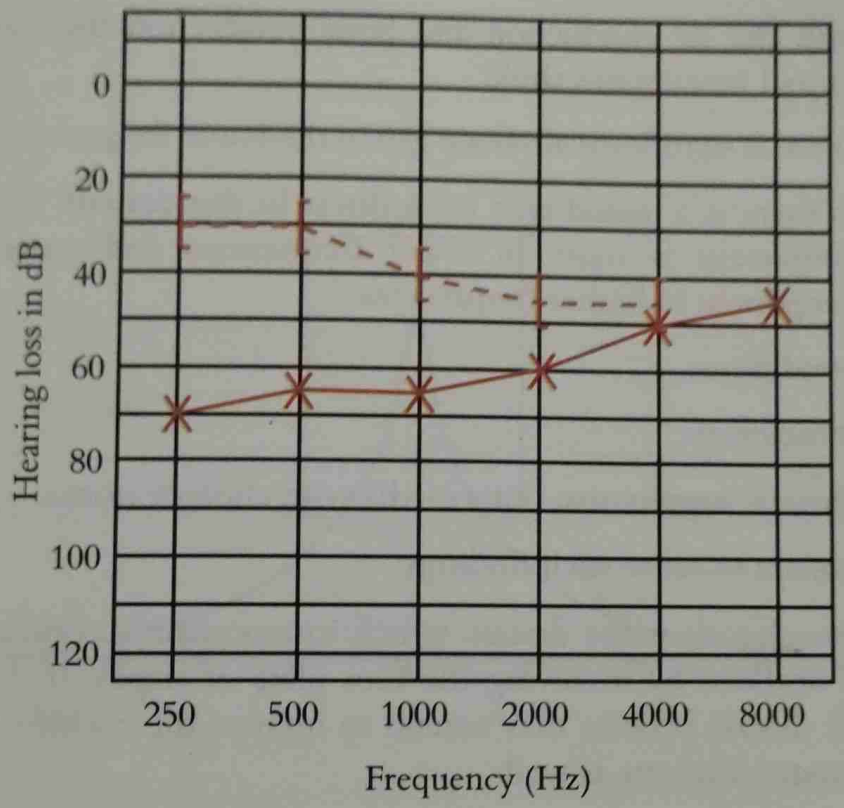
Questions

1. What is the name of this test/investigation?
2. Describe the findings of this graph.
3. What is the diagnosis in this patient?
4. Enlist the treatment options available in this case.

Answers

1. Name of the test/investigation:
   - Pure tone audiometry/pure tone audiogram.
2. Findings in the graph:
   - Both the air conduction and bone conduction lines are below normal hearing threshold which is more marked in the higher frequencies than lower frequencies.
   - There is no significant air-bone gap.
   - There is sensori-neural hearing loss more marked in higher frequencies.
3. Diagnosis:
   - The above findings are consistent with high frequency sensori-neural hearing loss. The most probable cause is presbycusis or senile deafness.
4. Treatment options:
   - Reassurance and explaining the nature of disease.
   - Hearing aid.
   - Auditory rehabilitation.
   - Lip reading.

OSCE Station No 12



Observe the above graph and answer the following questions:

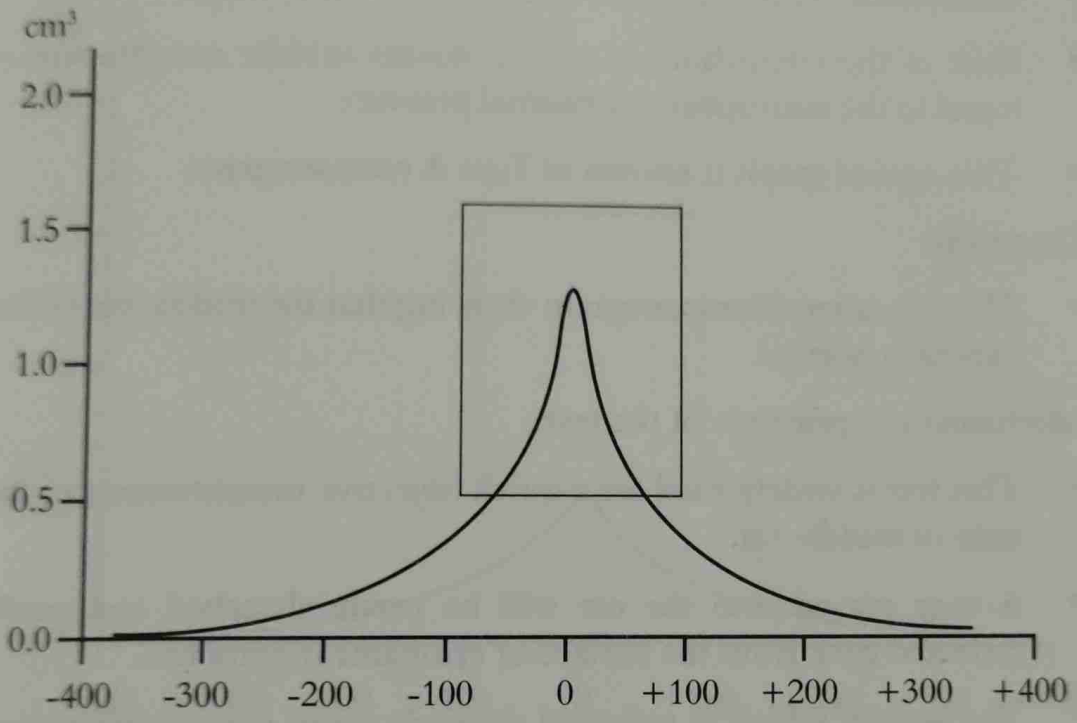
Questions

1. What is the name of this test/investigation?
2. What are the findings on this graph?
3. Enlist two conditions which can cause such findings.
4. Outline the mechanisms in both of these conditions to cause such findings.

Answers

1. Name of the test/investigation:
   - Pure tone audiometry/pure tone audiogram.
2. Findings in the graph:
   - Both the air conduction and bone conduction lines are below normal hearing threshold.
   - There is significant air-bone gap in the lower frequencies.
   - So there is a mixed type of deafness in this patient. Conductive component is more in lower frequencies and sensori-neural component in higher frequencies.
3. Two conditions:
   - Otosclerosis.
   - Chronic suppurative otitis media with cholesteatoma.
4. Mechanism to cause such findings:
   - Otosclerosis is the disease which causes mainly conductive type of deafness by involving the foot plate of stapes. In later stages the disease process may extend to involve the cochlea leading to sensory deafness as well.
   - Chronic suppurative otitis media with cholesteatoma (attico-antral type) is the disease which causes mainly conductive deafness by involving the middle ear, perforation of the tympanic membrane and erosion of the ossicles. Sometimes cholesteatoma may erode the bone of the otic capsule and causes sensory deafness.

OSCE Station No 13



Observe the above graph and answer the following questions:

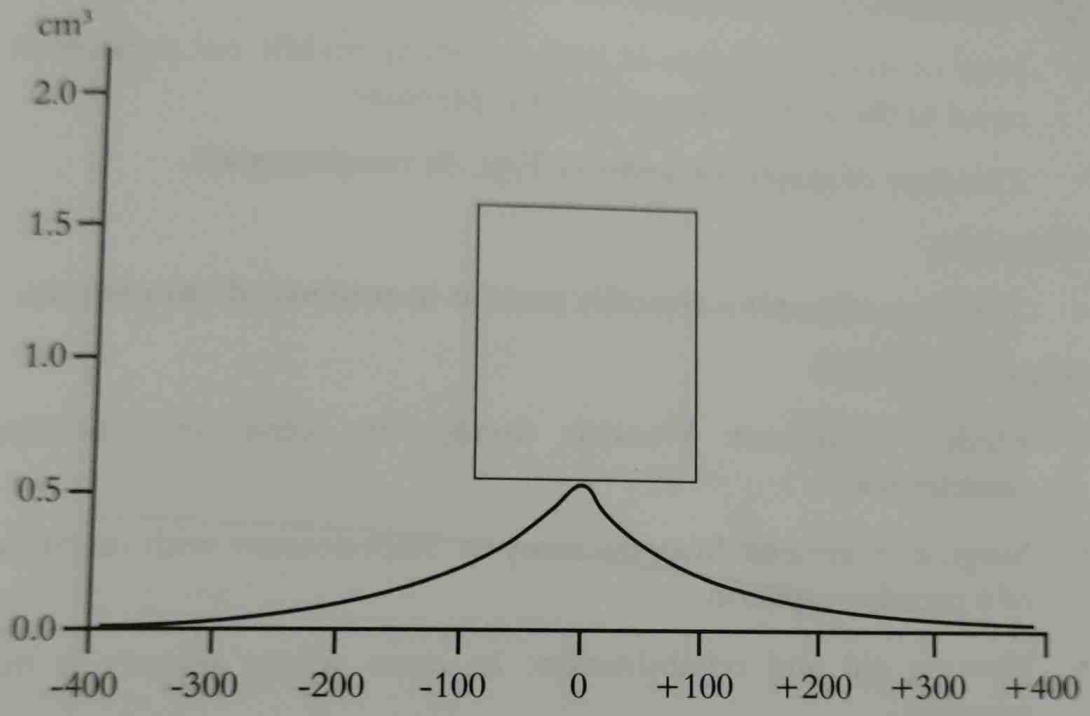
Questions

1. What is the name of this test/investigation?
2. What are the findings on this graph?
3. What is your diagnosis in this patient?
4. Outline the mechanisms or principle of this test.

Answers

1. Name of the test/investigation:
   - Impedance audiometry/tympanometry/tympanogram.
2. Findings in the graph:
   - Compliance of the middle ear is within normal range.
   - Peak of the compliance is at 0. It means middle ear pressure is equal to the atmosphere or normal pressure.
   - This type of graph is known as Type A tympanogram.
3. Diagnosis:
   - This is a normal tympanogram showing that the middle ear of the patient is normal.
4. Mechanism or principle of the test:
   - This test is widely used for a quick objective measurement of the state of middle ear.
   - A tone played into the ear will be partly absorbed and partly reflected back from the surface of tympanic membrane.
   - The sound, which is reflected depends upon the compliance of the tympanic membrane. If the tympanic membrane is stiff, more of the sound is reflected as compared to tympanic membrane which is mobile.
   - The tympanic membrane can be made artificially stiffer by changing pressure in the external auditory canal.
   - Changes in the acoustic impedance is automatically plotted as a graph against the pressure changes.
   - The compliance is maximum when the pressure in the external auditory canal is equal to the middle ear pressure.

OSCE Station No 14



Observe the above graph and answer the following questions:

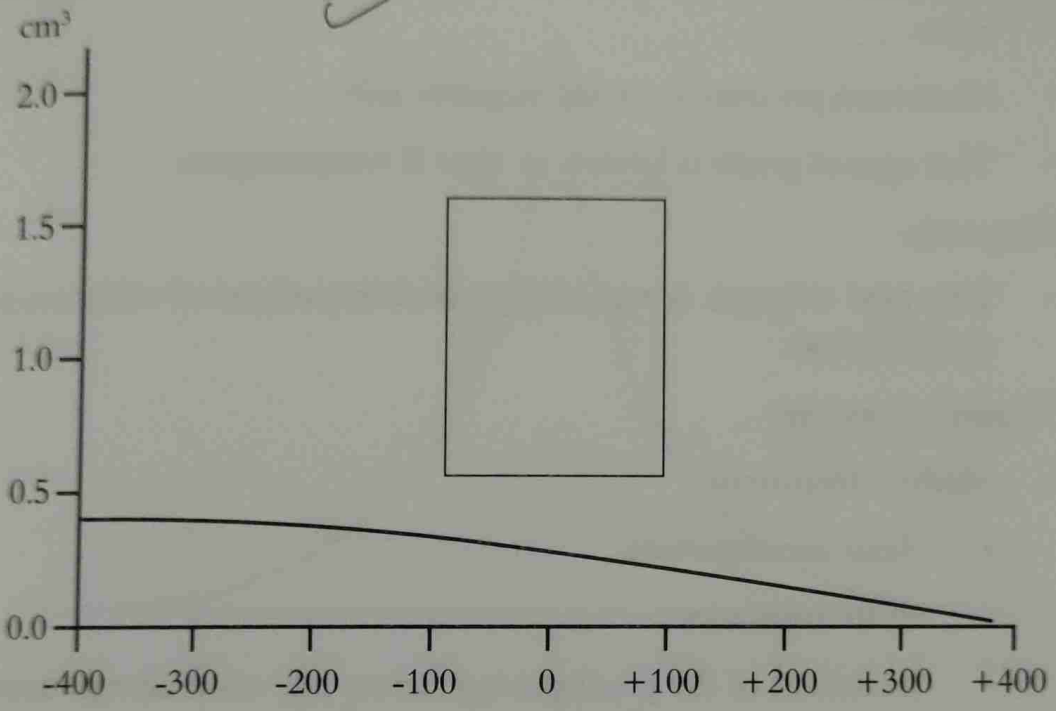
Questions

1. What is the name of this test/investigation?
2. What are the findings on this graph?
3. What is your diagnosis of this patient?
4. Enlist the treatment options available for this condition.

Answers

1. Name of the test/investigation:
   - Impedance audiometry/tympanometry/tympanogram.
2. Findings in the graph:
   - Compliance of the middle ear is reduced.
   - Peak of the compliance is at 0. It means middle ear pressure is equal to the atmosphere or normal pressure.
   - This type of graph is known as Type As tympanogram.
3. Diagnosis:
   - This type of graph is typically present in patients of otosclerosis.
4. Treatment options:
   - Medical treatment: Fluoride therapy in active and cochlear otosclerosis.
   - Surgical treatment: Stapedectomy or Stapedotomy with insertion of a prosthesis/piston.
   - Hearing aid and rehabilitation: In cases where surgery is not possible.

OSCE Station No 15



Observe the above graph and answer the following questions:

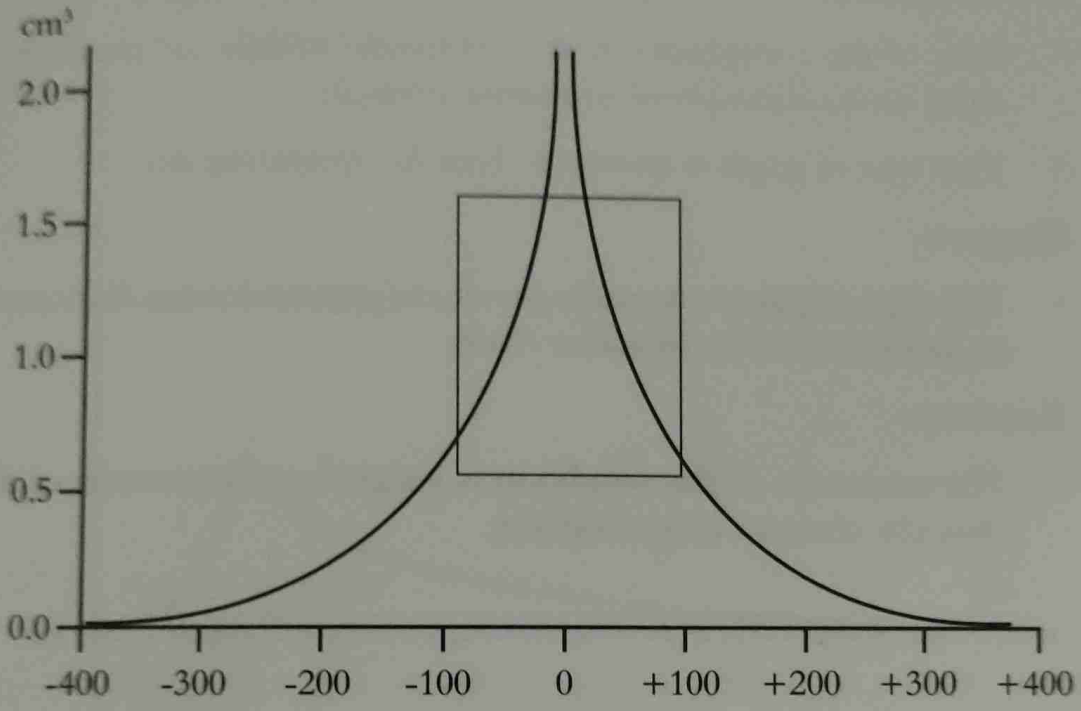
Questions

1. What is the name of this test/investigation?
2. What are the findings on this graph?
3. What is your diagnosis in this patient?
4. Enlist the treatment options available for this condition.

Answers

1. Name of the test/investigation:
   - Impedance audiometry/tympanometry/tympanogram.
2. Findings in the graph:
   - Compliance of the middle ear is reduced with a more or less flat curve.
   - Maximum pressure is on the negative side.
   - This type of graph is known as Type B tympanogram.
3. Diagnosis:
   - This type of graph is typically present in patients of otitis media with effusion.
4. Treatment options:
   - Medical treatment:
     - Nasal decongestant.
     - Steam inhalation.
     - Treatment of the predisposing factors like nasal allergy, upper respiratory tract infection or enlarged adenoids etc.
   - Surgical treatment:
     - Myringotomy and grommet insertion.

OSCE Station No 16



Observe the above graph and answer the following questions:

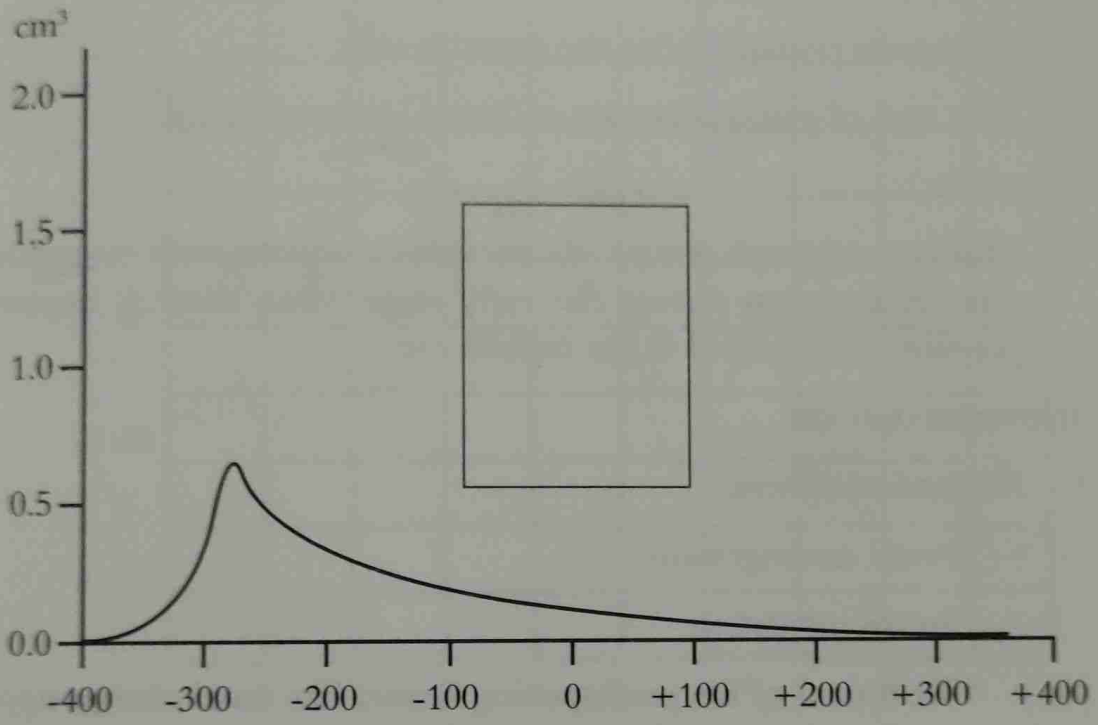
Questions

1. What is the name of this test/investigation?
2. What are the findings on this graph?
3. What is your diagnosis in this patient?
4. What is the treatment for this condition?

Answers

1. Name of the test/investigation:
   - Impedance audiometry/tympanometry/tympanogram.
2. Findings in the graph:
   - Compliance of the middle ear is increased with a high peak.
   - Peak of the compliance is at 0. It means middle ear pressure is equal to the atmosphere or normal pressure.
   - This type of graph is known as Type A□ tympanogram.
3. Diagnosis:
   - This type of graph is typically present in patients having dislocation or disruption of the ossicular chain.
4. Treatment:
   - The treatment of this condition is surgical reconstruction of the ossicular chain or tympanoplasty.

OSCE Station No 17



Observe the above graph and answer the following questions:

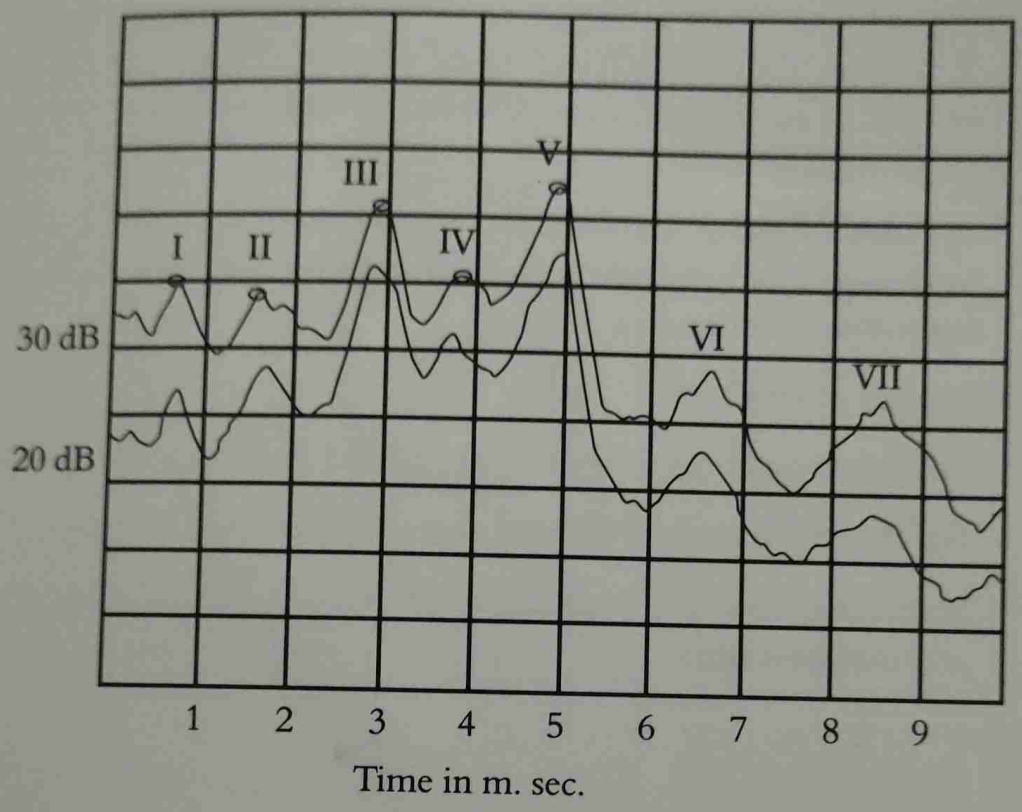
Questions

1. What is the name of this test/investigation?
2. What are the findings on this graph?
3. What is your diagnosis in this patient?
4. Enlist the treatment options available for this condition.

Answers

1. Name of the test/investigation:
   - Impedance audiometry/tympanometry/tympanogram.
2. Findings in the graph:
   - Compliance of the middle ear is reduced with a low peak.
   - Maximum pressure is on the negative side.
   - This type of graph is known as Type C tympanogram.
3. Diagnosis:
   - This type of graph is typically present in patients with eustachian tube dysfunction during the early stage when there is negative pressure but no fluid in the middle ear.
4. Treatment options:
   - Medical treatment:
     - Nasal decongestant.
     - Steam inhalation.
     - Treatment of the predisposing factors like nasal allergy, upper respiratory tract infection or enlarged adenoids etc.
   - Surgical treatment: Rarely required
     - Myringotomy and grommet insertion.

OSCE Station No 18



Observe the above graph and answer the following questions:

Questions

1. What is the name of this test/investigation?
2. What is the significance of different waves in this test?
3. Enlist three important conditions where this test is indicated.

Answers

1. Name of the test/investigation:
   - Brainstem Evoked Response Audiometry (BERA)/ Auditory Brainstem Response (ABR).
2. Significance of different waves:
   - This test is the measurement of physiological electrical activity occurring in the neurons of inner ear and brainstem in response to a sound stimuli.
   - A series of waves are obtained among them wave I, III and V are very important regarding their amplitude, absolute latencies and inter-wave latencies.
3. Indications of this test:
   - For determination of hearing threshold in infants or newborns.
   - For determination of hearing threshold in cases of malingering.
   - Screening tool for evaluation of retro-cochlear pathology like acoustic neuroma.

OSCE Station No 19

Observe the photograph of the right ear of a 16-year-old girl and answer the following questions:

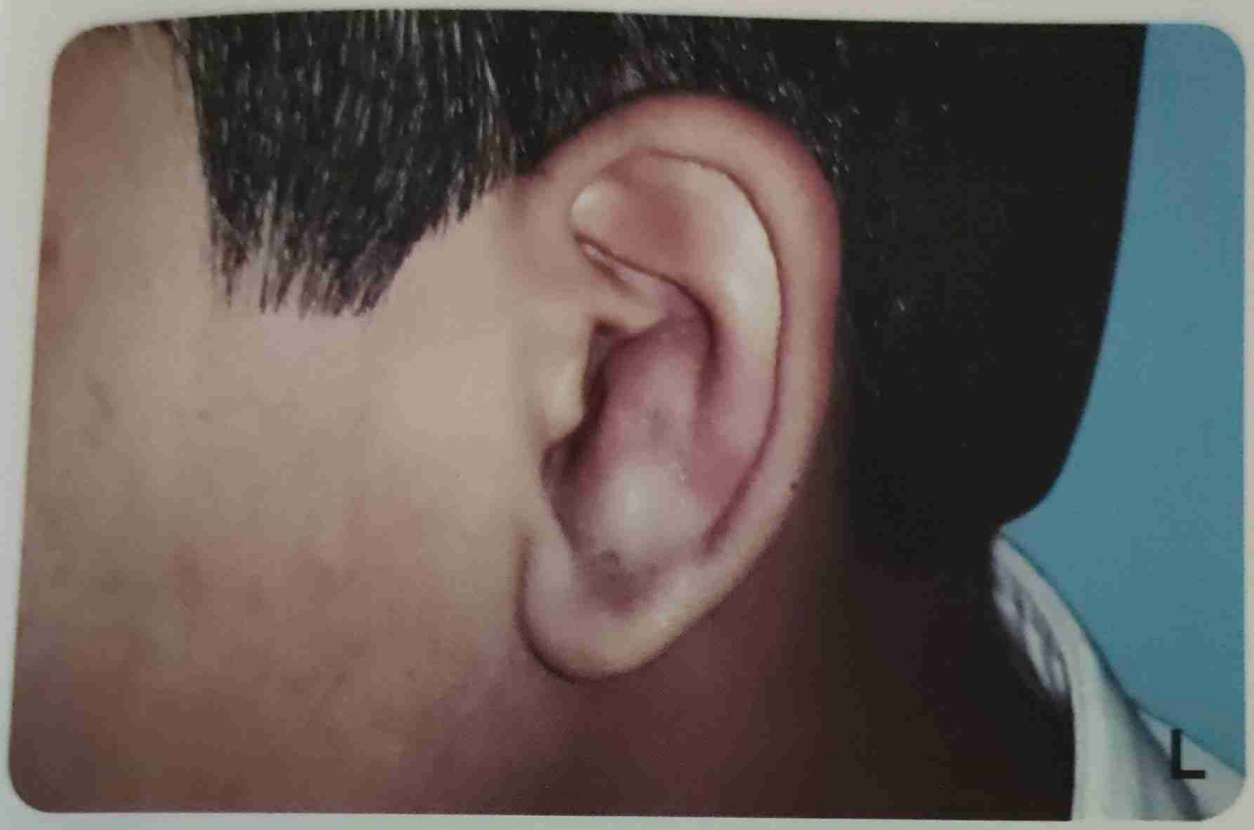
Questions

1. What is the pathology visible in the above photograph?
2. What is the aetiology of this condition?
3. How will you treat this condition?
4. What complications can arise if this is not treated properly?

Answers

1. Pathology:
   - Pre-auricular sinus.
2. Aetiology of this condition:
   - This is a congenital condition.
   - It is due to failure of complete fusion between the first and second branchial arch elements in the development phase of auricle.
3. Treatment of this condition:
   - Complete surgical excision of the sinus with its whole tract.
4. Complications of this condition:
   - Recurrent infection in the sinus.
   - Cyst formation.

OSCE Station No 20



Observe the photograph of the left ear of a 14-year-old boy and answer the following questions:

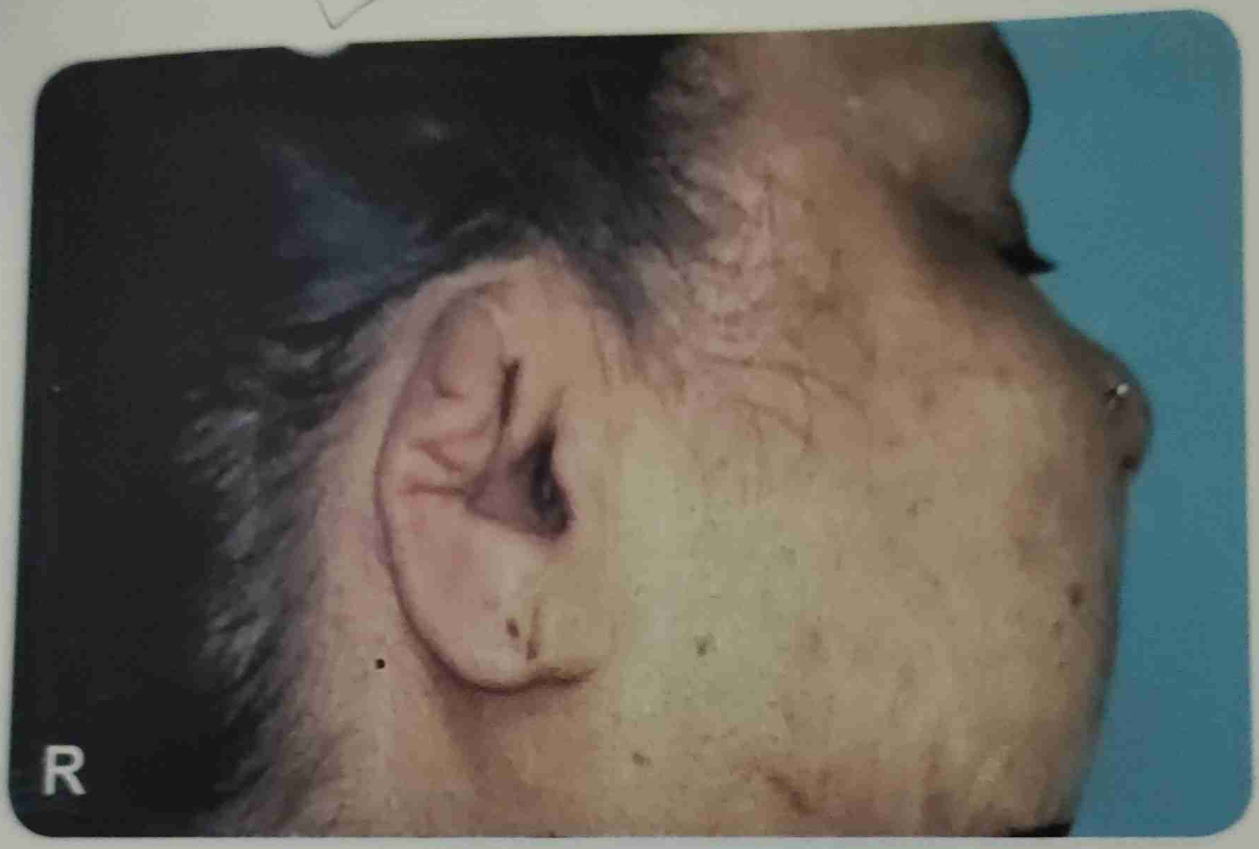
Questions

1. What is the most likely diagnosis?
2. What is the mechanism of formation of this lesion?
3. What is the main complication of this disease?
4. How will you treat this patient?

Answers

1. Diagnosis:
   - Haematoma of the pinna.
2. Mechanism of formation:
   - Collection of blood under the perichondrium due to rupture of sub-perichondrial blood vessels usually after trauma to pinna.
3. Main complication:
   - Necrosis of the cartilage, leading to deformed ear/pinna called cauliflower ear.
4. Treatment:
   - Aspiration with a wide bore needle.
   - Incision and drainage if aspiration is difficult or not possible.
   - Prevent re-accumulation of the blood by:
     - Placement of drain
     - Pressure bandage
     - Application of quilting sutures with splints, buttons or bolsters.
   - Prophylactic antibiotic.

OSCE Station No 21



Observe the photograph of the right ear of a 45-year-old lady and answer the following questions:

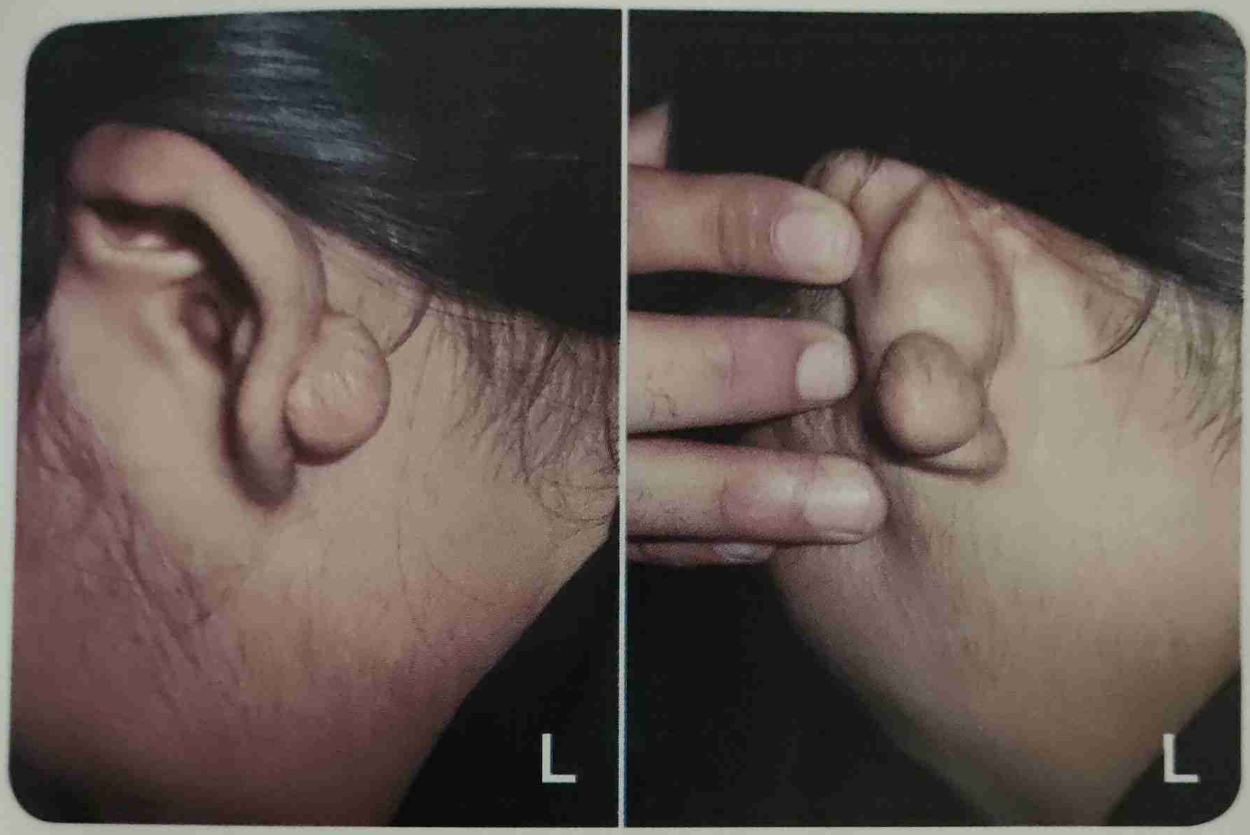
Questions

1. What is the most likely diagnosis?
2. What are the synonyms for this condition?
3. What is the mechanism of formation of this lesion?
4. How can you prevent this condition?

Answers

1. Diagnosis:
   - Deformed pinna.
2. Synonyms:
   - Cauliflower ear.
   - Boxer's ear.
   - Wrestler's ear.
3. Mechanism of formation:
   - Collection of blood under the perichondrium due to rupture of sub-perichondrial blood vessels usually after trauma to the pinna.
   - Necrosis of the cartilage occurs if the haematoma is not drained early, leading to deformed pinna.
4. Prevention of this condition:
   - This condition can be prevented by early and proper treatment of the haematoma.
   - Aspiration or incision and drainage should be done immediately.
   - Re-accumulation should be prevented by pressure dressings, splints, buttons etc.

OSCE Station No 22



Observe the photograph of the left ear of a 22-year-old girl who had history of ear pricking six months back. Answer the following questions:

Questions

1. What is the most likely diagnosis?
2. What is the mechanism of formation of this lesion?
3. How will you treat this condition?
4. How can you prevent its re-formation?

Answers

1. Diagnosis:
   - Keloid of the pinna after ear pricking.
2. Mechanism of formation:
   - When there is an excessive local tissue response to injury, a dysregulated deposition of extracellular matrix and collagen occurs resulting in either a hypertrophic scar or keloid.
   - They have a tendency to persist at the site of injury and recur after surgical excision.
   - Keloid formation can occur sporadically in patients of all skin types, but patients with darker skin and positive family histories are at increased risk.
3. Treatment:
   - Treatment is the surgical excision of the keloid.
4. Prevention:
   - It can be prevented by intra-lesional injection of steroid (triamcinolone) at the time of surgery and also repeatedly at regular intervals for some time.

OSCE Station No 23

Observe the photograph of the right ear of a 22-year-old man who presented with severe pain in the ear for last two days. Answer the following questions:

Questions

1. What is the most likely diagnosis?
2. What is the causative factor for this condition?
3. What are the predisposing factors for this condition?
4. How will you treat this condition?

Answers

1. Diagnosis:
   - Boil in the ear.
2. Causative factor:
   - Staphylococcus aureus.
3. Predisposing factors:
   - Diabetes mellitus.
   - General debilitating diseases.
   - Scratching of the ears.
   - Swimming in dirty water.
4. Treatment:
   - Medical treatment:
     - Antibiotic against staphylococcus aureus like amoxicillin with clavulanic acid.
     - Analgesic and antipyretic drug like paracetamol.
     - Local wicks application with 10% ichthammol glycerine or antiseptic ointment.
   - Surgical treatment: if not responding or if boil is large
     - Incision and drainage.
     - Incision is given along the long axis of external auditory canal.

OSCE Station No 24

Observe the otoscopic photograph of the right ear of a 22-year-old man who presented with severe itching in the ear for last 10 to 12 days. Answer the following questions:

Questions

1. What is the most likely diagnosis?
2. What are the causative organisms for this condition?
3. What are the predisposing factors for this condition?
4. How will you treat this condition?

Answers

1. Diagnosis:
   - Otomycosis or fungal infection of the external auditory canal.
2. Causative factor:
   - Aspergillus: nigar, albus and flavus.
   - Candida albicans.
3. Predisposing factors:
   - Tropical or sub-tropical climate.
   - Swimming in dirty water.
   - Continuous presence of discharge in the external auditory canal due to chronic otitis media.
4. Treatment:
   - Regular dry mopping or suction cleaning of the external auditory canal.
   - Local application of antifungal ear drops or lotion like clotrimazole.
   - Antibiotics if there is super added secondary bacterial infection.

OSCE Station No 25

Observe the otoscopic photograph of the left ear of a 20-year-old girl who presented with pain in the ear for last one day. Answer the following questions:

Questions

1. What is the most likely diagnosis?
2. What is the most likely causative organisms for this condition?
3. How will you treat this condition?
4. What is the prognosis of this condition?

Answers

1. Diagnosis:
   - Bullous myringitis or otitis externa haemorrhagica.
2. Causative factor:
   - Influenza virus is the most likely causative organism for this condition as it is mostly seen in influenza epidemics.
3. Treatment:
   - Mainly symptomatic for pain.
   - Keep the ear dry.
   - Prophylactic antibiotic is given to prevent secondary infection.
4. Prognosis:
   - Overall prognosis is very good with complete recovery in most of the cases.

OSCE Station No 26

Observe the otoscopic photograph of the left ear of a 38-year-old man and answer the following questions:

Questions

1. What is the most likely diagnosis?
2. Enumerate the clinical features of this condition.
3. What is the treatment of this condition?

Answers

1. Diagnosis:
   - Impacted wax in the ear.
2. Clinical features:
   - No symptoms initially.
   - Fullness and blockage of the ear.
   - Pain and irritation in the ear.
   - Tinnitus sometimes.
   - Presence of golden brown to blackish brown material in the external auditory canal.
   - Tenderness if super added infection.
3. Treatment:
   - First softening of the wax if hard with softening agent like 2% soda bicarb in glycerin drops for few days.
   - Removal or cleaning of the wax by:
     - Syringing.
     - Suction cleaning.
     - Removal with hook or ring probe if hard.

OSCE Station No 27

Observe the above photograph showing some procedure is being carried out on the right ear of the patient. Answer the following questions:

Questions

1. Name this procedure.
2. Outline the method of performing this procedure.
3. Enumerate the complications that can occur during or after this procedure.

Answers

1. Name of the procedure:
   - Syringing of the ear.
2. Method of this procedure:
   - Ear syringe is filled with normal saline at body temperature (to prevent thermal stimulation of the labyrinth).
   - Light is focused on the ear and pinna is pulled upwards and backwards in adult patients.
   - Nozzle of the syringe is introduced in the external auditory canal directing to postero-superior wall.
   - Saline is pushed on the postero-superior wall, which runs over the eardrum and flows out along the floor.
   - The returned fluid is collected in a kidney tray held under the ear.
3. Complications:
   - Trauma to the external auditory canal.
   - Perforation of the eardrum.
   - Otitis externa.
   - Vertigo due to stimulation of the labyrinth.
   - Re-activation of the inactive otitis media.

OSCE Station No 28

Observe the otoscopic photograph of a 12-year-old boy who presented with severe earache for last two days. Answer the following questions:

Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis in this case?
3. Name the common micro-organisms responsible for this condition.
4. How will you treat this condition?

Answers

1. Findings on this photograph:
    - This is the tympanic membrane of the right side.
    - Tympanic membrane is markedly congested with obvious bulging which is more prominent in the posterior half.
    - Cone of light is absent.
    - Most likely pus is present in the middle ear.
2. Diagnosis:
    - The most likely diagnosis in this case is acute suppurative otitis media.
3. Common micro-organisms:
    - Streptococcus pneumoniae.
    - Haemophilus influenzae.
    - Moraxella catarrhalis.
    - Streptococcus pyogenes.
    - Staphylococcus aureus.
4. Treatment of this condition:
    - Medical treatment:
        - Antibiotic against the above mentioned micro-organisms.
        - Analgesic and antipyretic drug.
        - Nasal decongestant both topical and oral.
        - Aural toilet if discharge is present after rupture of the eardrum.
        - Antibiotic ear drops after rupture of the eardrum.
    - Surgical treatment:
        - Myringotomy in cases of marked bulging or if not improving with medical treatment.

OSCE Station No 29

Observe the otoscopic photograph of a 24-year-old lady who presented with recurrent discharge from the ear for last many years. Answer the following questions:

Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis in this case?
3. Name the common micro-organisms responsible for this condition.
4. How will you treat this condition?

Answers

1. Findings on this photograph:
   - This is the tympanic membrane of the left side.
   - A medium sized, central and oval shaped perforation is present involving the anterior half of the eardrum anterior to the handle of malleus. The anterior margin of the perforation is not touching the annulus tympanicus. The margins of the perforation are regular and thickened. Handle of malleus appears to be intact.
   - Profuse mucous discharge is coming out from the perforation.
   - Rest of the tympanic membrane is congested.
2. Diagnosis:
   - The most likely diagnosis in this case is chronic suppurative otitis media, tubo-tympanic type without cholesteatoma.
3. Common micro-organisms:
   - Gram-ve: Pseudomonas aeruginosa, Proteus, Escherichia coli and Klebsiella.
   - Gram+ve: Staphylococcus aureus and Streptococcus pyogenes.
   - Anaerobes: Bacteroides fragilis and anaerobic streptococcus.
4. Treatment of this condition:
   - Medical treatment: to control the infection by giving antibiotic against the above mentioned micro-organisms, antibiotic ear drops and aural toilet.
   - Surgical treatment:
     - To control infection: canal wall up or simple mastoidectomy.
     - To repair perforation: tympanoplasty.
   - Elimination of the source of infection in tonsils, adenoids or sinuses if present.

OSCE Station No 30

Observe the otoscopic photograph of a 30-year-old man who presented with discharge from the ear for the last one year. Answer the following questions:

Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis in this case?
3. How will you treat this condition?

Answers

1. Findings on this photograph:
   - This is the tympanic membrane of the right side.
   - A medium sized, oval shaped, marginal perforation is present involving the postero-superior quadrant and part of postero-inferior quadrant. The margins of the perforation have involved the margins of the eardrum.
   - Some whitish irregular mass is visible through the perforation, most likely cholesteatoma.
   - Handle of the malleus appears to be necrotic at its tip. Other ossicles are not visible.
   - Some fluid is collected with air bubbles in the antero-inferior part of the middle ear giving the tympanic membrane a bluish appearance.
2. Diagnosis:
   - The most likely diagnosis in this case is chronic suppurative otitis media, attico-antral type with cholesteatoma.
3. Treatment of this condition:
   - Treatment of this condition is mainly surgical.
   - Canal wall down mastoidectomy (either modified radical or radical mastoidectomy) is needed to clear cholesteatoma.
   - The other option is atticotomy for the limited disease in the middle ear only.
   - Tympanoplasty (including the reconstruction of the ossicles and tympanic membrane) is required after the clearance of the disease either in the same sitting or later on in second sitting.

OSCE Station No 31

Observe the photograph of the right ear of an 18-year-old girl and answer the following questions:

Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis in this case?
3. What clinical test is mandatory to perform in this patient and why?
4. How will you treat this condition?

Answers

1. Findings on this photograph:
   - A smooth, shiny and reddish mass is visible coming out from the external auditory canal. Which most probably appears to be a aural polyp.
   - Yellowish thick pus is also visible coming out between the walls of the external auditory canal and the polyp.
   - Skin of the surrounding area of the tragus and concha is oedematous and inflamed.
2. Diagnosis:
   - The most likely diagnosis in this case is Aural polyp due to chronic suppurative otitis media. Aural polyp is mostly associated with the tubo-tympanic type of CSOM and sometimes with attico-antral type.
3. Mandatory clinical test:
   - The mandatory clinical test is Probe test.
   - This test is performed to find out the attachment or pedicle of this swelling. In aural polyp, probe can be moved all around the swelling.
   - After probe test, pus if present on the probe, should be looked for smell, colour, consistency and blood.
4. Treatment:
   - First perform the aural polypectomy and look at the findings on the tympanic membrane under operating microscope.
   - Mastoidectomy is then required. Extent or type of mastoidectomy is decided on the findings of the disease process.
   - Tympanoplasty for reconstruction of the eardrum and ossicles.

OSCE Station No 32

Observe the photograph of a 38-year-old man who presented with facial asymmetry and ear discharge. Answer the following questions:

Questions

1. Describe the findings visible in this photograph and also mention which side of the face is affected?
2. What is the most likely associated disease in this patient?
3. How will you treat this condition?

Answers

1. Findings on this photograph:
   - There is deviation of the angle of the mouth on showing teeth.
   - Loss of naso-labial fold on the left side.
   - Loss of skin creases on left side of the forehead.
   - So there is complete facial nerve paralysis, most probably lower motor neuron type.
   - Facial palsy is present on the left side.
2. Associated disease:
   - The most likely associated disease is chronic suppurative otitis media, attico-antral type or with cholesteatoma. Cholesteatoma causes bone erosion and facial nerve is involved when it erodes the facial nerve canal.
3. Treatment:
   - The treatment of this condition is mainly surgical.
   - First mastoid exploration is done and all the disease is cleared.
   - The intra-tympanic part of the facial nerve is explored by opening the facial canal (facial nerve decompression).

OSCE Station No 33

Observe the otoscopic photograph of a 24-year-old man who presented with deafness for the last three to four months. Answer the following questions:

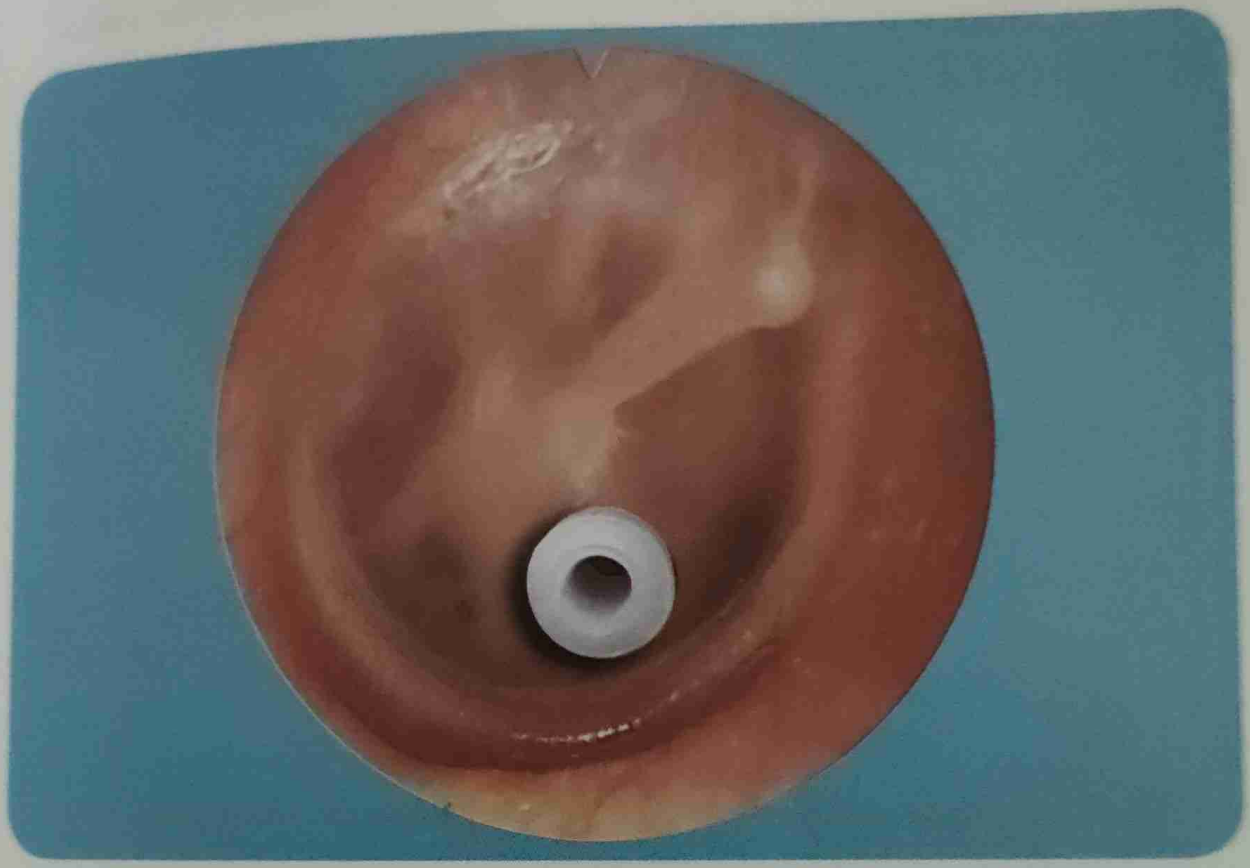
Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis in this patient?
3. What are the other synonyms for this condition?
4. Enlist two most important investigations required with its expected findings in this patient.

Answers

1. Findings on this photograph:
   - This is the otoscopic photograph of the right eardrum.
   - Fluid is present in the middle ear with fluid level visible on eardrum.
   - Cone of light is distorted.
   - Handle of malleus appears more horizontal and foreshortened. Lateral process of the malleus also appears to be more prominent.
   - Slight bulging is seen in the upper part of the eardrum.
2. Likely diagnosis:
   - Otitis media with effusion.
3. Synonyms:
   - Secretory otitis media.
   - Serous otitis media.
   - Mucinous otitis media.
   - Catarrhal otitis media.
   - Exudative otitis media.
   - Glue ear.
4. Two most important investigations:
   - Pure tone audiogram: It will show conductive hearing loss with air-bone gap, more pronounced in lower frequencies.
   - Tympanogram: It will show type B graph i.e. a flat curve.

OSCE Station No 34



Observe the otoscopic photograph of a 27-year-old man on which some surgical operation had been performed two months back. Answer the following questions:

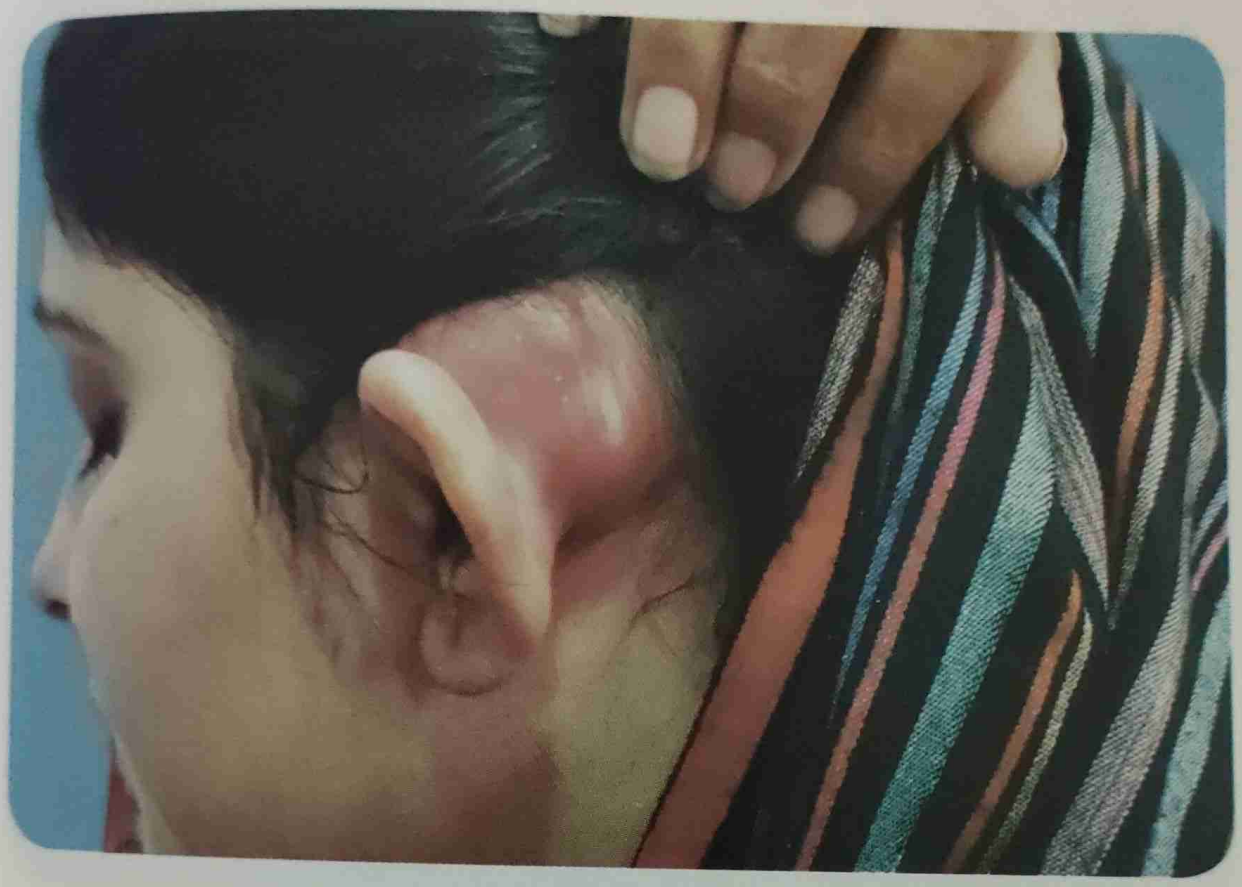
Questions

1. Describe the findings visible in this photograph.
2. Name the surgical operation done in this patient.
3. Name the condition for which this operation had been done.
4. Outline the steps of this surgical operation.

Answers

1. Findings on this photograph:
   - This is the otoscopic photograph of the right eardrum.
   - A grommet (Shepherd type without wire) is visible in the antero-inferior quadrant of the eardrum.
   - External auditory canal is dry with no discharge.
2. Name of surgical operation:
   - Myringotomy with insertion of grommet.
3. Name of the condition:
   - Otitis media with effusion.
4. Steps of surgical operation:
   - This operation can be done under local or general anaesthesia.
   - Under operating microscope, tympanic membrane is seen.
   - Using the myringotomy knife, a radial incision is given in the antero-inferior quadrant of the eardrum.
   - All the fluid present in the middle ear is drained by suction.
   - With the help of crocodile forceps, grommet is inserted through this incision.
   - Grommet is left in its place for sometime.

OSCE Station No 35



Observe the photograph of a 27-year-old lady who has a history of ear discharge for the last one year. Answer the following questions:

Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis?
3. Enlist relevant investigations required in this patient?
4. How will you treat this patient?

Answers

1. Findings on this photograph:
   - There is a swelling present in the post-aural region with marked signs of inflammation.
   - Post-aural sulcus is obliterated.
   - Pinna is pushed outwards.
2. Most likely diagnosis:
   - Post-aural or mastoid abscess due to chronic suppurative otitis media and mastoiditis
3. Relevant investigations:
   - Blood complete picture: increased WBCs count
   - Pus for C/S from the ear discharge or from the abscess after drainage
   - CT scan with contrast of the temporal bone and brain
4. Treatment:
   - Incision and drainage of the abscess.
   - Mastoid exploration (mastoidectomy) for the primary ear disease.
   - Appropriate antibiotic according to C/S report.
   - Analgesics and antipyretic agents.

OSCE Station No 36

Observe the photograph of a 11-year-old boy who has history of ear discharge for last one year. Answer the following questions:

Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis?
3. Enlist the other complications associated with this disease.

Answers

1. Findings on this photograph:
   - An opening is present in the post-aural region from which pus and blood is oozing.
   - Some dried blood and pus is collected around the opening.
   - There are signs of inflammation in the surrounding skin.
2. Most likely diagnosis:
   - Post-aural fistula due to mastoiditis and chronic suppurative otitis media
3. Other complications:
   - Mastoid abscess.
   - Citelli's abscess.
   - Bezold's abscess.
   - Politzer's abscess and Gradenigo's syndrome.
   - Facial nerve paralysis.
   - Labyrinthitis.
   - Thrombosis of external jugular vein.
   - Extra-dural abscess.
   - Sub-dural abscess.
   - Brain abscess.
   - Meningitis or encephalitis.
   - Sigmoid sinus thrombosis.

OSCE Station No 37

Observe the above illustration of the middle ear and ossicles. Answer the following questions:

Questions

1. Describe the findings visible in this photograph.
2. What is the most likely surgery done to this patient?
3. Name the disease for which this surgery has been done.
4. Enlist the complications of this surgical operation.

Answers

1. Findings on this photograph:
   - This is the illustration of the middle ear showing tympanic membrane, malleus and incus.
   - Only footplate of the stapes is visible. Supra-structure of the stapes is absent. A prosthesis (piston and wire) is applied from the long process of incus which is inserted through a opening made in the footplate of the stapes.
2. Most likely surgery:
   - Stapedotomy with insertion of a prosthesis (piston).
3. Name of the disease:
   - Otosclerosis.
4. Complications of the surgical operation:
   - Displacement of the prosthesis.
   - Necrosis of the long process of incus.
   - Perilymph fistula.
   - Damage to chorda tympani nerve and taste changes.
   - Facial nerve damage and paralysis.
   - Vertigo.
   - Wound infection and otitis media.
   - Non healing of the wound, tympanic membrane perforation.
   - Reparative granuloma.

OSCE Station No 38

Observe the photograph of a 50-year-old lady. Answer the following questions:

Questions

1. Describe the findings visible in this photograph.
2. What are the different types of such gadgets available?

Answers

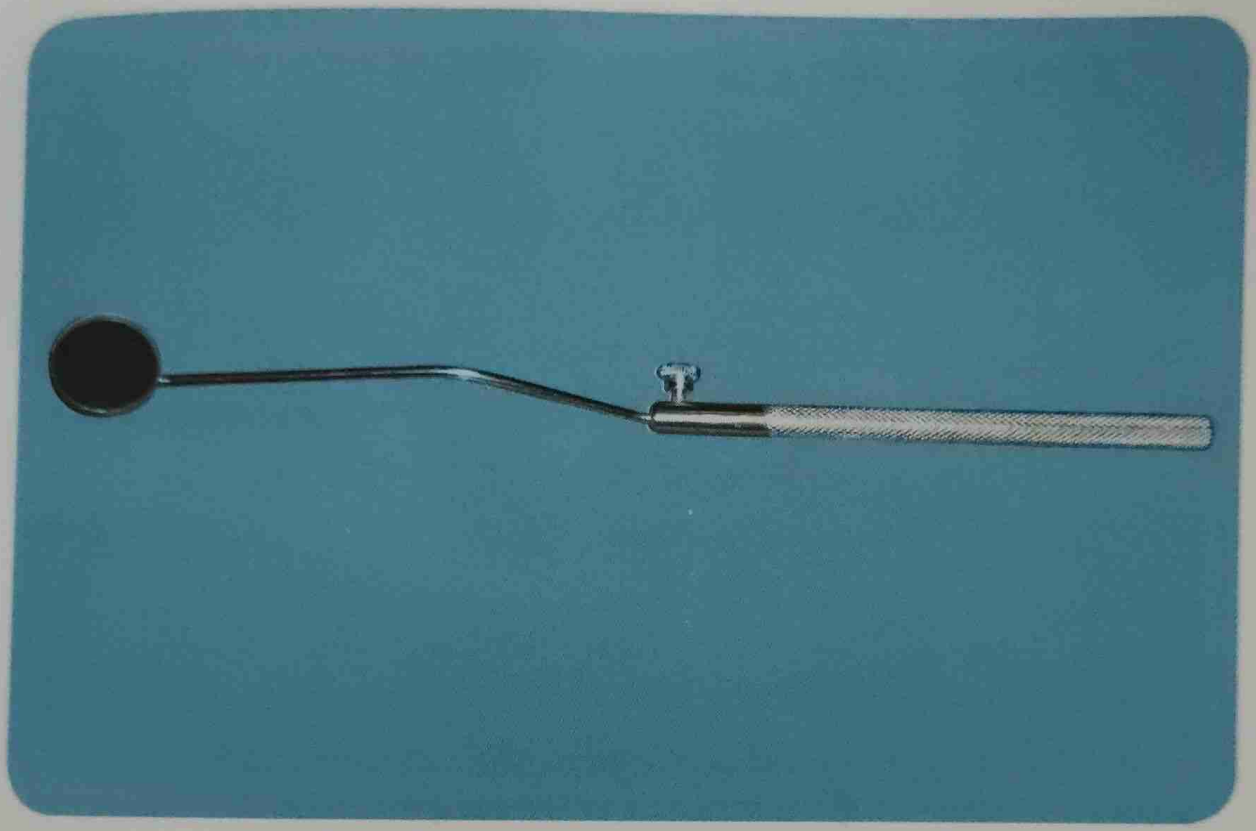
1. Findings on this photograph:
   - The photograph is showing the right ear of the patient. A Behind The Ear (BTE) type of hearing aid is fitted in it.
2. Different types:
   - Body worn type: these are rarely used now.
   - Behind The Ear (BTE) type hearing aid.
   - Spectacle type hearing aid.
   - In The Ear (ITE) type hearing aid.
   - In The Canal (ITC) type hearing aid.
   - Completely In The Canal (CIC) type hearing aid.
   - Bone conduction hearing aid.
   - Bone Anchored Hearing Aid (BAHA).
   - Implantable hearing aid.

Behind

SECTION 02

NOSE AND PARANASAL SINUSES

OSCE Station No 39



Observe the above photograph of an instrument and answer the following questions:

Questions

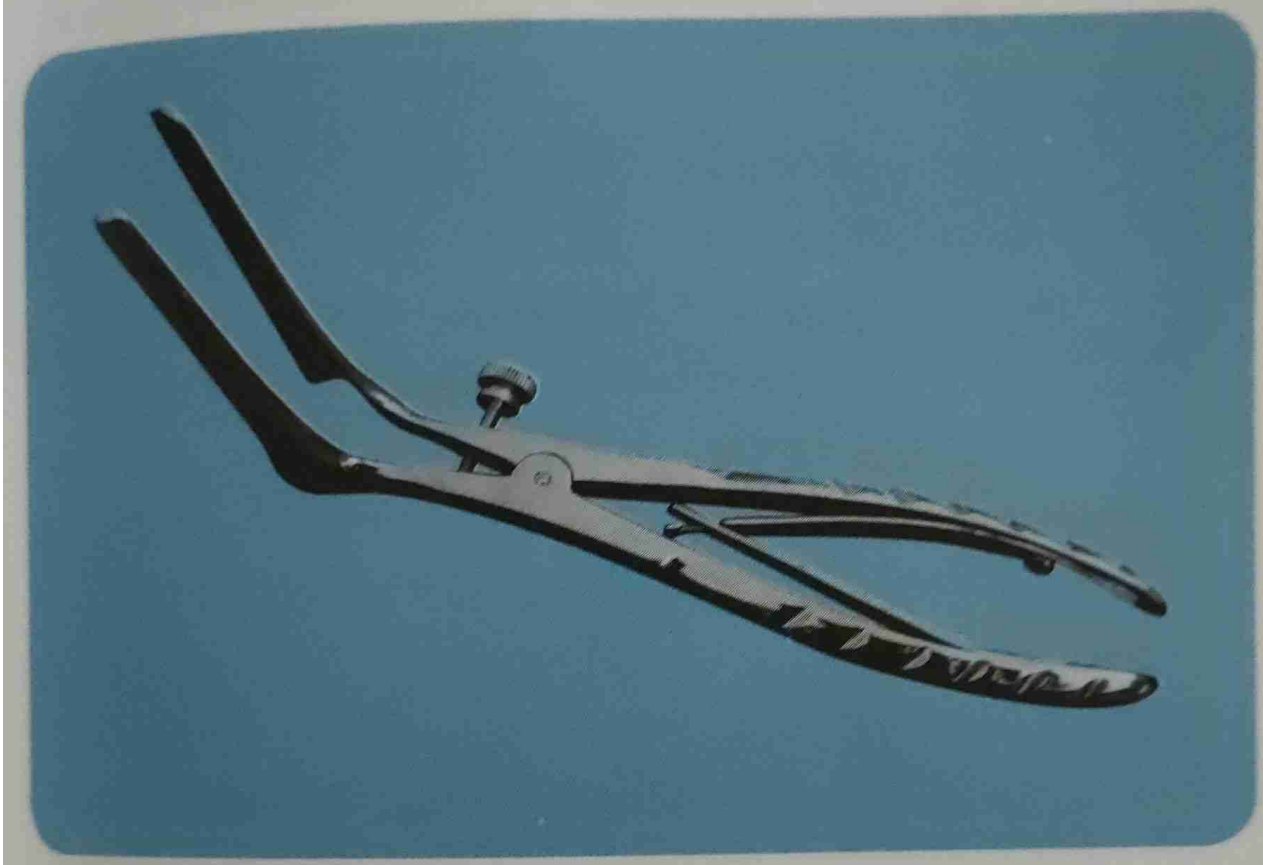
1. Name the given instrument and the procedure where it is used.
2. Outline the steps of this procedure.

Answers

1. Name of the instrument and procedure:
   - Posterior rhinoscopy mirror.
   - Posterior rhinoscopy.
2. Steps of the procedure:
   - The patient sits in front of the examiner and is asked to open the mouth.
   - With the help of a tongue depressor which is held in left hand, tongue is depressed and patient is asked to breathe through his nose. This opens the nasopharynx by bringing the soft palate down and forward.
   - Posterior rhinoscopy mirror is held in right hand like a pen and warmed from its mirror surface to prevent misting.
   - The warmed mirror is checked for its temperature on the back of left palm.
   - The mirror is then introduced, facing upwards sliding over the tongue depressor and is passed behind the uvula.
   - The different parts of the nasopharynx and the posterior end of nasal cavity are examined by tilting the mirror in different directions.

OSCE
Station No

40



Observe the above photograph of an instrument and answer the following questions:

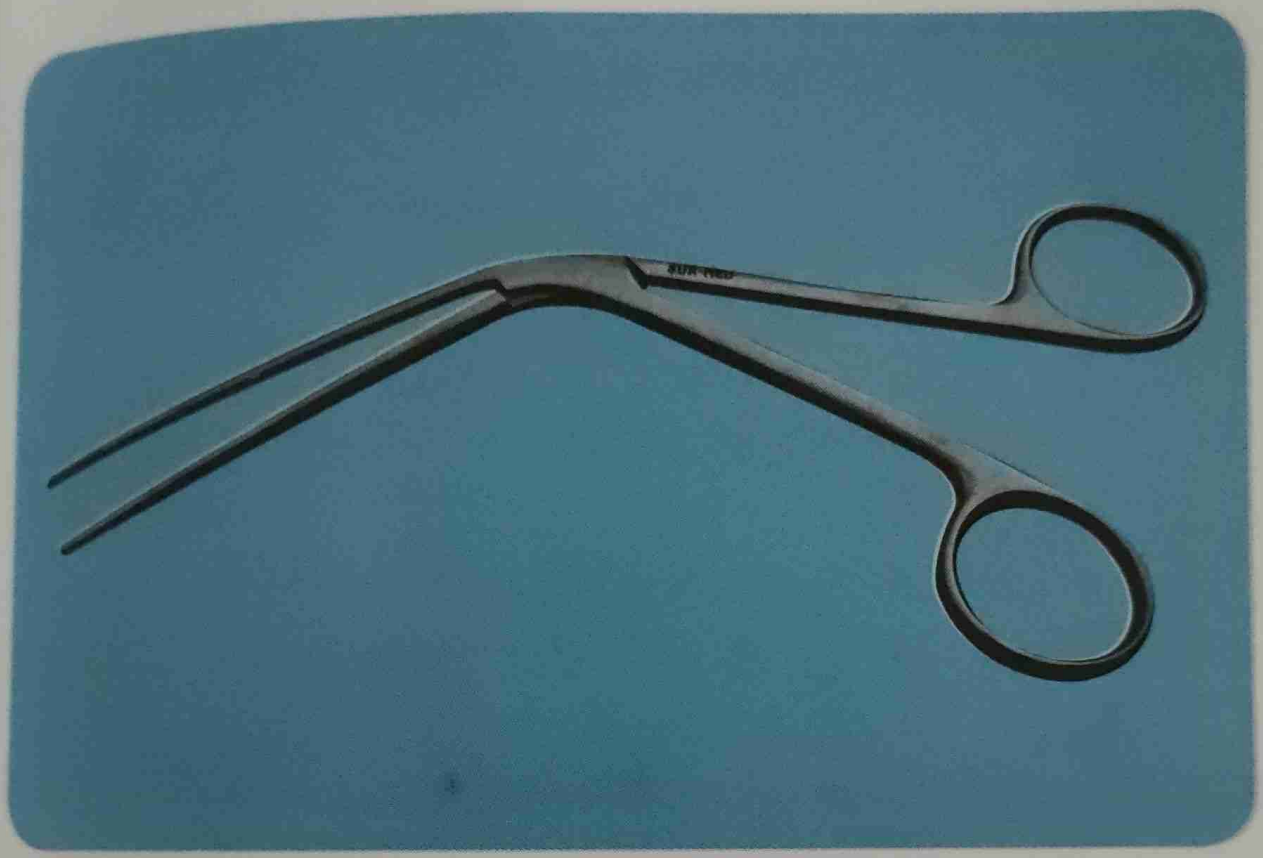
Questions

1. Name the given instrument and what is its use?
2. Name five surgical operations where this instrument is used.

Answers

1. Name of the instrument and its use:
   - Killian's self retaining nasal speculum.
   - It is used in nasal surgeries to open the nostril and keep it open as it is self retaining type of speculum.
2. Operations:
   - Septoplasty/SMR.
   - Intranasal polypectomy.
   - Removal of the foreign body of nose or rhinolith.
   - SMD of the inferior turbinate.
   - Cauterisation of the bleeder in epistaxis.

OSCE Station No 41



Observe the above photograph of an instrument and answer the following questions:

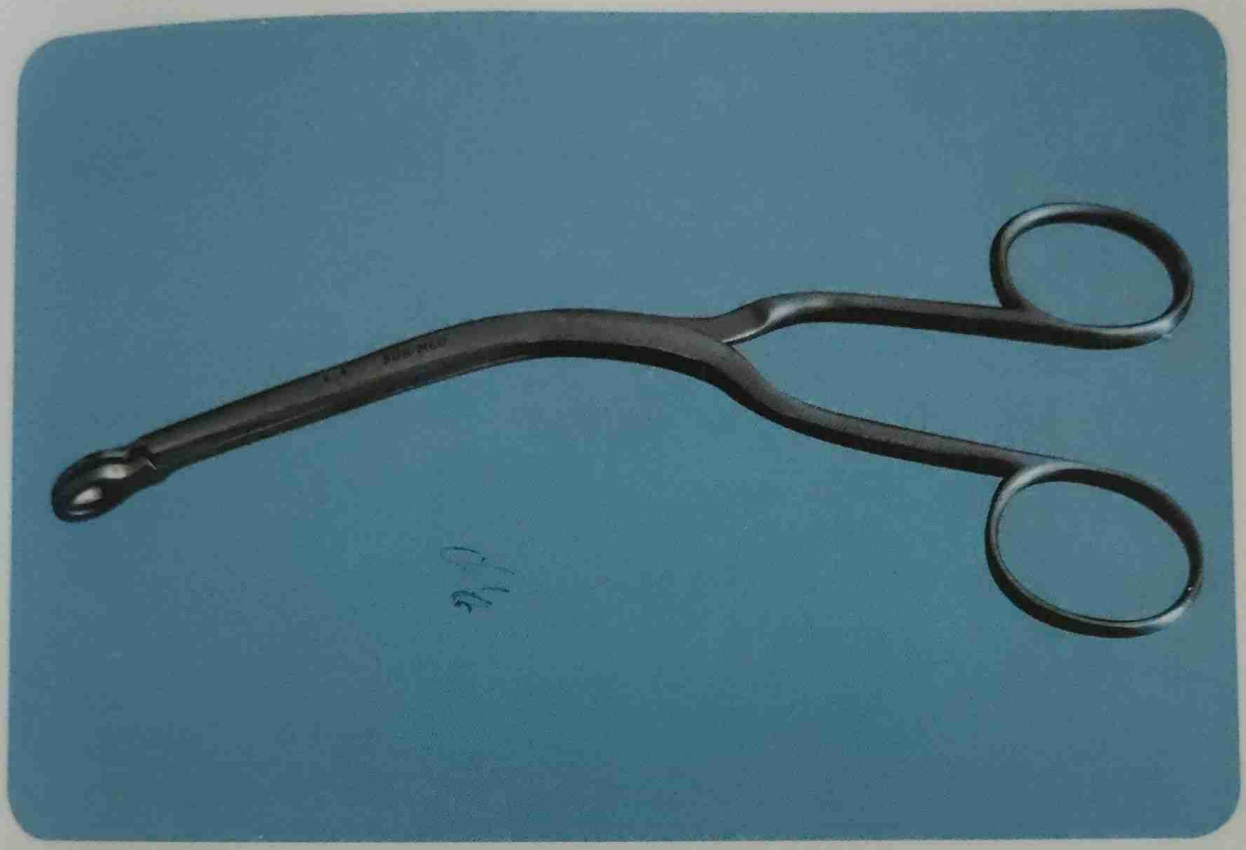
Questions

1. Name the given instrument.
2. What are the uses of this instrument?
3. Why this instrument is angulated?

Answers

1. Name of the instrument:
   - Nasal packing forceps or Tilley's forceps.
2. Uses of the instrument:
   - This is used for anterior nasal packing in epistaxis or any nasal surgery like SMR, septoplasty, polypectomy and Caldwell Luc's operation.
   - It is also used for removal of cartilage or bone or gauze pieces from the nasal cavity in above mentioned surgeries.
3. Reason of angulation:
   - Most of the instruments used in nasal surgeries are angulated. The reason is that, vision of the surgeon is not obstructed by his working hand.

OSCE Station No 42



Observe the above photograph of an instrument and answer the following questions:

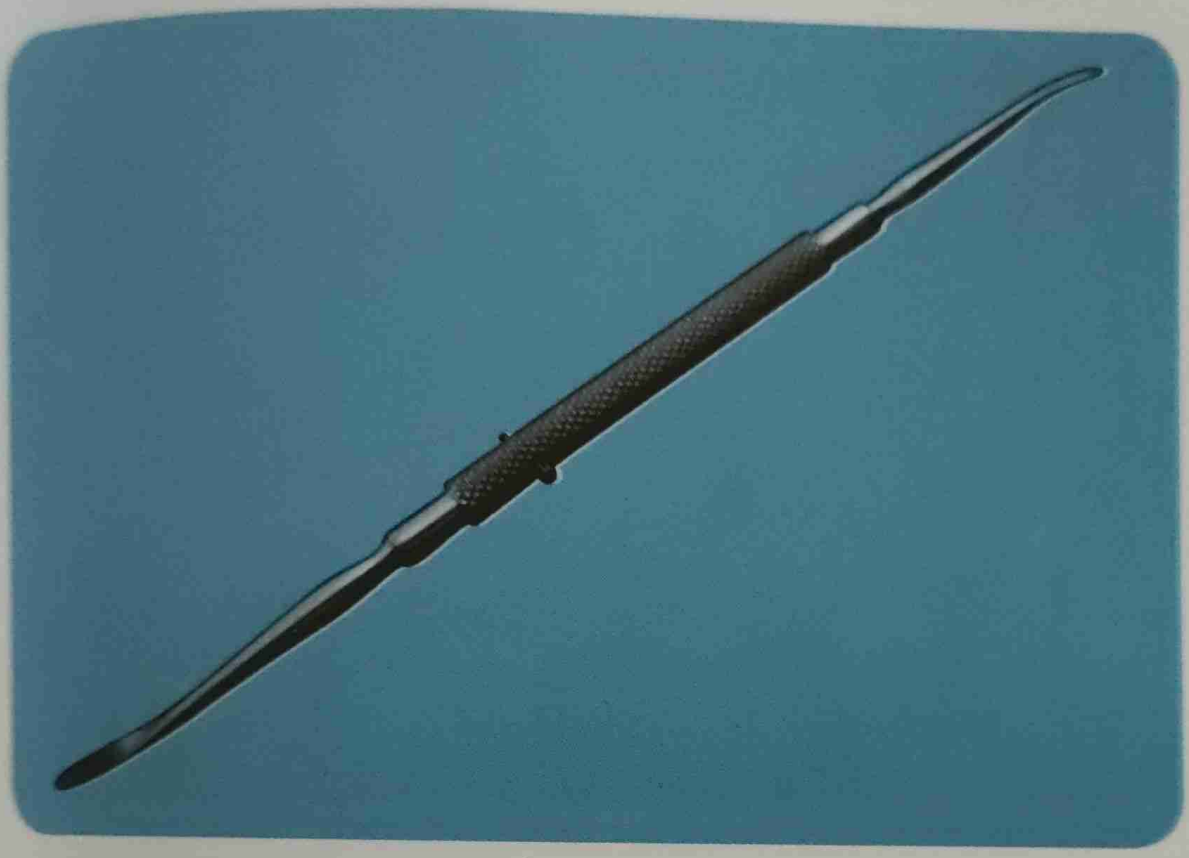
Questions

1. Name the given instrument.
2. What are the uses of this instrument?
3. Which another instrument is very similar to this instrument?

Answers

1. Name of the instrument:
   - Luc's forceps.
2. Uses of the instrument:
   - It is used to remove cartilage or bone pieces during septoplasty and SMR operations.
   - To remove polypi during intranasal polypectomy or Caldwell Luc's operation.
   - To take punch biopsy from a growth in the nose or oral cavity.
3. Similar instrument:
   - The shape of the Luc's forceps is very similar to Tonsil holding forceps.

OSCE Station No 43



Observe the above photograph of an instrument and answer the following questions:

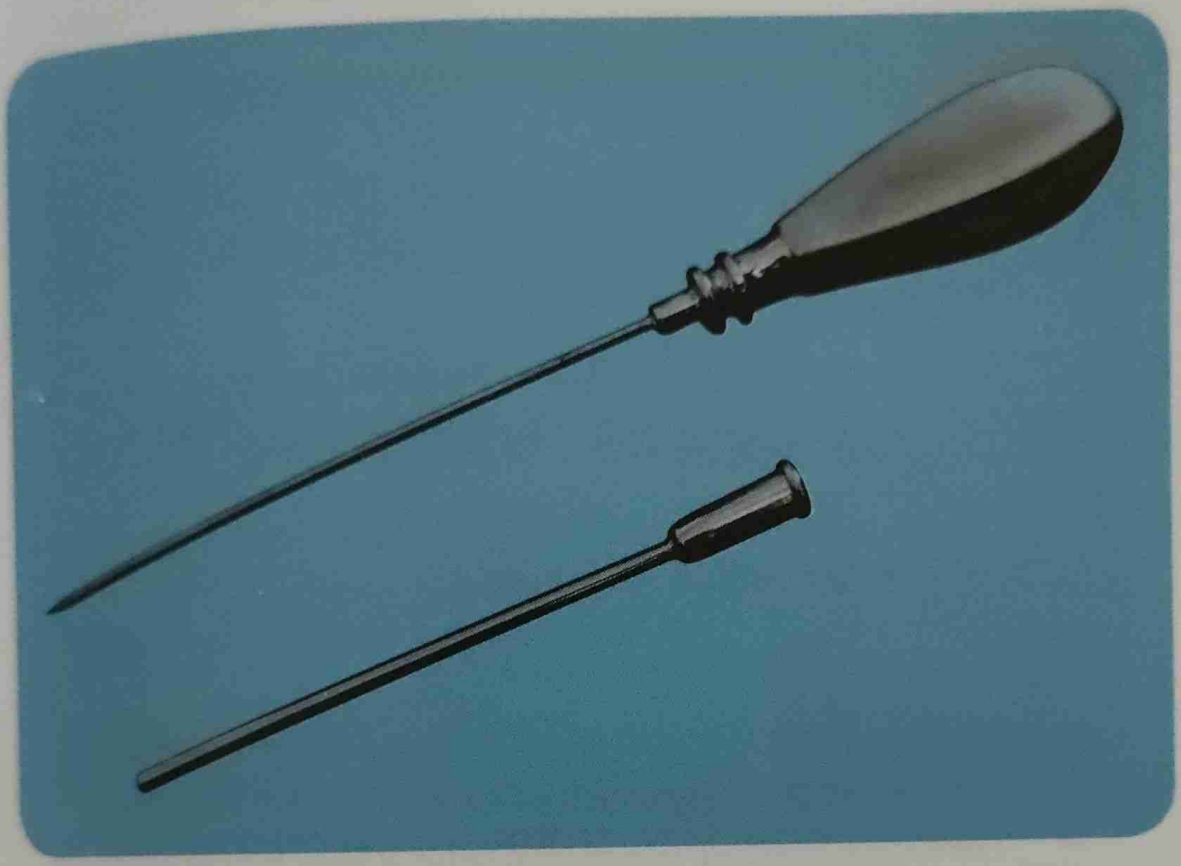
Questions

1. Name the given instrument.
2. What are the uses of this instrument?
3. Name the operations where this instrument is used.

Answers

1. Name of the instrument:
   - SMR dissector or Freer's dissector.
2. Uses:
   - It is used to elevate mucoperichonrium or periostium from the underlying cartilage or bone.
   - Used to manipulate turbinates during endoscopic sinus surgery.
   - Used to prepare and thin out the temporalis fascia.
3. Operations:
   - SMR.
   - Septoplasty.
   - Caldwell Luc's operation.
   - Mastoidectomy.
   - Mandibulectomy.
   - Maxillectomy.
   - Functional endoscopic sinus surgery.

OSCE Station No 44



Observe the above photograph of an instrument and answer the following questions:

Questions

1. Name the given instrument.
2. Name the surgical operation where this instrument is used.
3. Outline the steps of this surgical operation.

Answers

1. Name of the instrument:
   - Lichtwitz Trocar and Cannula.
2. Name of surgical operation:
   - Antral washout or proof puncture.
3. Steps of surgical operation:
   - In adults antral washout is mostly done under local anaesthesia.
   - 4% xylocaine pack with adrenaline is applied in the inferior meatus for 15 to 20 minutes.
   - Sitting position is preferred in adults when it is done under local anaesthesia whereas patient lies supine with head end raised when general anaesthesia is used.
   - The medial wall of the maxillary antrum is punctured with trocar and cannula in the inferior meatus at a point 1.5 to 2 cm behind the anterior end of inferior turbinate. Its direction is towards the ipsilateral tragus or outer canthus of the eye.
   - After piercing the trocar is removed and cannula is advanced further.
   - The sinus is irrigated with normal saline at body temperature with a 20ml syringe or Hagginson's syringe.
   - In the end the cannula is removed and nose is packed for few hours if there is significant bleeding.

OSCE Station No 45

Observe the above photograph of an instrument and answer the following questions:

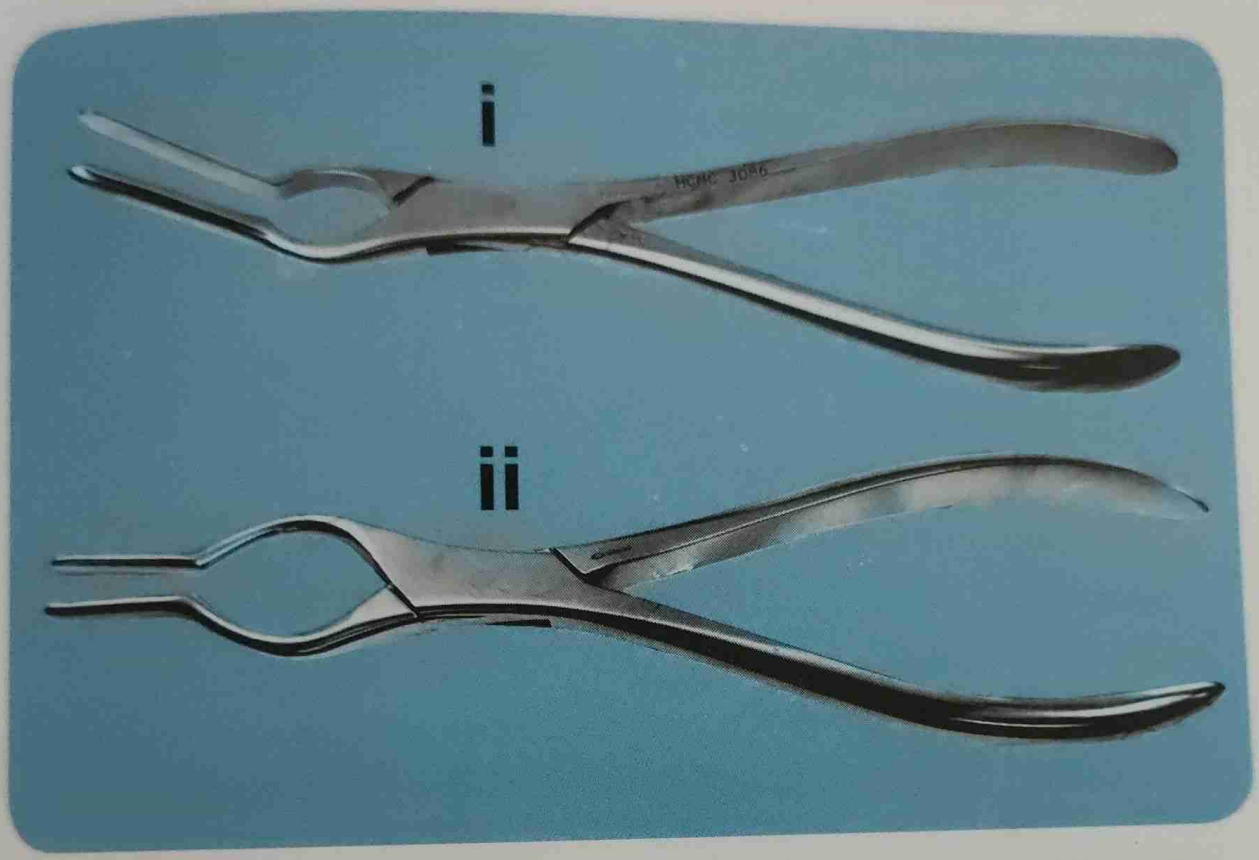
Questions

1. Name the given instrument.
2. Name the surgical operations where this instrument is used.
3. In which step of the operation this instrument is used?
4. Why its end is V shaped?
5. Name the complications associated with the use of this instrument.

Answers

1. Name of the instrument:
   - Tilley's Nasal Gouge or Fish Tail Gouge or V shaped Gouge.
2. Names of the operation:
   - SMR and Septoplasty operation.
3. Step of the operation:
   - This instrument is used to remove the bony spur or maxillary crest from the floor of the nasal cavity.
4. V shaped end:
   - Its end is V shaped because it gives better anchorage to the maxillary crest or bony spur.
5. Complications:
   - Excessive bleeding.
   - Palatal damage and perforation.

OSCE Station No 46



Observe the above photograph of two instruments and answer the following questions:

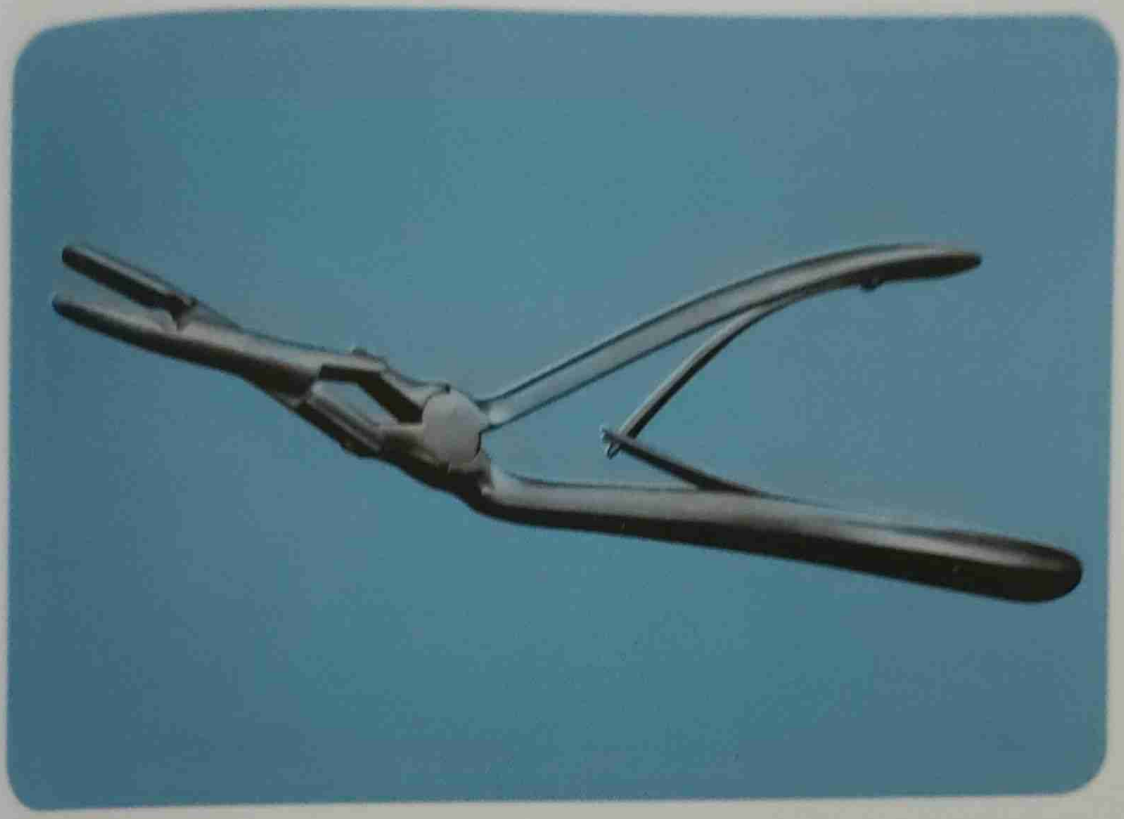
Questions

1. Name both these instruments.
2. What are the uses of these instruments?
3. Outline the differences in the shape of these instruments.
4. Outline the method of using both these instruments.

Answers

1. Name of the instruments:
   i. Ashe's forceps.
   ii. Walsham's forceps.
2. Uses of the intruments:
   - Ashe's forceps is used to straighten the nasal septum after fracture.
   - Walsham's forceps is used to realign the nasal bone fracture.
3. Differences in the shape:
   - Blades are angulated in Ashe's forceps while it is straight in Walsham's forceps.
   - Both the blades are of equal size in Ashe's forceps while one blade is slightly smaller than the other in Walsham's forceps.
   - On approximation of the blades, there is some gap in Ashe's forceps while there is no gap in Walsham's forceps.
4. Method of using:
   - As the Ashe's forceps is used to straighten the nasal septum, one blade is inserted in right nasal cavity and the other in left nasal cavity.
   - While using Walsham's forceps, smaller blade is inserted in one nasal cavity while the bigger blade remains outside on the outer aspect of the nasal bone.

OSCE Station No 47



Observe the above photograph of an instrument and answer the following questions:

Questions

1. What is the name of this instrument?
2. Name the operations where this instrument is used.
3. What are the advantages of using this instrument?

Answers

1. Name of the instrument:
   - Jansen Middleton septal forceps or double action septal bone punch.
2. Name of operations:
   - SMR.
   - Septoplasty.
   - Rhinoplasty.
3. Advantages of this instrument:
   - It is a stout instrument with double pivot having high mechanical advantage.
   - Thick bony spur or bone can be nibbled with ease and precision.

OSCE Station No 48

Observe the above photograph of an instrument and answer the following questions:

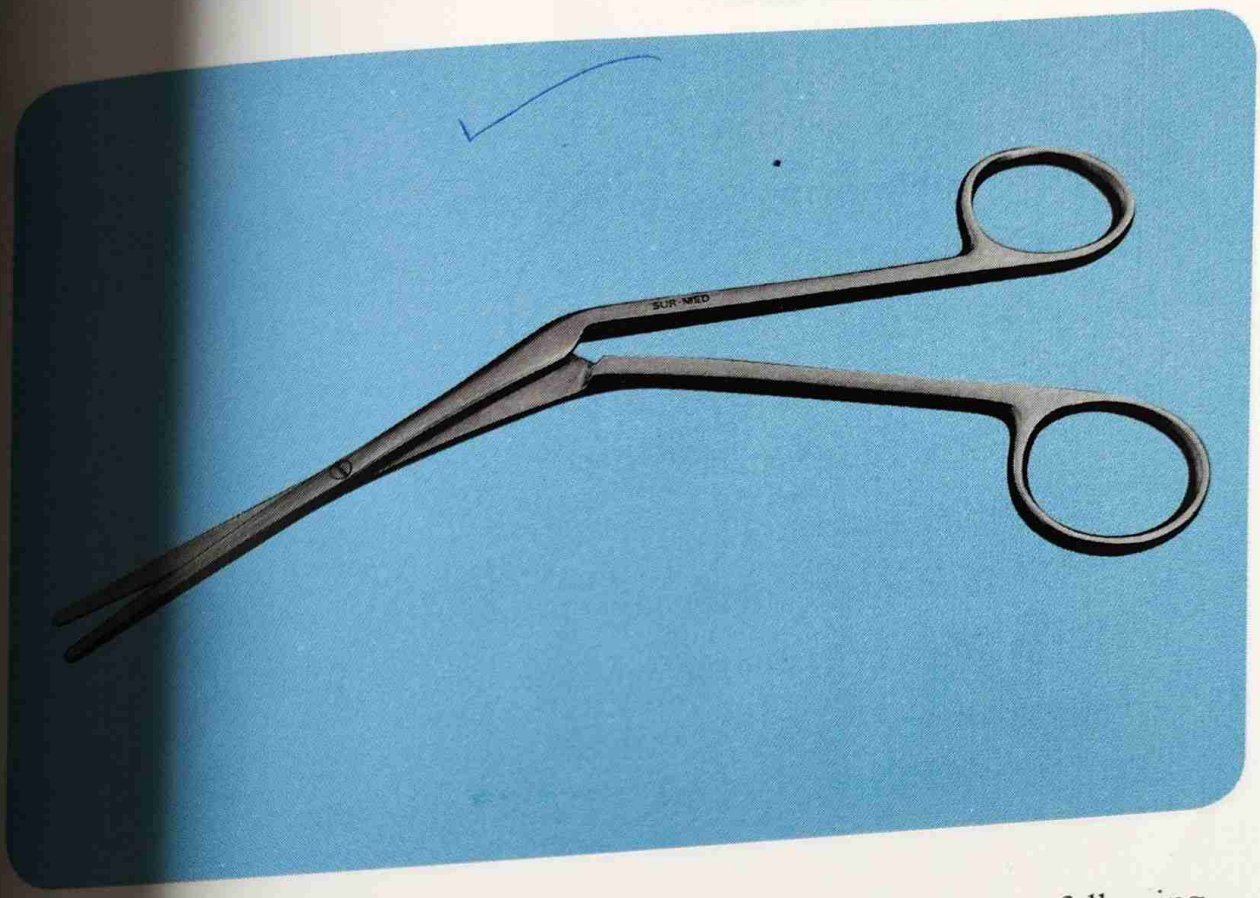
Questions

1. What is the name of this instrument?
2. Name the operations and procedures where this instrument can be used.

Answers

1. Name of the instrument:
   - Suction nozzle.
2. Name of operations and procedures:
   - Depending upon the size of the suction nozzle, it can be used in many ENT operations and procedures like:
   - SMR.
   - Septoplasy.
   - Rhinoplasty.
   - Caldwell Luc's operation.
   - Functional endoscopic sinus surgery.
   - Polypectomy.
   - Turbinectomy.
   - Mastoidectomy.
   - Tympanoplasty.
   - Stapedectomy.
   - Suction cleaning of the wax or otomycosis.
   - Removal of foreign body or rhinolith.

OSCE Station No 49



Observe the above photograph of an instrument and answer the following questions:

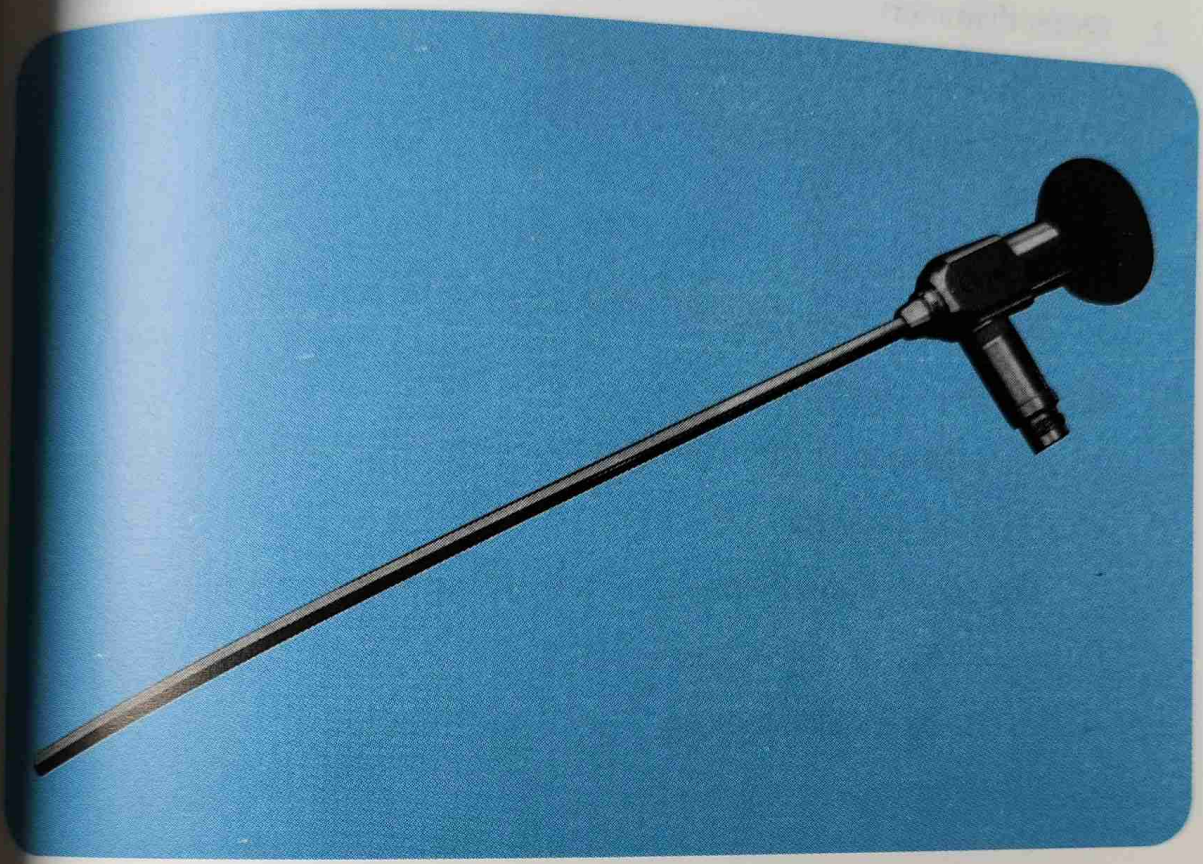
Questions

1. What is the name of this instrument?
2. Name the operation where this instrument is used.
3. What are the different types of such operation?
4. What are the other surgical options available if you do not want to perform this operation?

Answers

1. Name of the instrument:
   - Heymann Turbinectomy Scissors.
2. Operation where it is used:
   - Turbinectomy.
3. Different types of operation:
   - Partial turbinectomy.
   - Total turbinectomy.
4. Other options:
   - Electric cautery of the inferior turbinate.
   - Submucosal diathermy of inferior turbinate.
   - CO_2 Laser surgery.
   - Sub-mucosal resection by microdebrider.
   - Radiofrequency turbinate reduction.
   - Cryosurgery.

OSCE Station No 50



Observe the above photograph of an instrument and answer the following questions:

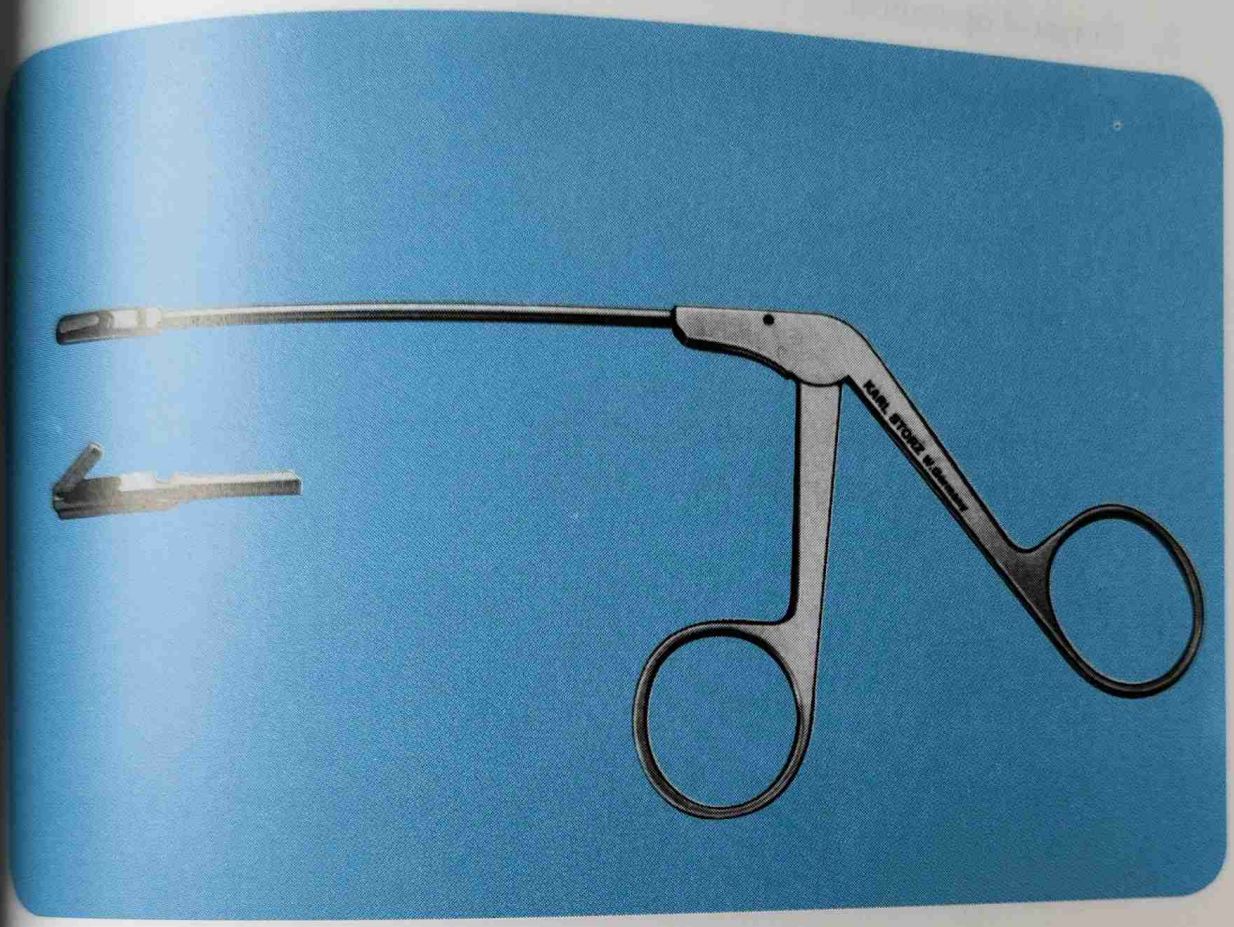
Questions

1. What is the name of this instrument?
2. What should be the outer diameter for nasal use in adults and children?
3. What is the usual length for nasal use?
4. What is the significance of green colour coding in this instrument?
5. What are the other colour codings in such an instrument?

Answers

1. Name of the instrument:
   - Nasal rigid endoscope or telescope.
2. Outer diameter:
   - The usual outer diameter for adult use in nasal surgery is 4.0 mm.
   - The usual outer diameter for paediatric use in nasal surgery is 2.7 mm.
3. Usual length:
   - The usual length for nasal endoscopy is 18 cm.
4. Green colour coding:
   - The significance of green colour coding is that it is 0° telescope.
5. Other colour coding:
   - The other colour codes for nasal endoscopes are as follows:
     - Red is 30° telescope.
     - Black is 45° telescope.
     - Yellow is 70° telescope.

OSCE Station No 51



Observe the above photograph of an instrument and answer the following questions:

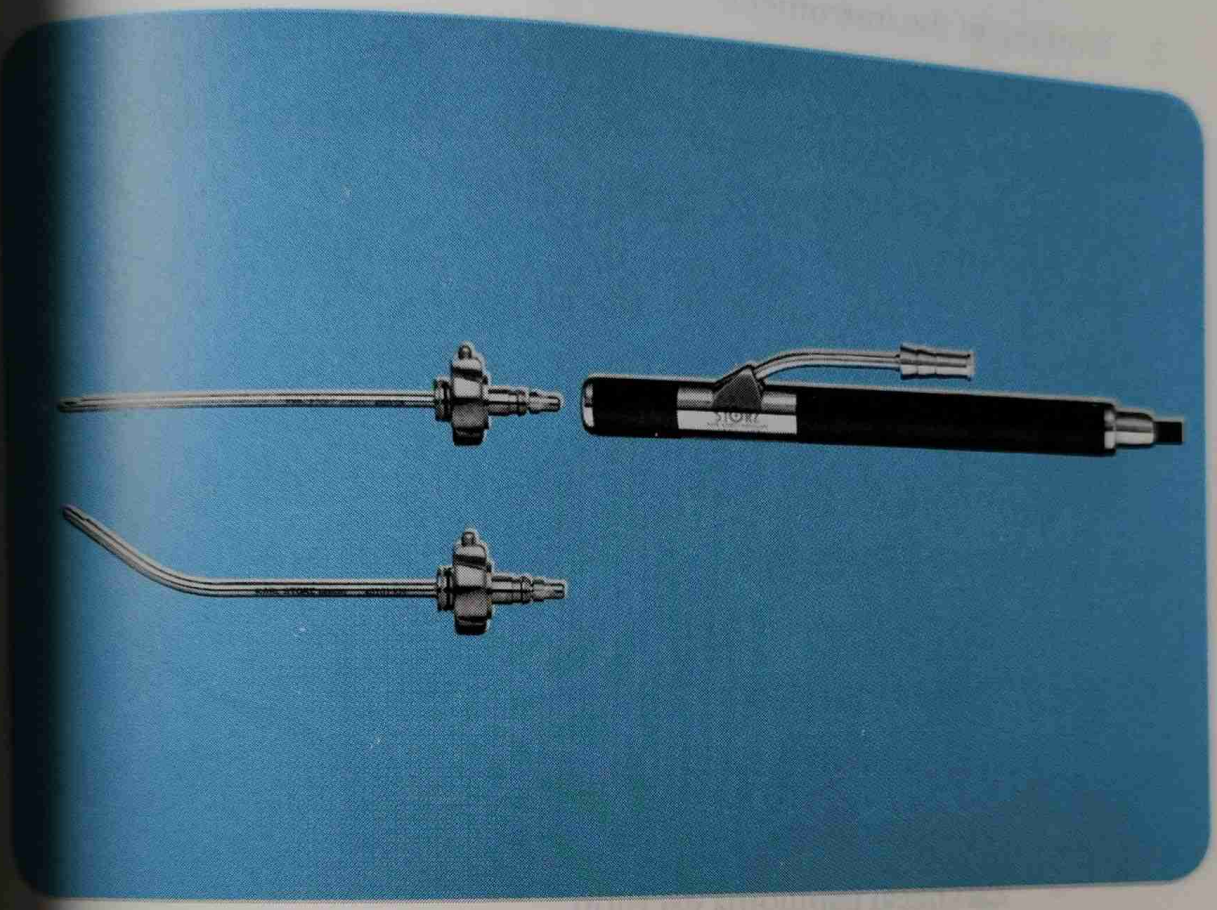
Questions

1. What is the name of this instrument?
2. Name the surgical operation in which this instrument is used.
3. What are the uses of this instrument in such surgical operation?
4. Name the single most common complication associated with the use of this instrument?

Answers

1. Name of the instrument:
   - Ostrum antral punch forceps or Ostrum back biting forceps
2. Surgical operation:
   - Functional endoscopic sinus surgery.
3. Uses:
   - Widening of the maxillary sinus osteum.
   - Uncinectomy.
4. Complication:
   - Damage to the nasolacrimal duct if widening of the maxillary sinus osteum is done more anteriorly.

OSCE Station No 52



Observe the above photograph of an instrument and answer the following questions:

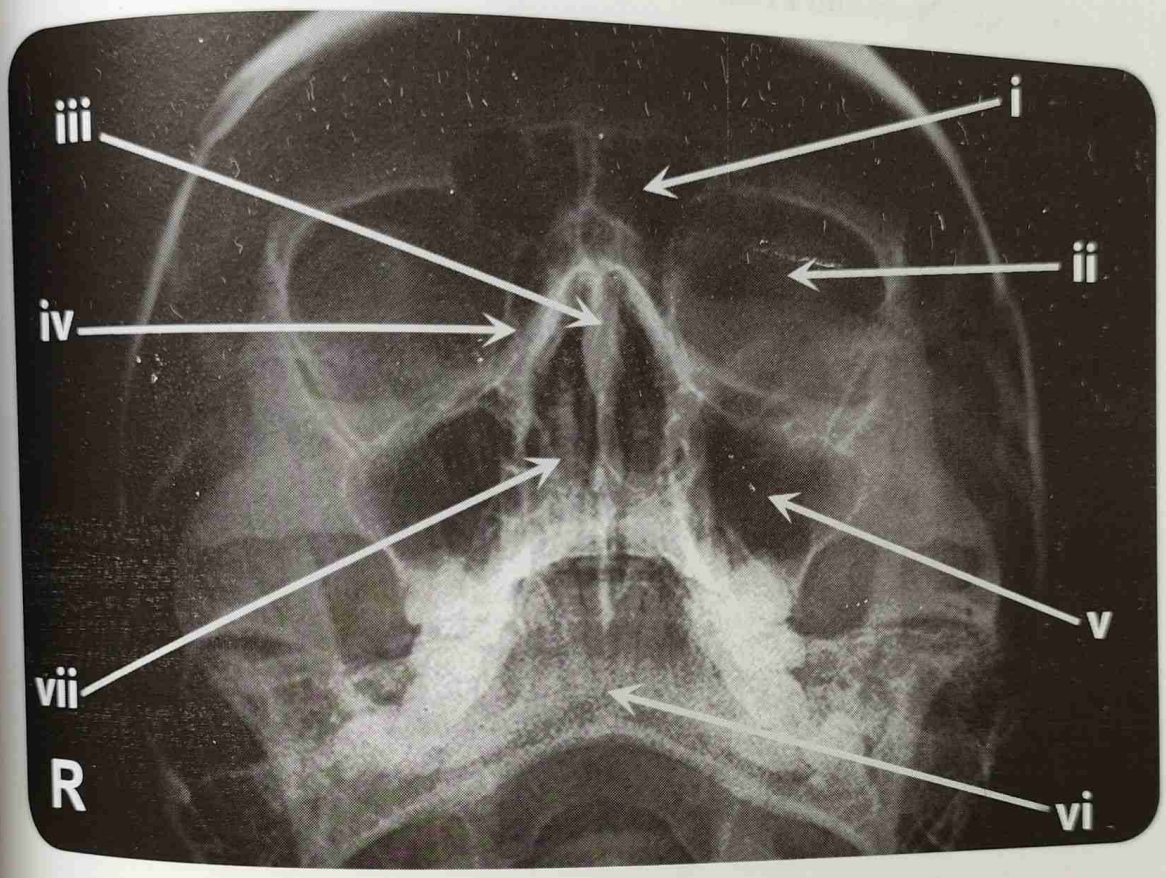
Questions

1. What is the name of this instrument?
2. How does this instrument work?
3. Name the surgical operations in which this instrument can be used.

Answers

1. Name of the instrument:
   - Hand piece of microdebrider with straight and curved blades.
2. Working of the instrument:
   - There is a blade at the tip which rotates or oscillates.
   - There is negative pressure inside which sucks the soft tissues in contact with the window. This soft tissue is cut by the oscillating or rotating blade.
   - Thus any soft tissue can be shaved that come in contact with the window at its tip.
3. Surgical operations:
   - This instrument can be used to shave the soft tissues in the following surgeries:
     - Polypectomy.
     - SMR of the inferior turbinate.
     - Tonsillectomy.
     - Adenoidectomy.
     - Laryngeal papilloma excision.

OSCE Station No 53



Observe the above photograph of a radio-imaging film and answer the following questions:

Questions

1. Name the type, site and view of this film.
2. Name the structures labelled from i to vii.

Answers

1. Name of this film:
   - Type: Plain X-ray.
   - Site: Nose and PNS.
   - View: Occipito-mental or Water's view.
2. Name of structures:
   i. Frontal sinus-left.
   ii. Orbit-left.
   iii. Nasal septum.
   iv. Ethmoidal air cells-right.
   v. Maxillary sinus-left.
   vi. Mandible.
   vii. Inferior turbinate-right.

OSCE Station No 54

Observe the above photograph of a radio-imaging film of a 46-year-old male who presented with nasal symptoms of 5 days duration and answer the following questions:

Questions

1. Name the type, site and view of this film.
2. What are the findings visible on this film?
3. What is the most likely diagnosis in this patient?
4. Outline the common clinical features of this condition.

Answers

1. Name of this film:
   - Type: Plain X-ray.
   - Site: Nose and PNS.
   - View: Occipito-mental or Water's view with open mouth.
2. Findings in the film:
   - There is haziness in the paranasal sinuses and the nasal cavities on both sides
   - There is air-fluid level visible in both the maxillary sinuses.
3. Diagnosis:
   - Acute bacterial rhino-sinusitis.
4. Clinical features:
   - It usually follows the viral rhino-sinusitis or common cold.
   - Rhinorrhoea is usually thick and muco-purulent/purulent along with post-nasal dripping.
   - Headache (typically office headache) and pain in the region of maxillary, ethmoidal and frontal sinuses.
   - Muco-purulent secretions may be seen in the nasal cavities especially in the middle meatus along with congestion and oedema of the inferior turbinates.
   - Tenderness over the maxillary, frontal and ethmoidal sinuses.

OSCE Station No 55

Observe the above photograph of a radio-imaging film and answer the following questions:

Questions

1. Name the type, site and view of this film.
2. What are the findings with diagnosis on this film ?
3. What is the importance of this film?
4. Write down the classification of this condition.

Answers

1. Name of this film:
   - Type: Plain X-ray.
   - Site: Nasal bone.
   - View: Lateral view.
2. Findings in the film:
   - There is fracture in the upper part of the nasal bone.
   - The fractured pieces are minimally displaced.
3. Importance:
   - This film is not of much help as far as the treatment is concerned.
   - This film is very important for the record of nasal bone fracture and it has a great medico-legal importance.
4. Classification:
   - Nasal bone fracture is classified into following three types:
     - Class I fracture.
     - Class II fracture.
     - Class III fracture.

OSCE Station No 56

Observe the above photograph of a radio-imaging film and answer the following questions:

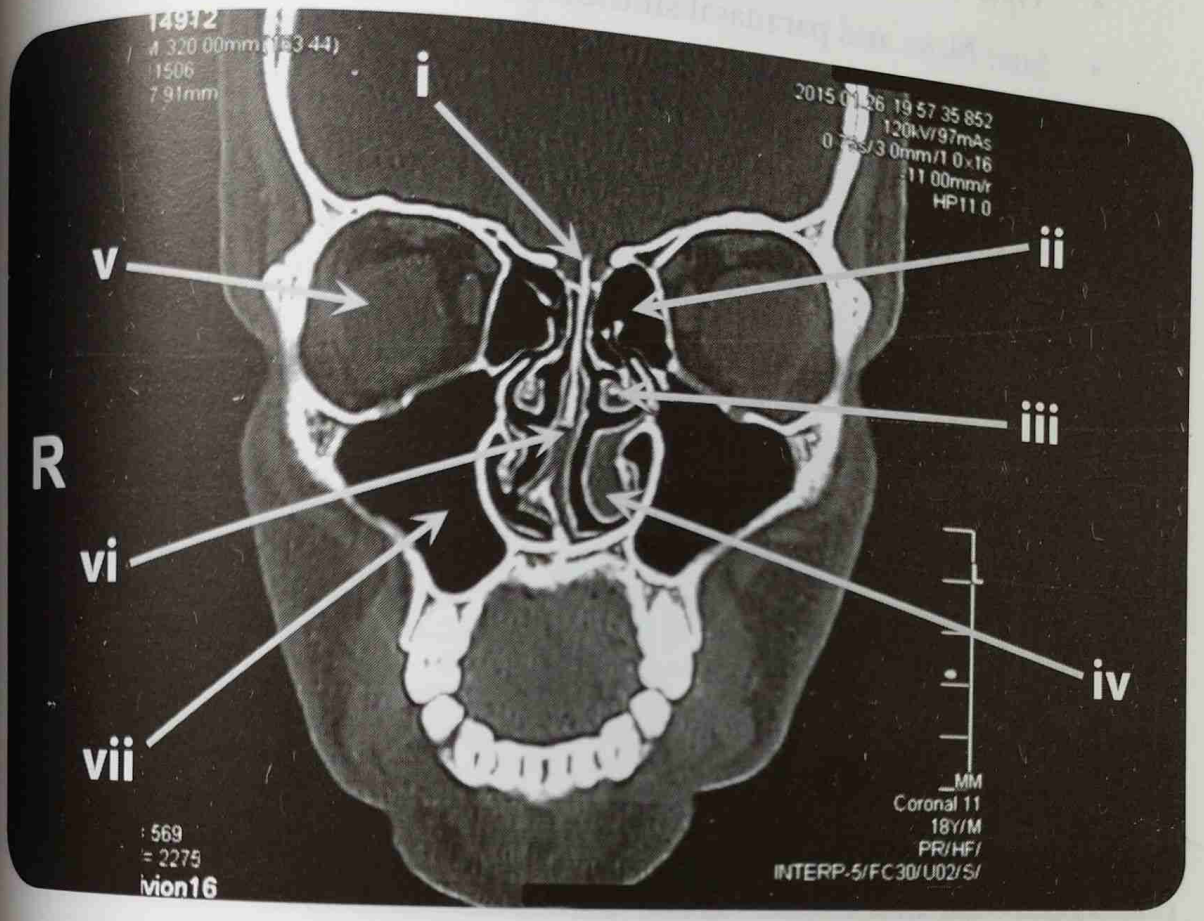
Questions

1. Name the type, site and view of this film.
2. What are the findings with diagnosis on this film ?
3. How will you treat this condition?
4. What is the most common complication associated with such patients?

Answers

1. Name of this film:
   - Type: Plain X-ray.
   - Site: Nasal cavity or face.
   - View: Lateral view.
2. Findings on this film:
   - A rounded radiopaque shadow is visible in the anterior part of the nasal cavity.
   - This X-ray looks to be of a young child. So most probably this is a case of foreign body in the nose.
   - The nature of foreign body looks to be metallic and rounded in shape. Detailed history and antero-posterior view is required for further diagnosis.
   - In common clinical practice, such type of shadow on X-ray is mostly due to battery cell.
3. Treatment:
   - As foreign body is present in the nasal cavity and needs removal.
   - Removal of foreign body can be done under local or general anaesthesia depending upon the condition of the child.
   - Such types of rounded foreign bodies can be easily removed with the help of the ring probe.
4. Complication associated with such patients:
   - The most common problem associated with such battery cell is that if it is left for a longer time, release of chemicals occur in the nasal cavity. These chemicals cause burning and necrosis of the nasal mucosa and underlying bone and cartilage. As a result septal perforation can occur and sometimes nasal adhesions may form later on.

OSCE Station No 57



Observe the above photograph of a radio-imaging film and answer the following questions:

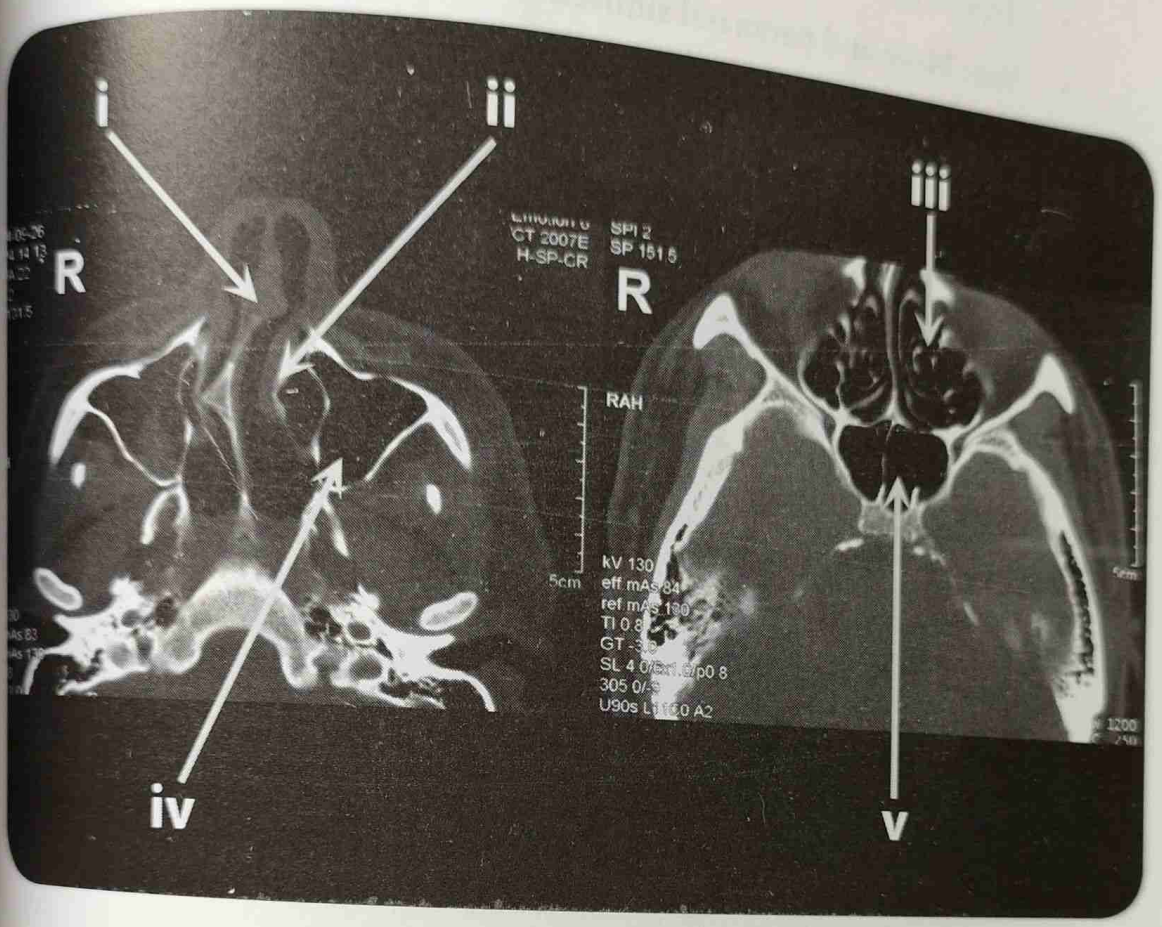
Questions

1. Name the type, site and view of this film.
2. Name the structures labelled from i to vii.

Answers

1. Name of this film:
   - Type: Plain CT scan (without contrast).
   - Site: Nose and paranasal sinuses.
   - View: Coronal view.
2. Name of the structures:
   i. Crista galli.
   ii. Ethmoidal air cells-left.
   iii. Middle turbinate-left.
   iv. Inferior turbinate-left.
   v. Orbit and eye ball-right.
   vi. Nasal septum.
   vii. Maxillary sinus-right.

OSCE Station No 58



Observe the above photograph of a radio-imaging film and answer the following questions:

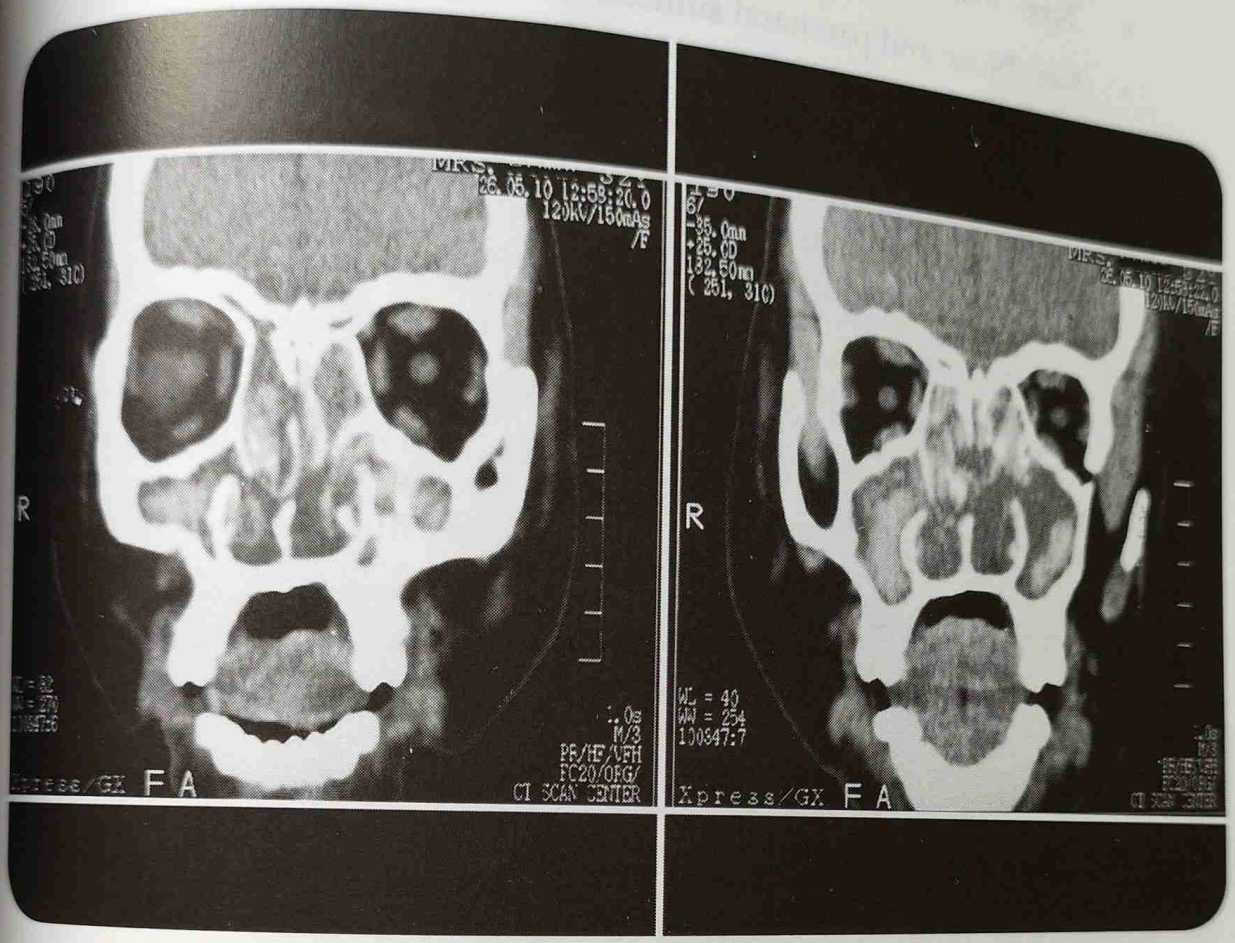
Questions

1. Name the type, site and view of this film.
2. Name the structures labelled from i to v with its findings.

Answers

1. Name of this film:
   - Type: Plain CT scan (without contrast).
   - Site: Nose and paranasal sinuses.
   - View: axial view.
2. Name of the structures:
   i. Nasal septum-markedly deviated with spur.
   ii. Inferior turbinate-hypertrophied.
   iii. Ethmoidal air cells-normal.
   iv. Maxillary sinus-left-normal.
   v. Sphenoidal sinus-left-normal.

OSCE Station No 59



Observe the above photograph of a radio-imaging film and answer the following questions:

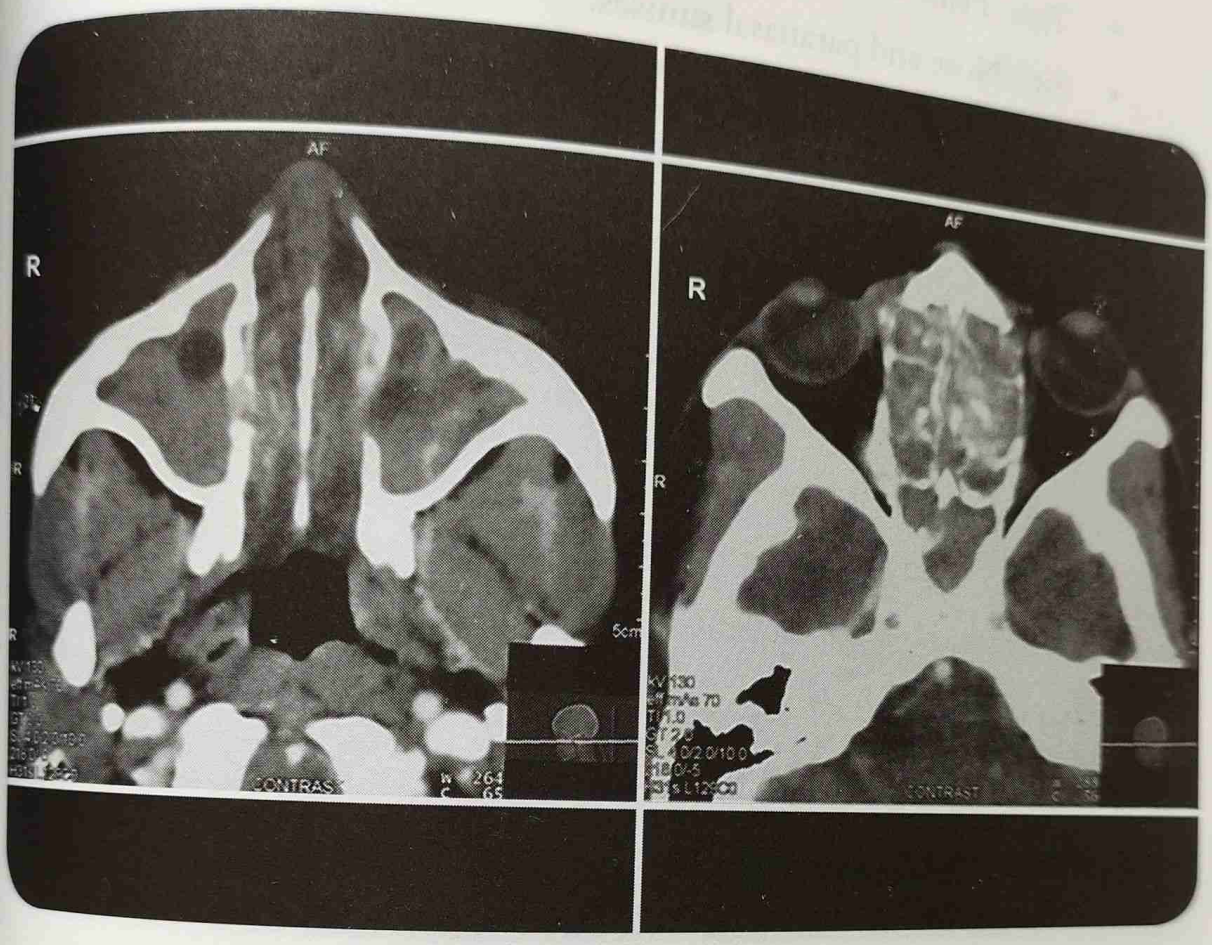
Questions

1. Name the type, site and view of this film.
2. Outline the findings visible in this radio-imaging film.
3. What is the most likely diagnosis of this patient?
4. How will you treat this patient?

Answers

1. Name of this film:
   - Type: Plain CT scan without contrast.
   - Site: Nose and paranasal sinuses.
   - View: Coronal view.
2. Findings:
   - This is a coronal section of CT scan showing the nasal cavities, maxillary sinuses and ethmoidal sinuses.
   - There is soft tissue shadow completely filling both the nasal cavities, maxillary sinuses and ethmoidal air cells.
   - There is double density shadow present.
   - There is no involvement of the orbits and the cranial cavity.
   - There is no bone erosion.
   - Frontal and sphenoidal sinuses are not visible in this film.
3. Likely diagnosis:
   - Bilateral nasal polypi/allergic fungal sinusitis.
4. Treatment:
   - Clearance of the disease from all the sinuses and nose through endoscopic sinus surgery or conventional surgery.
   - Topical and systemic steroid.
   - Oral antifungal agents.

OSCE Station No 60



Observe the above photograph of a radio-imaging film and answer the following questions:

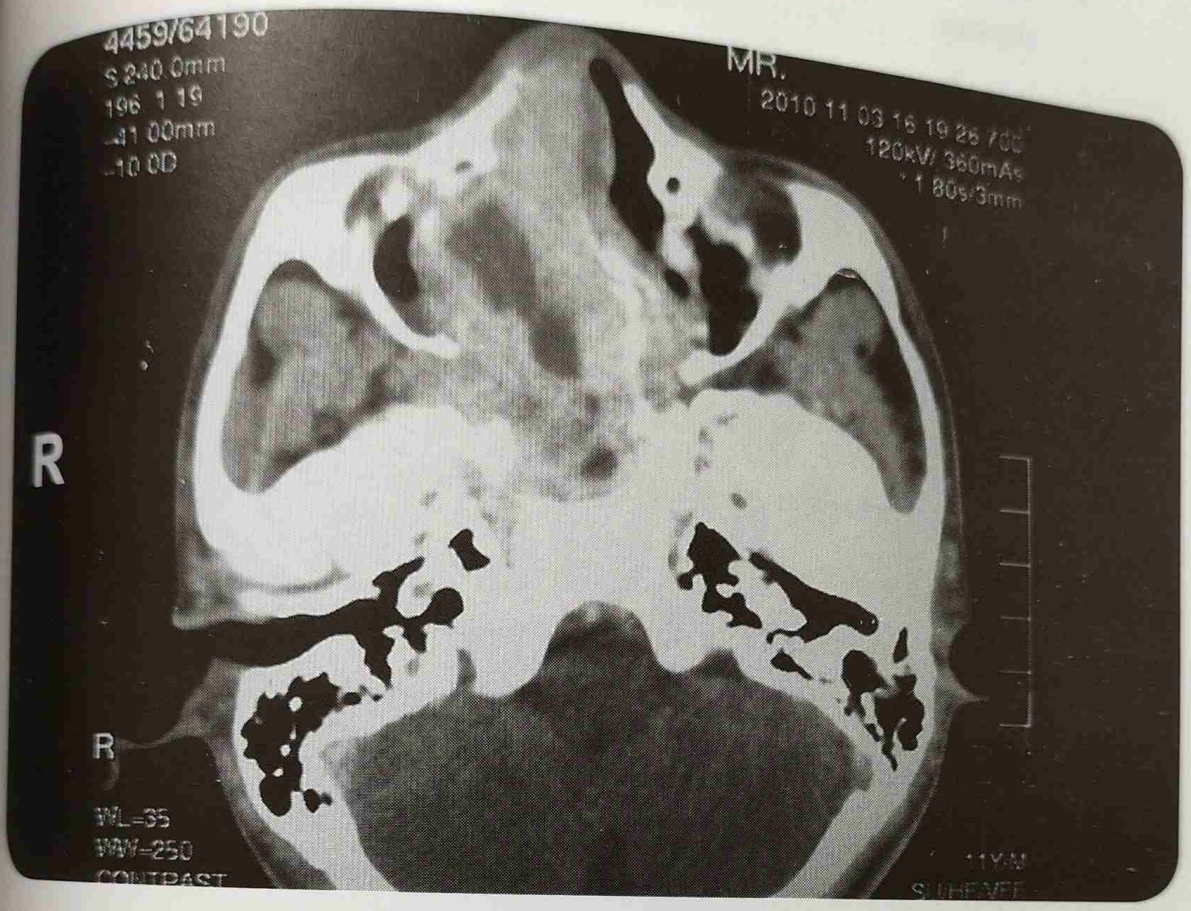
Questions

1. Name the type, site and view of this film.
2. Outline the findings visible in this radio-imaging film.
3. What is the most likely diagnosis in this patient?
4. Enlist the aetiological factors for this condition.

Answers

1. Name of this film:
   - Type: Plain CT scan without contrast.
   - Site: Nose and paranasal sinuses.
   - View: Axial view.
2. Findings:
   - This is a axial section of CT scan showing the nasal cavities, maxillary sinuses and ethmoidal sinuses.
   - There is soft tissue shadow completely filling both the nasal cavities, maxillary sinuses and ethmoidal air cells.
   - Nasopharynx is clear.
   - There is no involvement of the orbits.
   - There is no bone erosions or expansion of the sinuses.
3. Likely diagnosis:
   - Bilateral nasal polypi.
4. Aetiological factors:
   - Nasal allergy.
   - Vasomotor rhinitis.
   - Chronic rhinosinusitis.
   - Allergic fungal sinusitis.
   - Aspirin hypersensitivity.
   - Asthma.
   - Cystic fibrosis.

OSCE Station No 61



Observe the above photograph of a radio-imaging film of a 13-year-old boy who presented with recurrent epistaxis. Answer the following questions:

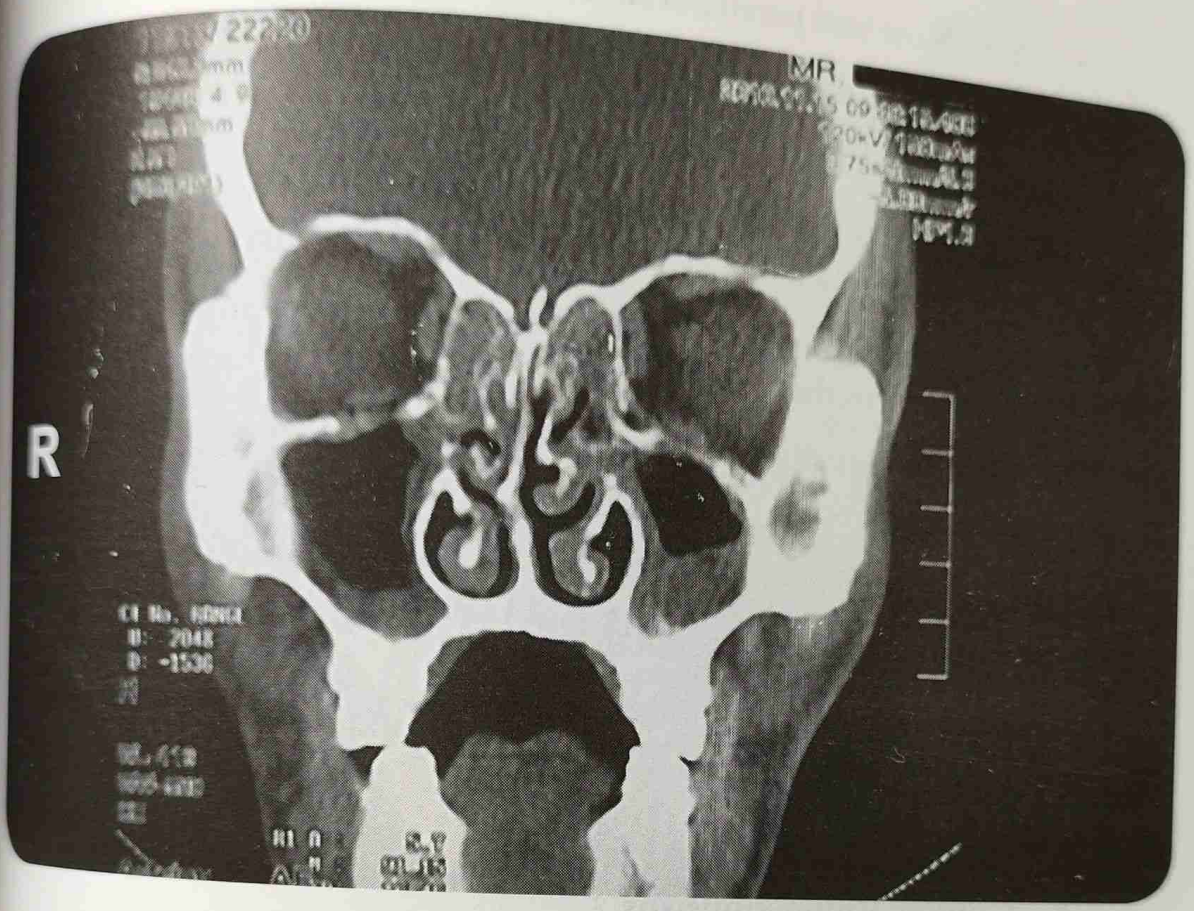
Questions

1. Describe the findings visible in this radio-imaging film.
2. What is the most likely diagnosis in this patient?
3. What are the treatment options in this patient?

Answers

1. Findings on this film:
    - This is a CT scan axial view through the nose and paranasal sinuses.
    - It is showing a soft tissue mass occupying the nasal cavity on the right side and the nasopharynx.
    - The mass is pushing the nasal septum on the left and occluding the left nasal cavity as well.
    - The mass is also involving the right maxillary sinus.
    - Laterally it is extending into right pterygo-palatine fossa.
2. Likely diagnosis:
    - Juvenile nasopharyngeal angiofibroma.
3. Treatment options:
    - Treatment is complete surgical excision of the tumour mass.
    - Pre-operative super selective embolization of the feeding vessel will reduce the bleeding during surgery.
    - The surgical excision can be done by one or more of the following approaches:
        - Endoscopic.
        - Trans-antral.
        - Lateral rhinotomy.
        - Trans-palatal.

OSCE Station No 62



Observe the above photograph of a radio-imaging film of a young man who has nasal complaints for the last eight months. Answer the following questions:

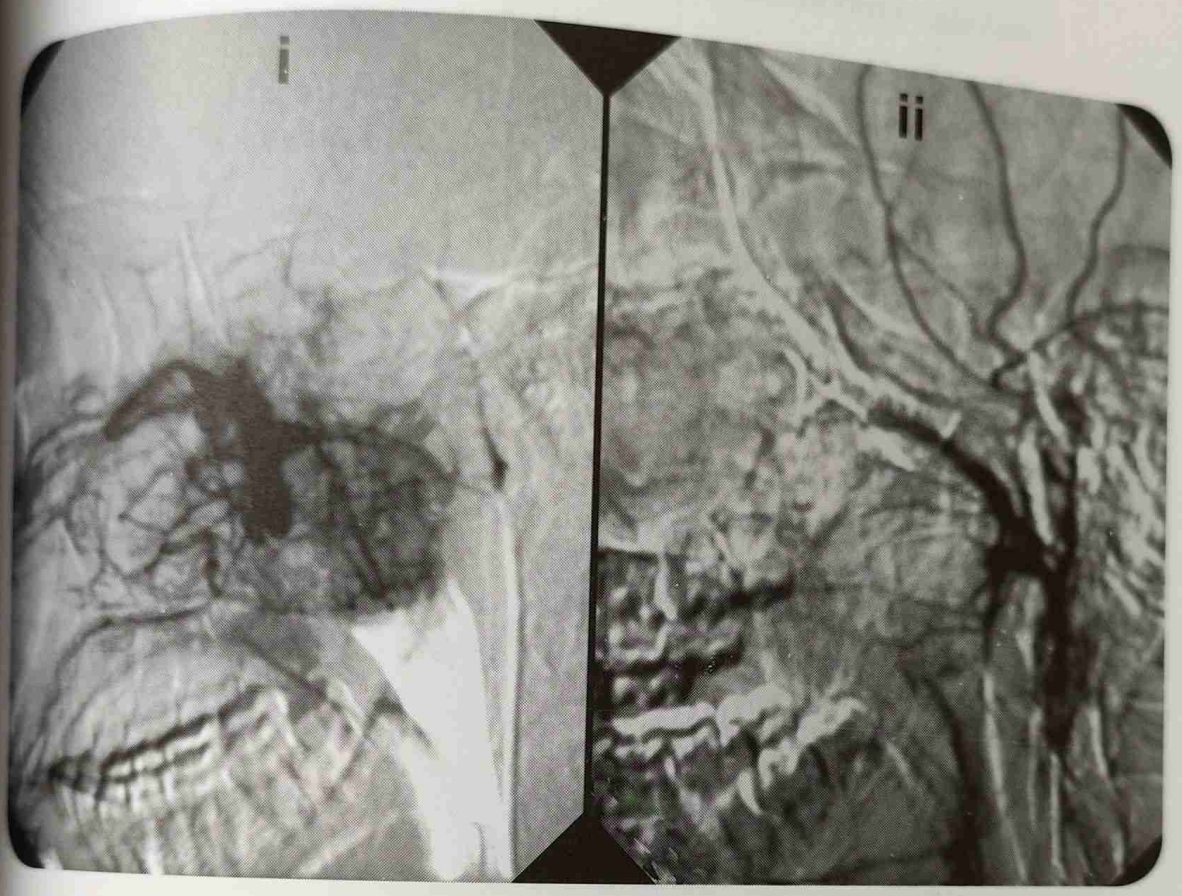
Questions

1. Name the type, site and view of this film.
2. Describe the findings visible in this radio-imaging film.
3. What is the most likely diagnosis?
4. How will you treat this condition?

Answers

1. Name of this film:
   - Type: Plain CT scan without contrast.
   - Site: Nose and paranasal sinuses.
   - View: Coronal view.
2. Findings:
   - This is a CT scan coronal view showing the nasal cavity, maxillary sinus, ethmoidal air cells, orbits and cranial cavity.
   - There is mucosal thickening in both maxillary sinuses with air-fluid level in the left maxillary sinus.
   - There is soft tissue opacity in visible ethmoidal air cells on both the sides.
   - Inferior turbinates on both the sides appear to be enlarged.
   - There is no bony erosion visible.
   - Fovea ethmoidalis is intact on both the sides with no intra-cranial involvement.
3. Likely diagnosis:
   - Chronic Rhino-sinusistis.
4. Treatment:
   - Medical treatment:
     - Antibiotics.
     - Nasal decongestant.
     - Mucolytic agents.
     - Steam inhalation.
     - Treatment of allergy if present.
   - Surgical treatment:
     - Functional endoscopic sinus surgery including middle meatus antrostomy and ethmoidectomy.
     - Clearance and ventilation of the other sinuses (if also involved).

OSCE Station No 63



Observe the above photograph of left external carotid angiography film of a 14-year-old boy. Answer the following questions:

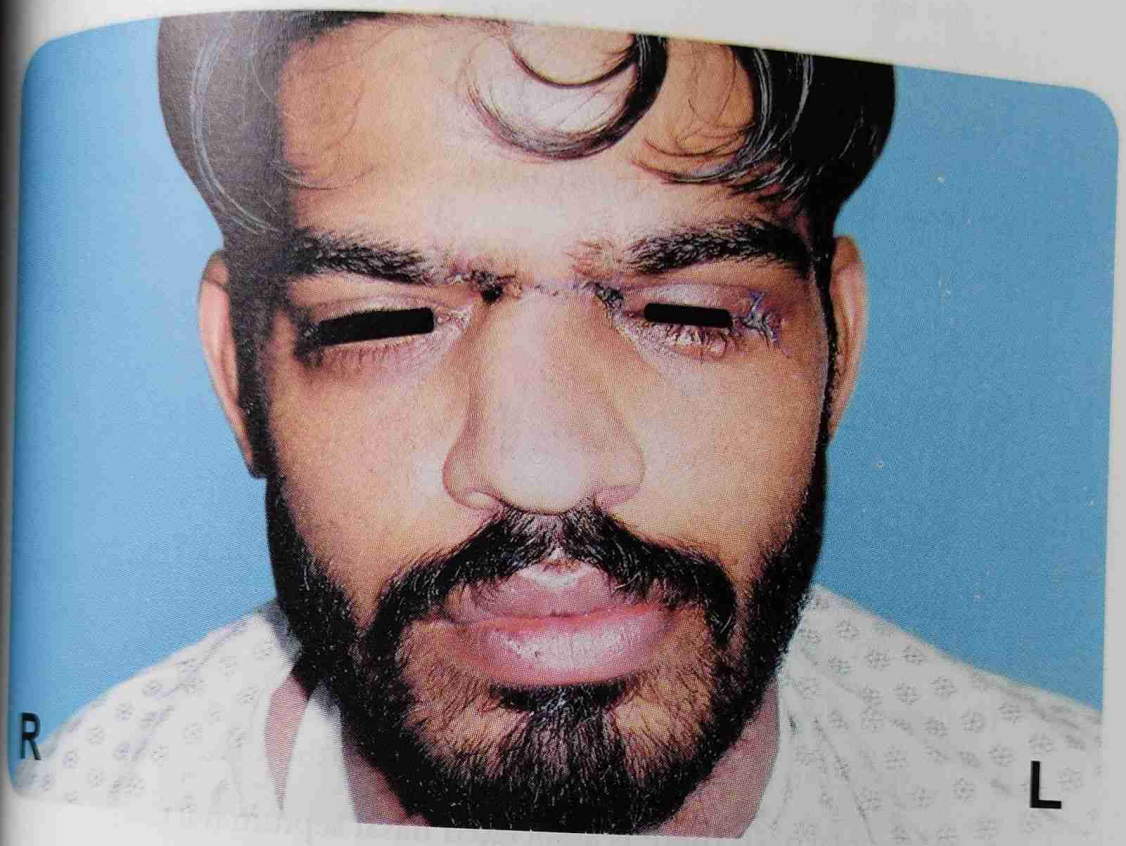
Questions

1. Outline the visible findings on both films i and ii.
2. What is the most likely diagnosis?
3. Briefly outline the pathology of this condition.

Answers

1. Visible findings:
   - This is a angiography films of left external carotid artery before and after embolization.
   - Film No. i is shows a vascular blush due to a vascular tumour.
   - Film No. ii the blush is absent because of embolization.
2. Likely diagnosis:
   - Juvenile nasopharyngeal angiofibroma.
3. Pathology of this condition:
   - It is a benign but locally aggressive tumour of the nose and nasopharynx.
   - Site of origin is most probably spheno-palatine foramen.
   - Occurs exclusively in males.
   - The most usual age of onset is in second decade.
   - It contains both angiomatous and fibrous tissues in varying proportion.
   - It is a hormonal dependent tumour.

OSCE Station No 64



Observe the above photograph of a 24-year-old man who had a road traffic accident while riding a bike. Answer the following questions:

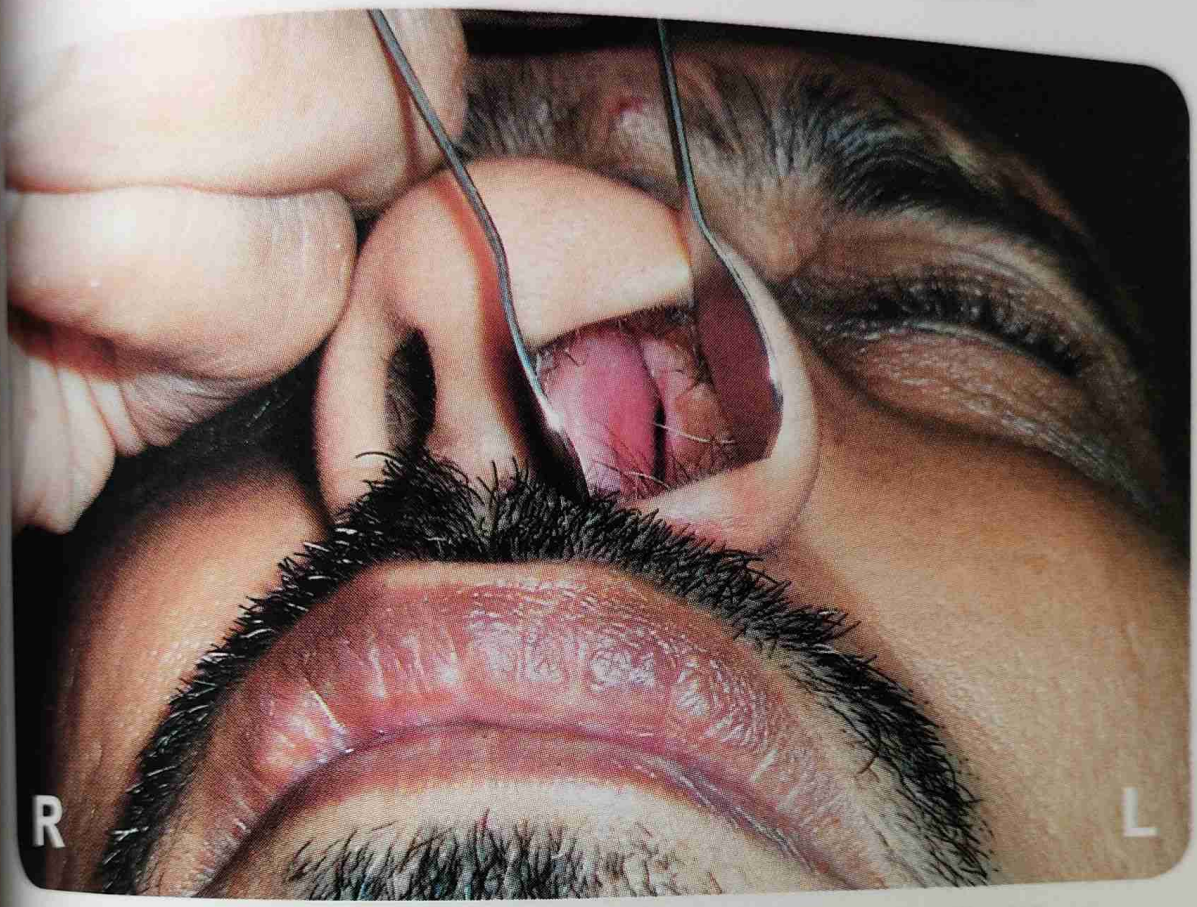
Questions

1. Describe the findings visible on this photograph.
2. What further investigations are required in this patient?
3. How will you treat this patient?

Answers

1. Findings:
   - There is marked deformity of the external nose with deviation of the bridge of nose towards the right side.
   - There are two areas where stitching with prolene has been done. One at the root of the nose and the other near the outer canthus of the left eye.
   - There is no other deformity of the facial bone or mandible.
   - No visible bleeding from the nose.
2. Further investigations:
   - Plain X-ray nasal bone (lateral view).
   - 3D CT scan of the face (if available).
   - Nasal endoscopy (if available).
   - Investigations for general anaesthesia (if surgical intervention is required).
3. Treatment:
   - Correction of the nasal bone fracture with POP casting.
   - Septoplasty (if there is associated nasal septum fracture).
   - Medical treatment including antibiotic and NSAID.
   - Treatment of the other associated injury.

OSCE Station No 65



Observe the above photograph of anterior rhinoscopy on a 38-year-old man who presented with nasal obstruction for the last many years. Answer the following questions:

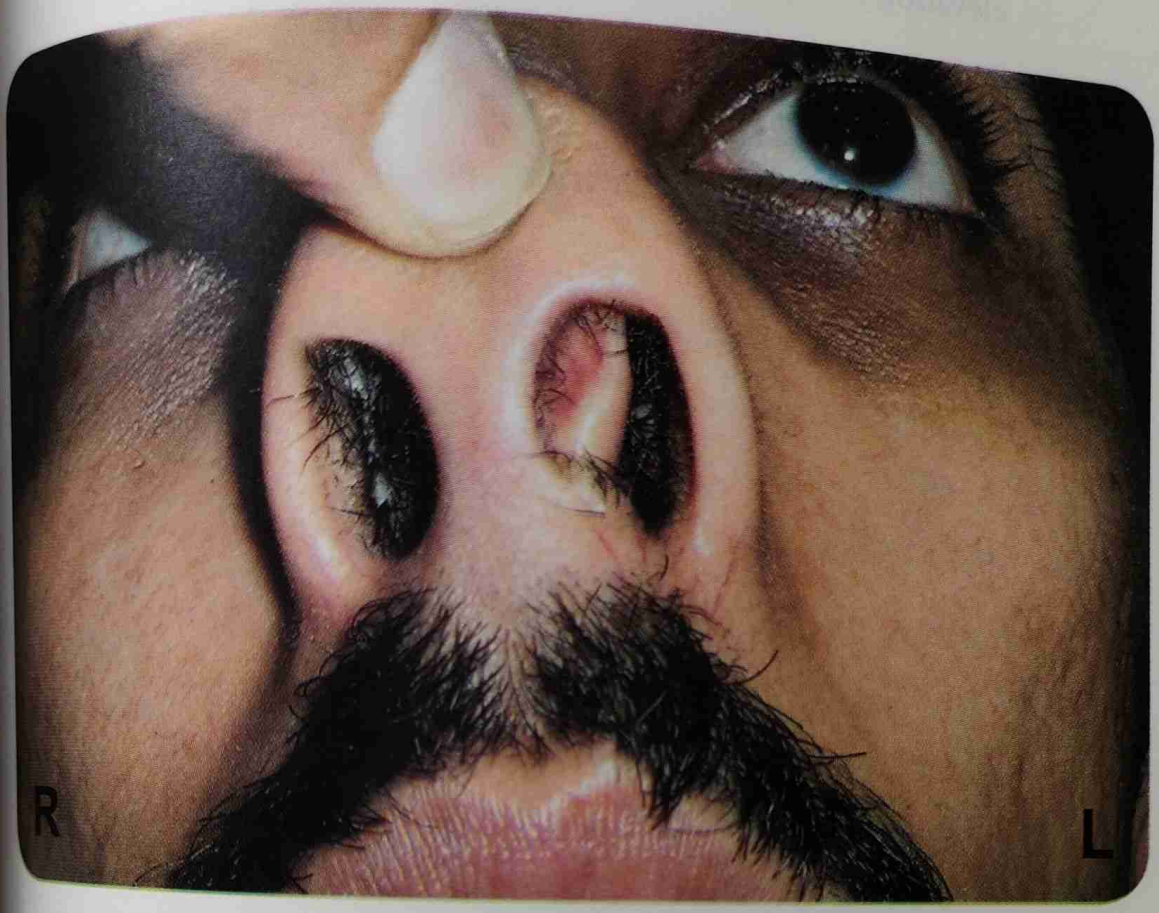
Questions

1. Describe the findings visible on this photograph.
2. What investigations are required in this patient?
3. Enlist the complications associated with surgery of this condition.

Answers

1. Findings visible:
   - This is a photograph of anterior rhinoscopy being done on the left side.
   - There is marked deviated nasal septum with convexity on the left side.
   - Overlying mucosa is somewhat congested.
2. Required investigations:
   - Plain X-ray PNS (Water's view) for assessing the condition of the sinuses.
   - CT scan of the nose and PNS without contrast for assessing the paranasal sinuses and posterior nose.
   - Nasal endoscopy.
   - Investigations when surgery is planned like complete blood picture, blood sugar level, X-ray chest (PA view), urine detailed report, hepatitis screening, bleeding and clotting profile.
3. Complications:
   - Anaesthetic complications.
   - Bleeding.
   - Septal haematoma.
   - Septal perforation.
   - CSF rhinorrhoea.
   - Saddle nose deformity.
   - Adhesion formation.
   - Persistence of deviation.
   - Flapping nasal septum.

OSCE Station No 66



Observe the above photograph of the nose of a 28-year-old man. Answer the following questions:

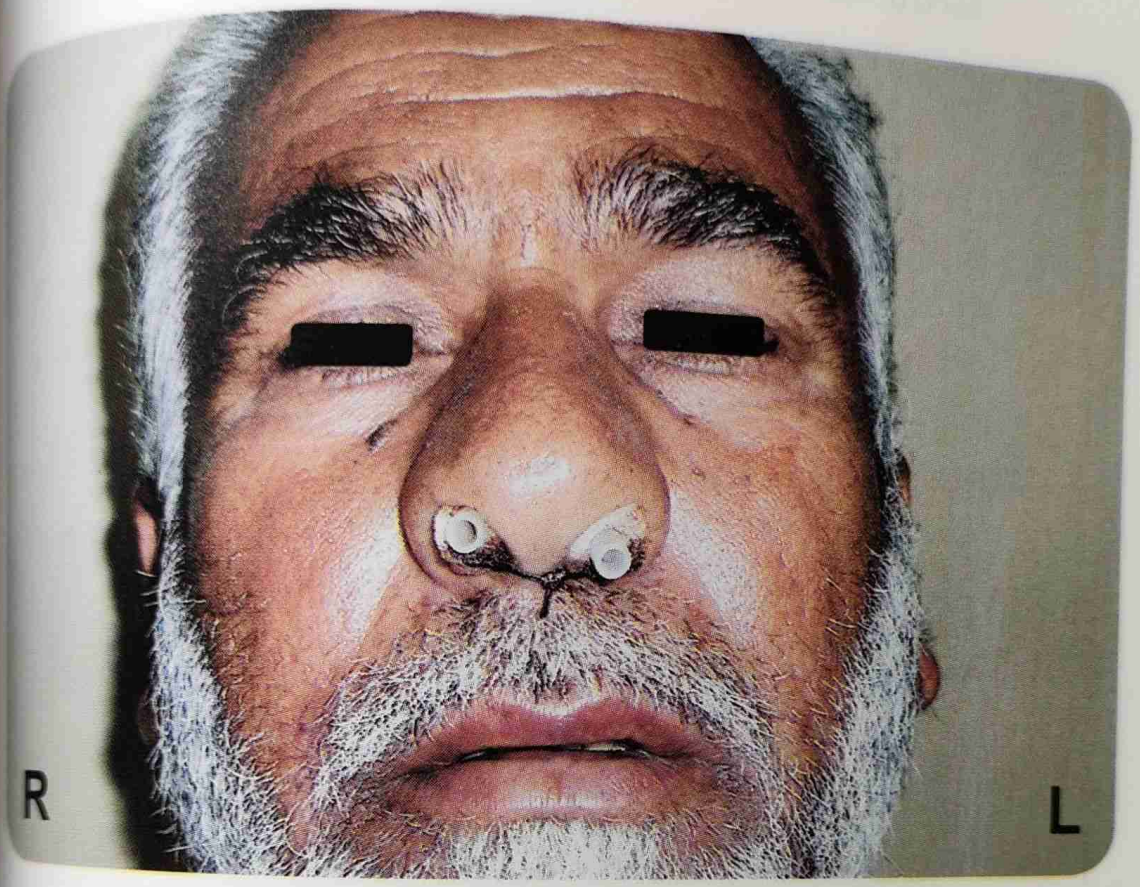
Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis in this case?
3. What are the other types of this condition?
4. How will you treat this condition?

Answers

1. Findings on this photograph:
   - This is a photograph of a patient, where nose is being examined by elevating the tip of the nose.
   - There is marked anterior septal dislocation on the left side.
2. Diagnosis:
   - Deviated nasal septum-anterior septal dislocation.
3. Other types of this condition:
   - Simple or C-shaped deviation.
   - Sigmoid or S-shaped deviation.
   - Spur.
   - Thickened nasal septum.
4. Treatment of this condition:
   - The treatment of this condition is septoplasty.

OSCE Station No 67



Observe the above photograph of the nose of a 55-year-old man and answer the following questions:

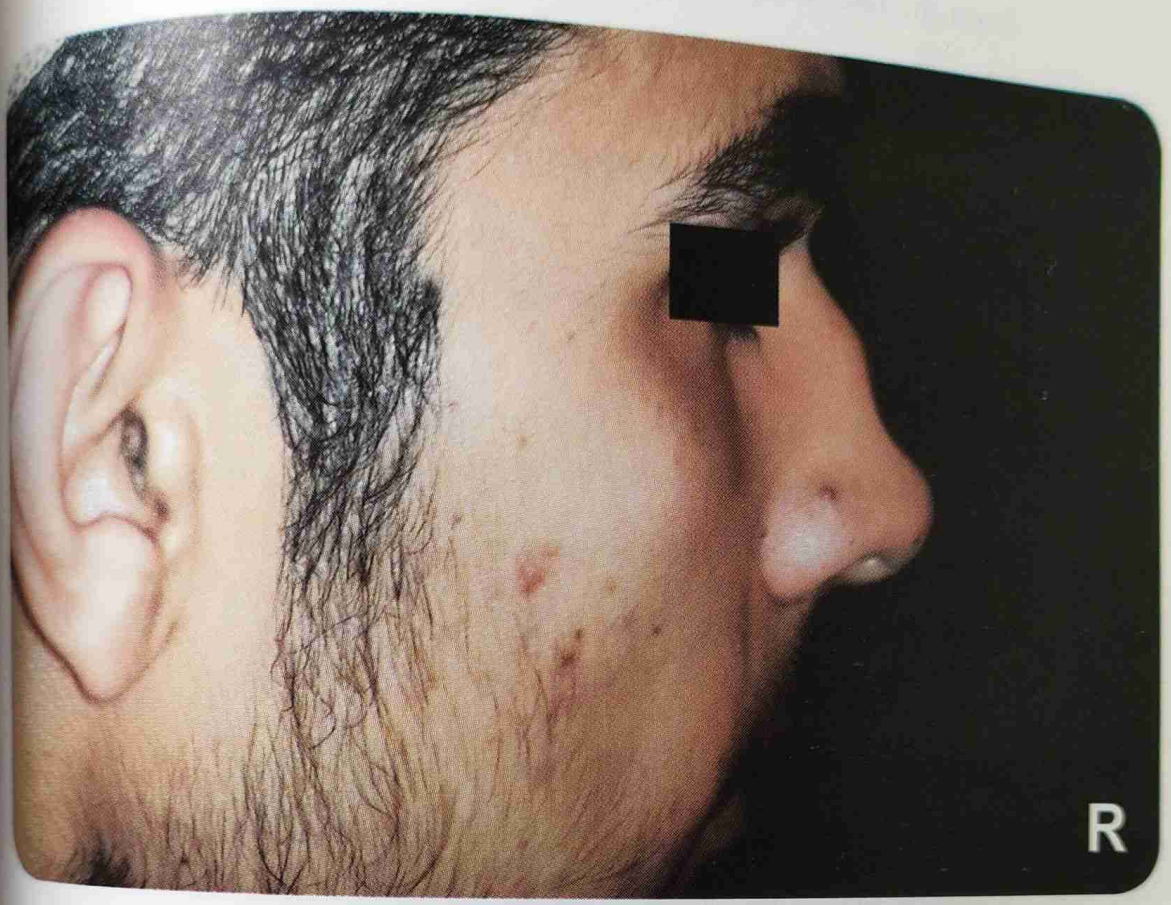
Questions

1. Describe the visible findings with the name of procedure done on this patient.
2. What are the advantages of this type?
3. Name three indications for this procedure.

Answers

1. Findings:
   - This is a 55-year-old man in whom anterior nasal packing has been done.
   - Anterior nasal packing is done with a nasal tampon having airway tube (Merocele standard dressing with airway tube).
2. Advantages of this packing:
   - In this nasal tampon airway tube is present, so patient can breathe through his nose. Problems of mouth breathing is thus avoided.
   - This type of nasal tampon is made from a special porous sponge that can absorb huge amount of secretions and blood.
   - As compared to gauze packing, this type of packing is easy to insert and easy to remove.
3. Three indications:
   - After septal surgery like septoplasty, septo-rhinoplasty.
   - After endoscopic sinus surgery.
   - For control of epistaxis.

OSCE Station No 68



Observe the above photograph of the external nose of a 18-year-old boy and answer the following questions:

Questions

1. Describe the visible findings with diagnosis in this patient.
2. What is the aetiology of this condition?
3. How will you treat this condition?

Answers

1. Findings with diagnosis:
   - This is a photograph of the external nose of a 18-year-old boy seen from the lateral aspect.
   - There is a depression in the bridge of the nose mainly in its middle one third.
   - Diagnosis is saddle nose deformity.
2. Aetiology:
   - Middle one third of the bridge on the nose is mainly supported by the septal cartilage.
   - Saddle nose deformity occurs when this support is lost by necrosis or excessive removal during surgery. Important causes are:
     - Septal haematoma or septal abscess.
     - Septal surgery like SMR or septoplasty.
     - Trauma to nose.
3. Treatment of this condition:
   - Saddle nose deformity is corrected by 'Augmentation Rhinoplasty'.
   - A graft is placed to augment the nose.
   - The graft used for this purpose can be a cartilage graft like costal cartilage or a free bone graft like iliac crest.

OSCE Station No 69

Observe the above photograph of the nose of a 40-year-old man. Answer the following questions:

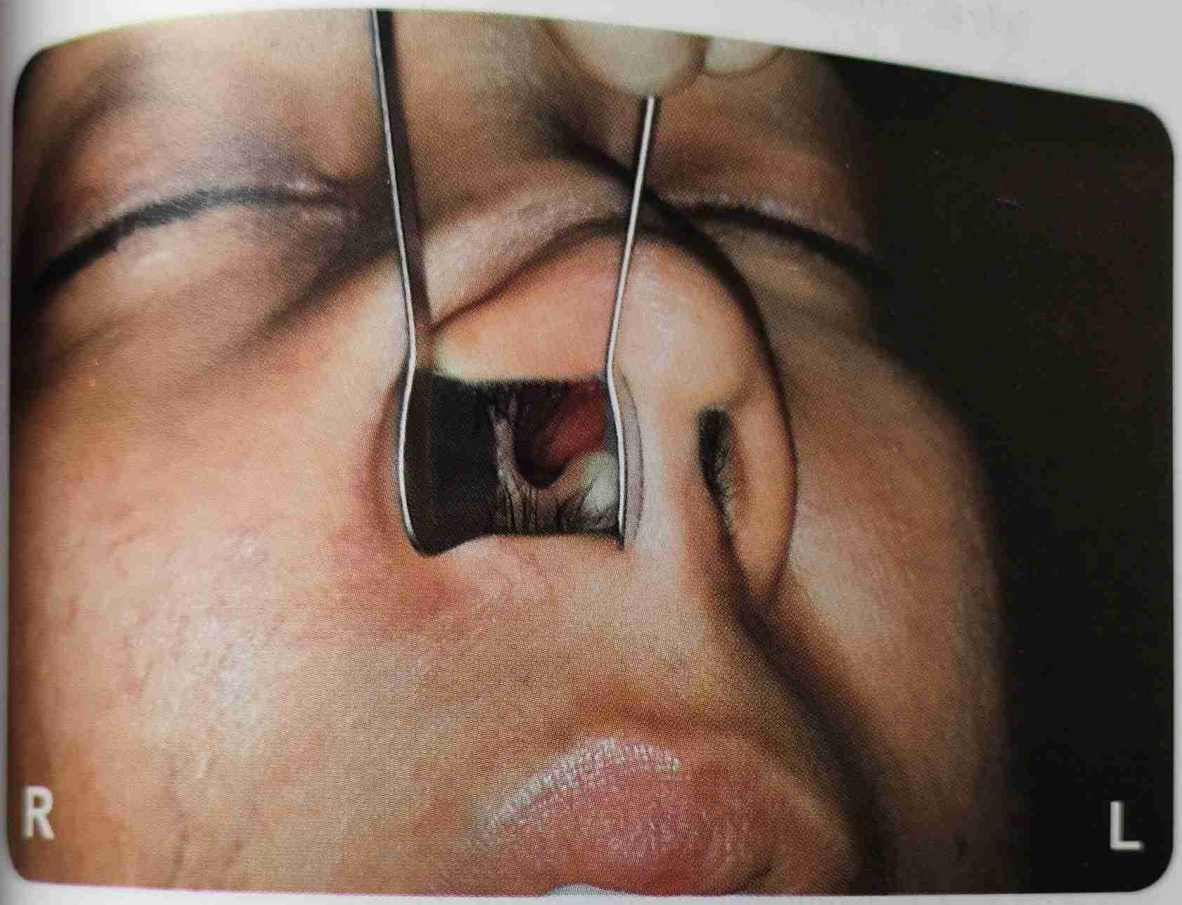
Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis in this case?
3. What clinical test is mandatory to perform in this patient and why?
4. How will you treat this patient?
5. Enlist the complications associated with this condition.

Answers

1. Findings on this photograph:
   - This photograph is showing the nasal cavity of a 40-year-old man, where a smooth and diffuse bulge is present on both the sides of the nasal septum.
   - Colour of this bulging is red.
   - There is complete obliteration of the nasal cavity due to this bulging.
2. Most likely diagnosis:
   - Septal haematoma or septal abscess.
3. Mandatory clinical test:
   - The mandatory clinical test is Probe test.
   - This test is performed to find out the consistency of this swelling and to find out the origin from where it is arising (nasal septum or lateral wall).
4. Treatment:
   - Incision and drainage.
   - Placement of a drain and nasal packing.
   - Sent the drained material for culture and sensitivity.
   - Antibiotic and NSAID.
5. Complications:
   - Septal haematoma may convert into abscess.
   - Organization with resultant thickening of the nasal septum.
   - Necrosis of the septal cartilage with resultant saddle nose deformity or septal perforation.
   - Extension of the infection leading to cavernous sinus thrombosis or meningitis.

OSCE Station No 70



Observe the above photograph of anterior rhinoscopy on a 24-year-old lady, who has history of some nasal surgery six months back. Answer the following questions:

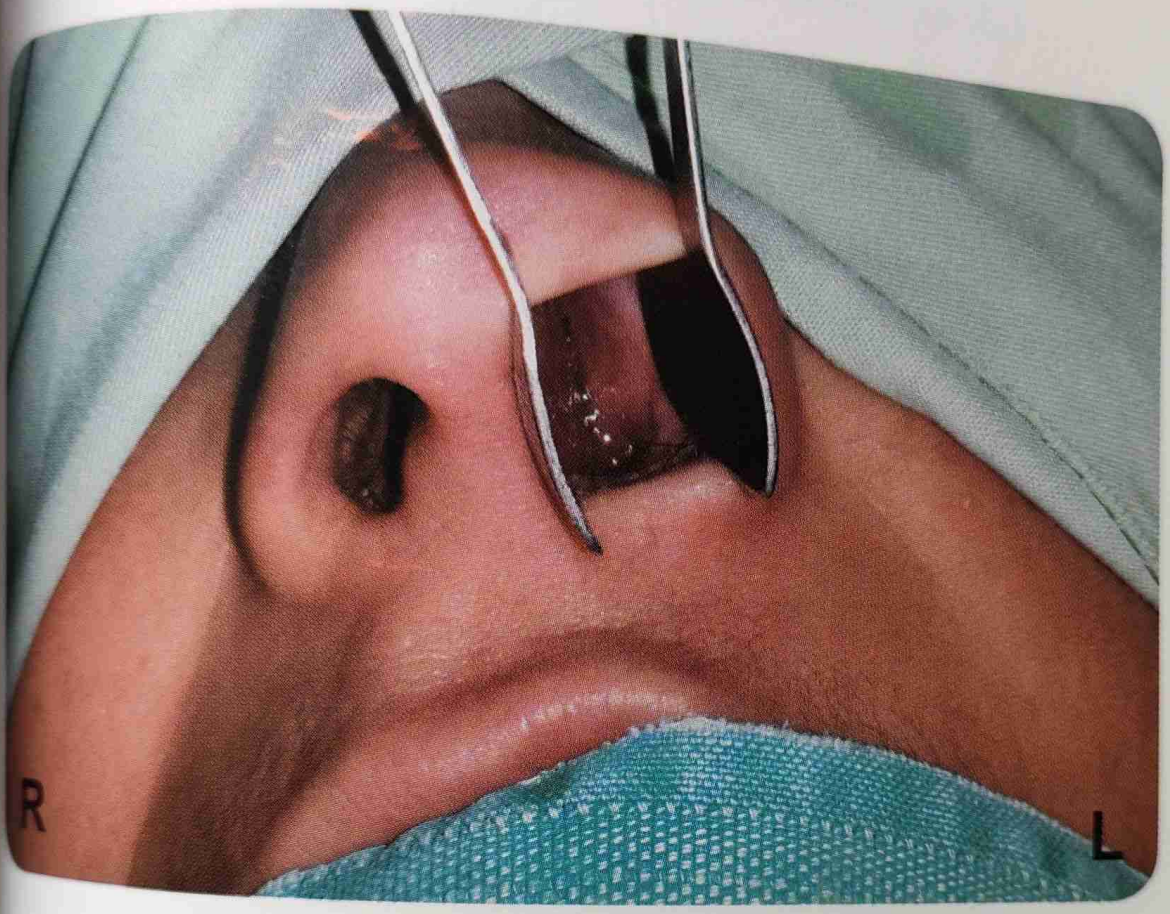
Questions

1. Describe the visible findings with diagnosis in this patient.
2. Enlist the causes of this condition.
3. How will you treat this patient?

Answers

1. Findings with diagnosis:
   - This is a photograph of anterior rhinoscopy being performed on a lady showing the right nasal cavity and the nasal septum.
   - There is a large perforation in the nasal septum.
   - The posterior and inferior margins of the perforation are visible while the anterior and superior margins are not visible. The visible margins are regular but slightly thickened.
   - Through the perforation, mucosa of the other nasal cavity is also visible which is pink in colour.
2. Causes of this condition:
   - Septal surgery.
   - Repeated bilateral cautery of the nasal septum.
   - Tight anterior nasal packing.
   - Penetrating injury of the nasal septum.
   - Snuff takers.
   - Septal haematoma and abscess.
   - Chronic granulomatous diseases of the nose.
   - Foreign body or rhinolith.
   - Idiopathic.
3. Treatment:
   - No treatment if there is no symptom.
   - Symptomatic treatment for crusting like 25% glucose in glycerin drops, normal saline spray and application of ointment.
   - Surgical closure of the perforation with mucosal flaps and obturators.

OSCE Station No 71



Observe the above photograph of anterior rhinoscopy on a 22-year-old lady, who has history of some nasal surgery two months back. Answer the following questions:

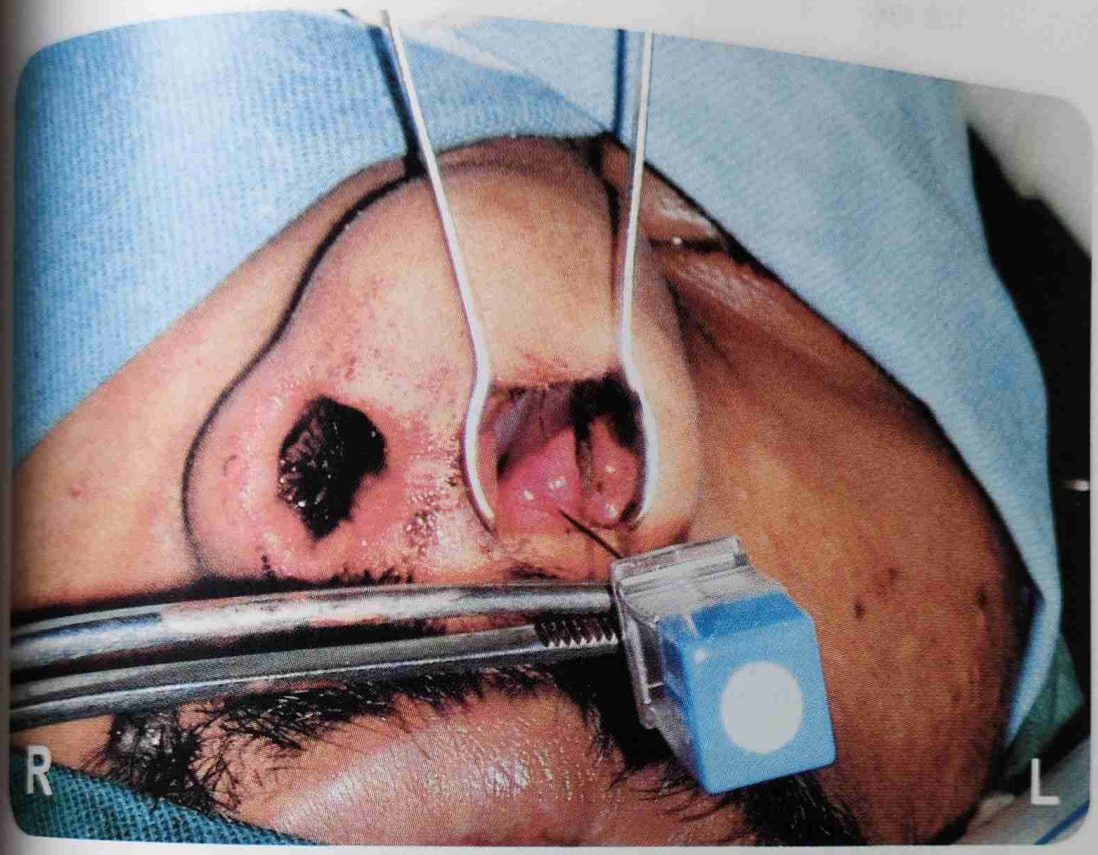
Questions

1. Describe the visible findings with diagnosis in this patient.
2. What is the aetiology of this condition and how can be this prevented?
3. How will you treat this patient?

Answers

1. Findings on this photograph:
   - This is a photograph of anterior rhinoscopy being performed on a lady showing the left nasal cavity.
   - There is no space between the nasal septum and the lateral wall of the nose.
   - Some secretions are also present in the nasal cavity.
   - Diagnosis is nasal adhesion.
2. Aetiology with prevention:
   - Nasal adhesion is the fibrous band with epithelialization between the nasal septum and the lateral wall of the nose, mainly inferior turbinate.
   - These fibrous bands are formed when there is mucosal disruption on both the nasal septum and the lateral wall of the nose.
   - The chances of adhesions are more when surgery on nasal septum and inferior turbinate is done in the same sitting.
   - It can be prevented by placing a splint for sometimes after surgery.
3. Treatment:
   - Excision of the adhesions.
   - Keeping the splints in between for 10 to 14 days.

OSCE Station No 72



Observe the above photograph of the nasal cavity of a young man, where some surgical operation is in process. Answer the following questions:

Questions

1. Name this surgical procedure.
2. What is the indication of this surgical operation?
3. What are the other options of surgery for this condition?
4. Outline the steps of this surgical operation.

Answers

1. Surgical procedure:
   - Sub-Mucosal Diathermy (SMD) of the inferior turbinate of the left side.
2. Indication of this operation:
   - Hypertrophy or enlargement of the inferior turbinate causing nasal obstruction.
3. Other options for surgery:
   - Electric cautery of the inferior turbinate.
   - CO_2 laser surgery.
   - Sub-mucosal resection by microdebrider.
   - Radiofrequency turbinate reduction.
   - Cryosurgery.
   - Partial or total turbinectomy.
4. Steps of surgical operation:
   - This operation can be done under local or general anaesthesia.
   - A fine needle is taken and is inserted sub-mucosally into the inferior turbinate along its whole length.
   - Diathermy point is touched with the end of the needle and it is withdrawn slowly.
   - The burning of the sub-mucosa is done along the whole length of the inferior turbinate.
   - Two or three more sub-mucosal burns are made parallel to the first one.
   - Burning of the sub-mucosa causes reduction of the tissue and secondly fibrosis occurs that causes further shrinkage of the inferior turbinate.

OSCE Station No 73

Observe the above photograph of a 27-year-old man, on whom some surgical operation is in process. Answer the following questions:

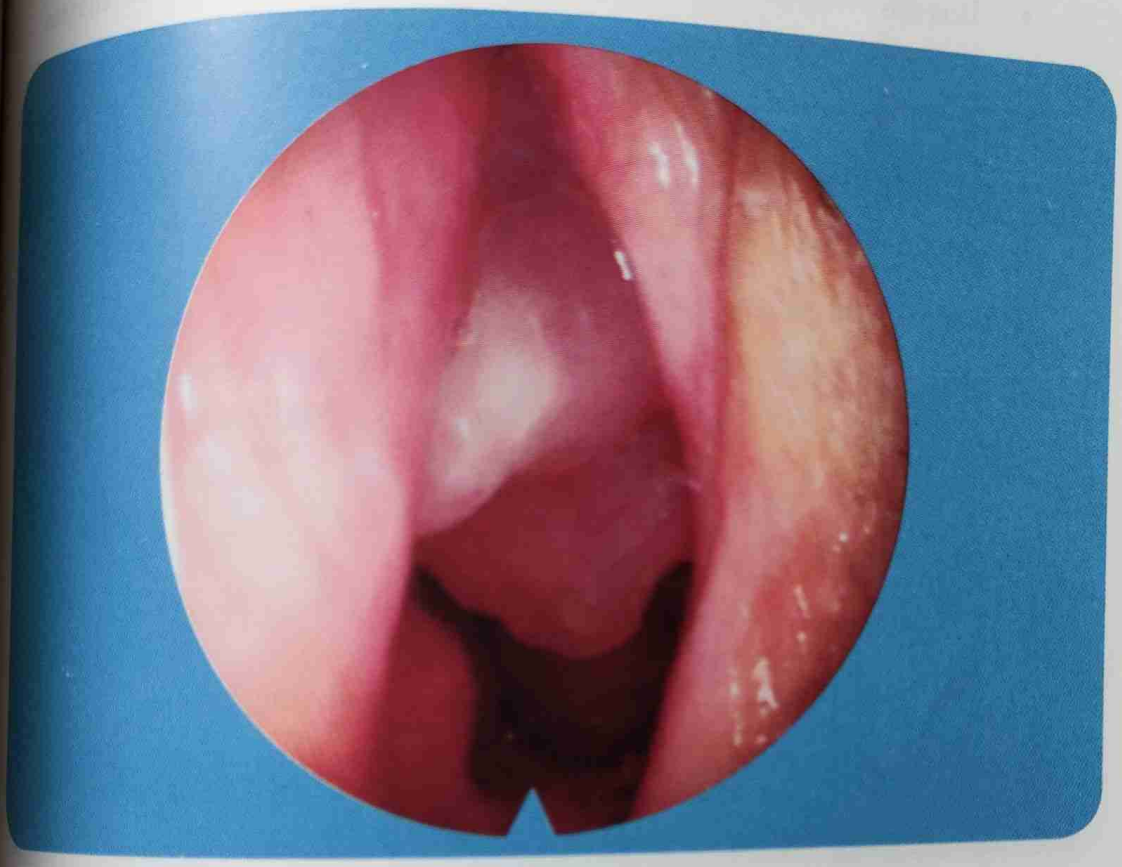
Questions

1. Name this surgical operation.
2. Enlist the indications for this operation.
3. What should be direction of this instrument during insertion?
4. Enlist the complications that can occur during or after this surgery.

Answers

1. Name of surgical operation:
   - Antral washout or proof puncture.
2. Indications of this operation:
   - Acute or sub-acute maxillary sinusitis.
   - Chronic maxillary sinusitis.
   - In suspected malignancy cases for cytology of returned fluid.
3. Direction during insertion:
   - This instrument (Lichwitz's trocar and cannula) is directed towards the outer canthus of the eye or the tragus of the same side.
4. Complications:
   - Anaesthetic complications.
   - Bleeding.
   - Injury to the structures in the orbital cavity.
   - Injury to tissue in the cheek.
   - Injury to pterygo-palatine fossa.
   - Air embolism.

OSCE Station No 74



Observe the above photograph of nasal endoscopy of the left nasal cavity in a 30-year-old lady who has a long history of sneezing, rhinorrhoea and nasal obstruction. Answer the following questions:

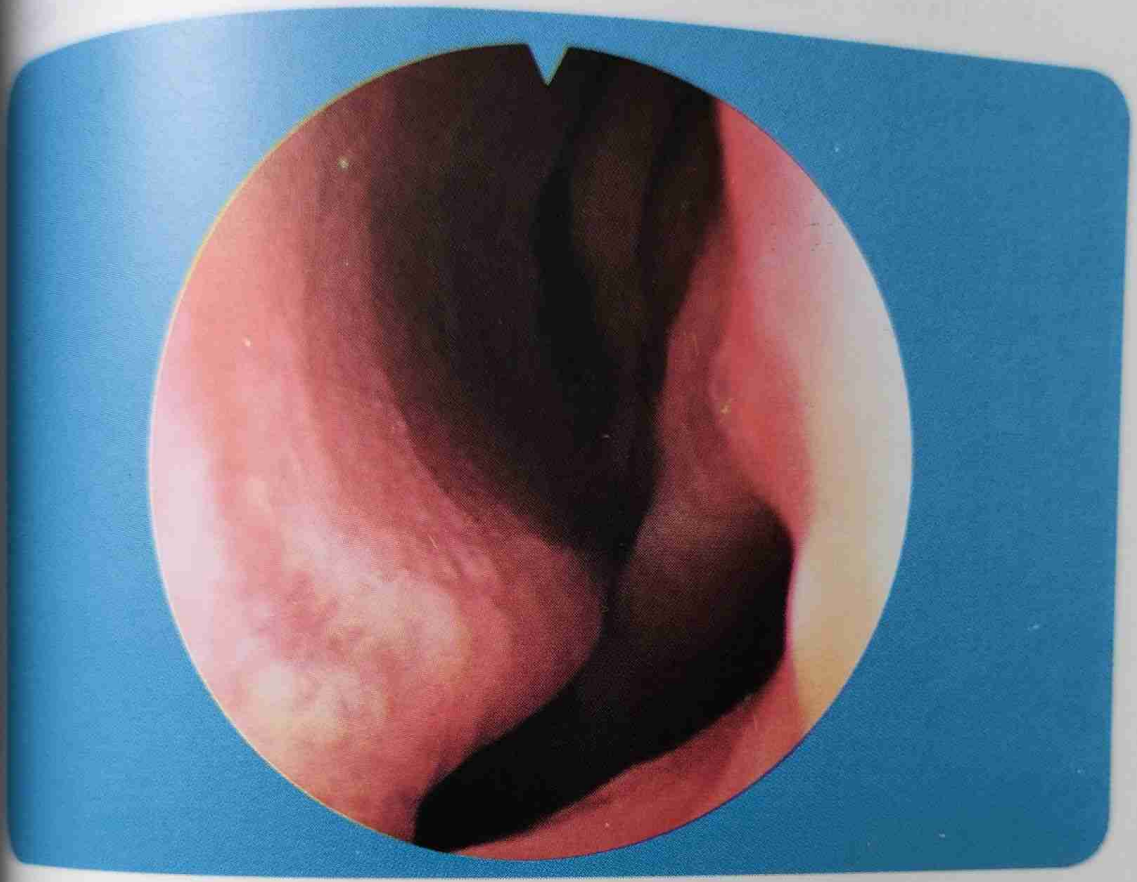
Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis?
3. What further investigations are required in this patient?

Answers

1. Findings on this photograph:
   - This is a photograph of nasal endoscopy of the left nasal cavity.
   - It is showing presence of multiple smooth, pale grape like masses in the nasal cavity.
   - Nasal secretions are also present in the nasal cavity.
2. Most likely diagnosis:
   - Nasal polypi.
3. Further investigations required:
   - CT scan of the nose and PNS without contrast in both axial and coronal view to find out the extent of the nasal polypi.
   - Investigations for nasal allergy:
     - complete blood picture.
     - total serum IgE level.
   - Baseline investigations when surgery is planned.
   - Histopathology of the tissue removed in surgery.

OSCE Station No 75



Observe the above endoscopic view of the left nasal cavity of a 20-year-old man. Answer the following questions:

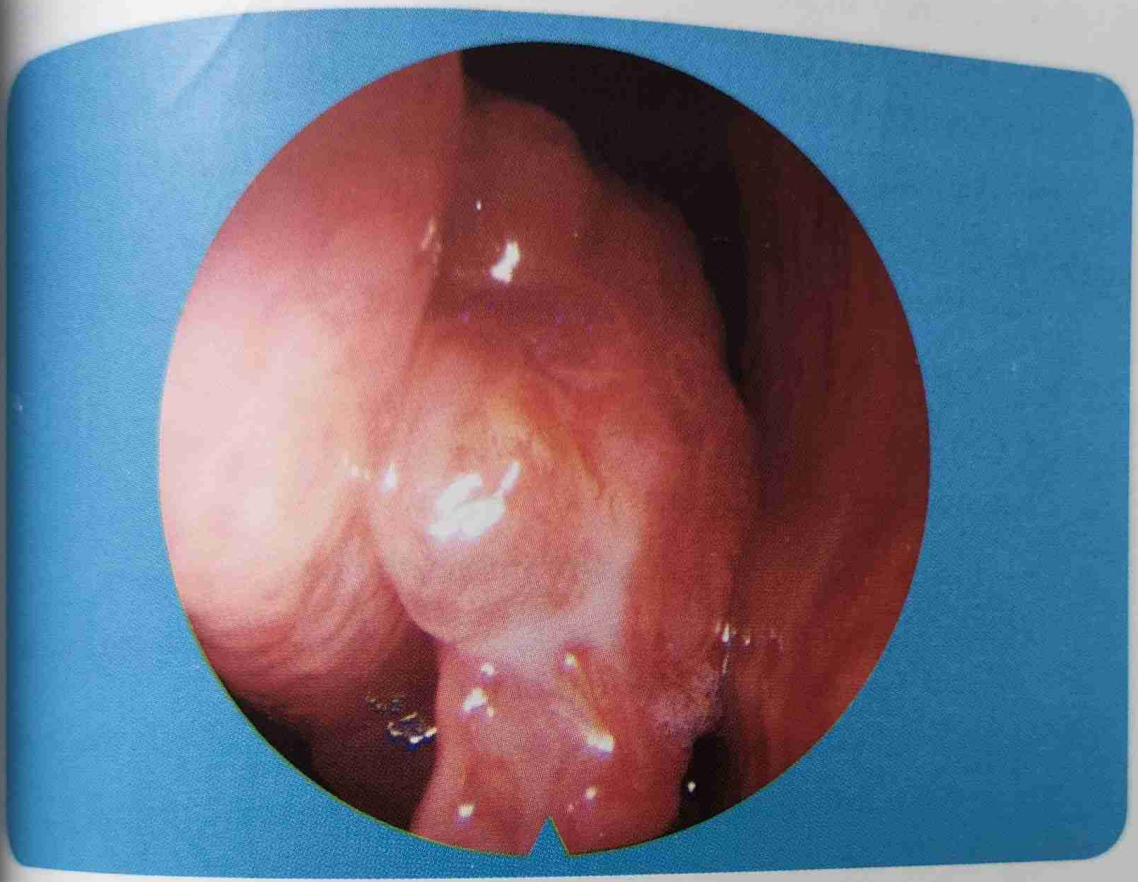
Questions

1. Describe the findings visible in this photograph with diagnosis.
2. How will you treat this patient?
3. Enlist three important complications of this treatment.

Answers

1. Findings on this photograph:
   - This is the endoscopic view of the left nasal cavity.
   - There is a sharp shelf like projection from the nasal septum near its floor.
   - This is touching the inferior turbinate.
   - Diagnosis is deviated nasal septum-septal spur.
2. Treatment:
   - Treatment of this condition is septoplasty (removal of the spur) either by conventional surgery or endoscopic surgery.
3. Three important complications:
   - Septal perforation.
   - Nasal adhesion.
   - Excessive bleeding from the septum or inferior turbinate.

OSCE Station No 76



Observe the above endoscopic view of the right nasal cavity of a 52-year-old man who presented with right sided nasal obstruction for last eight months. Answer the following questions:

Questions

1. Describe the findings visible in this photograph.
2. Write two most important differential diagnosis in this case.
3. Enlist two most relevant investigations required in this patient.

Answers

1. Findings on this photograph:
   - This is the endoscopic view of the right nasal cavity.
   - There is an irregular mass with shiny surface present in the right nasal cavity between the inferior turbinate and the nasal septum.
   - Some fresh blood is also visible on the surface of this mass.
   - Mucosa of the visible nasal septum and the inferior turbinate looks to be quite normal.
2. Two differential diagnosis:
   - Inverted papilloma.
   - Squamous cell carcinoma.
3. Two relevant investigations:
   - Punch biopsy of the mass for histopathology.
   - CT scan of the nose and PNS with contrast in axial and coronal view for assessing the extent of the mass.

SECTION 03

ORAL CAVITY AND PHARYNX

OSCE Station No 77

Observe the above photograph of an instrument and answer the following questions:

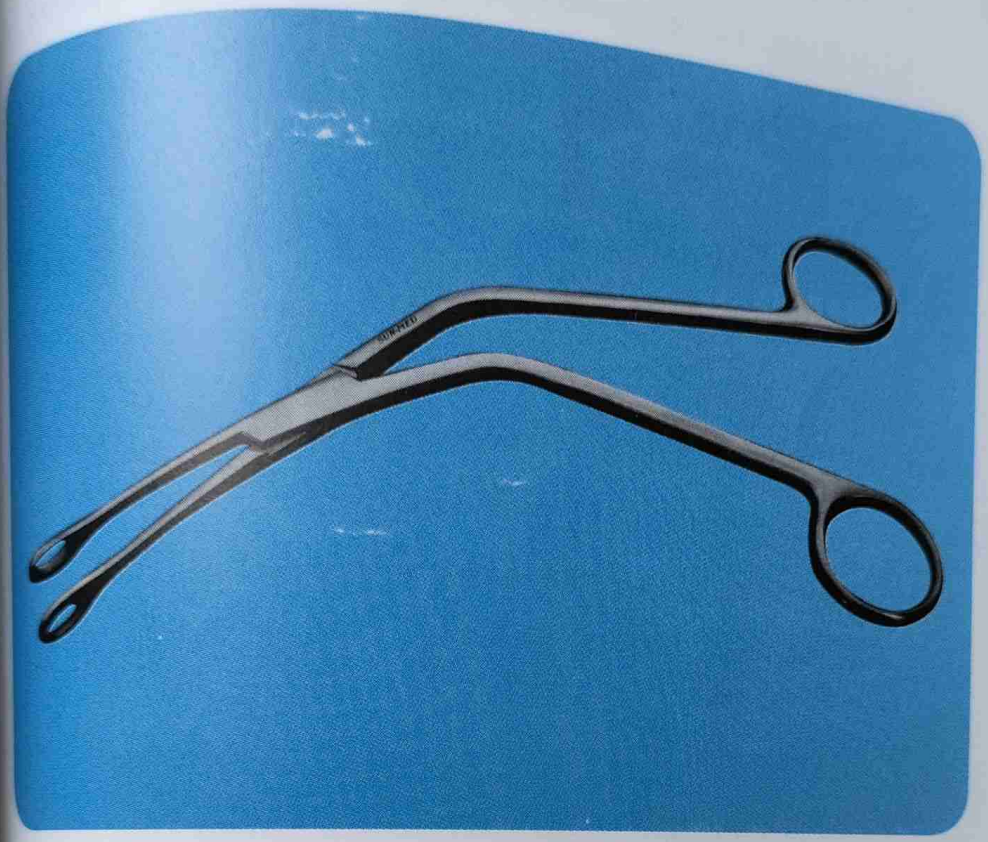
Questions

1. Name the given instrument.
2. Name two most common surgical operations where this instrument is used.
3. Name the position in which these operations are performed.
4. Outline the post-operative care of such patient.

Answers

1. Name of the instrument and procedure:
   - Boyle Davis mouth gag.
2. Two surgical operations:
   - Tonsillectomy.
   - Adenoidectomy.
3. Name of position:
   - Rose's position.
4. Post-operative care:
   - Patient is kept in lateral position until he is fully conscious.
   - He must be observed for bleeding from mouth.
   - Vital signs including pulse, respiration, blood pressure and temperature are checked at regular intervals.
   - He is kept Nothing Per Orally (NPO) for four to six hours.
   - Liquid diet and ice cream are allowed after four to six hours.
   - Soft diet is allowed after a day and gradually changed from soft to solid food.
   - Oral hygiene is maintained by regular mouthwash and gargles.
   - Suitable antibiotic and proper analgesic are prescribed.
   - Regular follow up till the healing is complete.

OSCE Station No 78



Observe the above photograph of an instrument and answer the following questions:

Questions

1. Name the given instrument and what is its use?
2. Which another instrument is very similar to this instrument?
3. Name five common indications of this surgical operation.

Answers

1. Name of the instrument and its use:
   - Denis Browne tonsil holding forceps.
   - It is used during tonsillectomy operation for holding the palatine tonsils.
2. Name of similar instrument:
   - Luc's forceps.
3. Five common indications:
   i. Recurrent tonsillitis.
      - Seven attacks in one year.
      - Five attacks in a year for two consecutive years.
      - Three attacks in a year for three consecutive years.

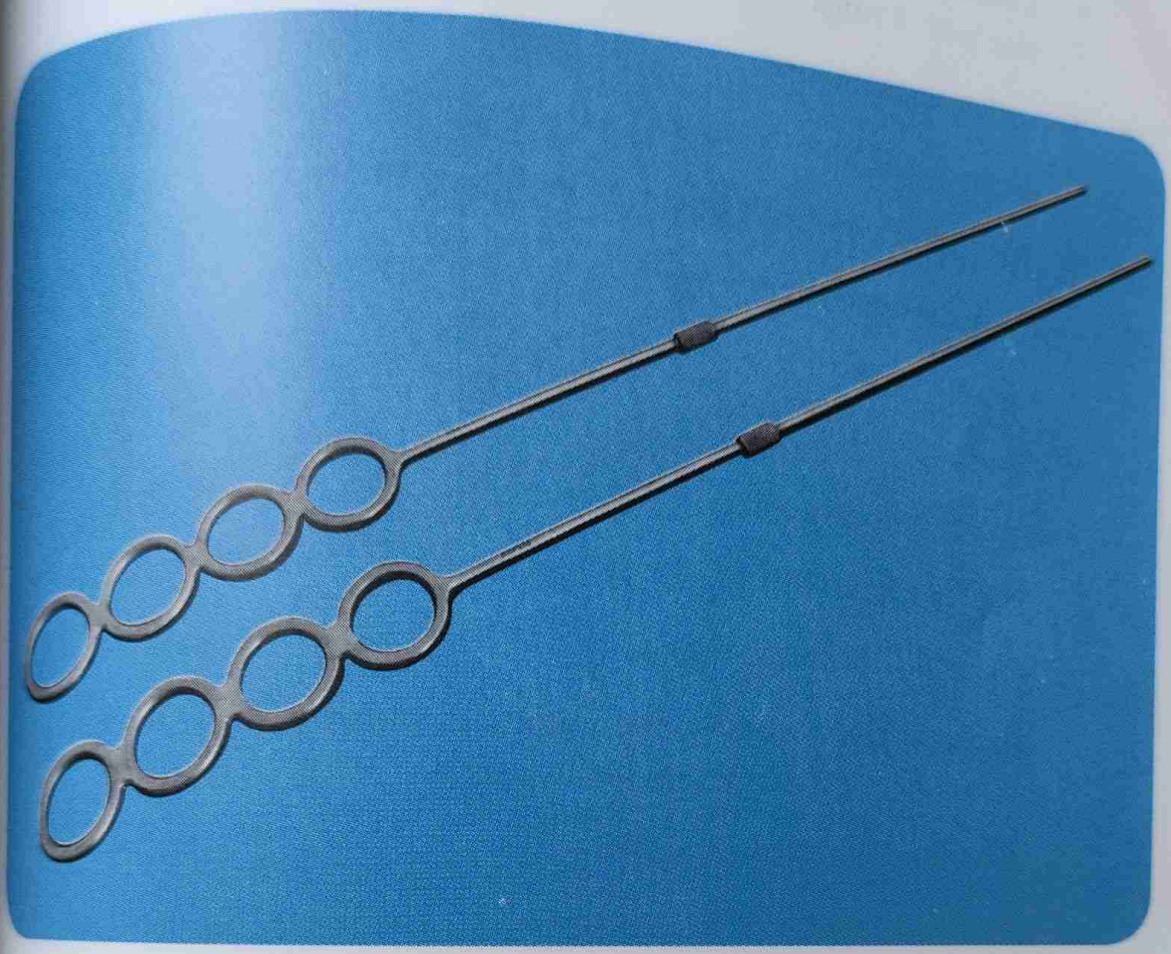
   ii. Hypertrophied tonsils interfering with swallowing, respiration or speech.

   iii. After quinsy.

   iv. Tonsillar stone or cyst.

   v. For biopsy purpose.

OSCE Station No 79



Observe the above photograph of an instrument and answer the following questions:

Questions

1. Name the given instrument with its use.
2. Name two other instruments that are used along with this instrument.
3. Name two most common surgical operations where this instrument is used.
4. Enlist pre-operative preparation of the patient for these operations.

Answers

1. Name of the instrument:
   - Draffin's suspension rods (also called Draffin's bipod rods)-adult size with 4 rings.
2. Two other instruments:
   - Boyle Davis mouth gag.
   - Magauren plate with hole for stabilizing the rods.
3. Two surgical operations:
   - Tonsillectomy.
   - Adenoidectomy.
4. Pre-operative preparation:
   - Nil Per Orally (NPO) for at least six hours before surgery.
   - General anaesthesia fitness.
   - Baseline investigations like complete blood picture, urine D/R, X-ray chest and screening for hepatitis.
   - Bleeding and clotting profile.
   - Parenteral antibiotic before surgery.

OSCE Station No 80

Observe the above photograph of an instrument and answer the following questions:

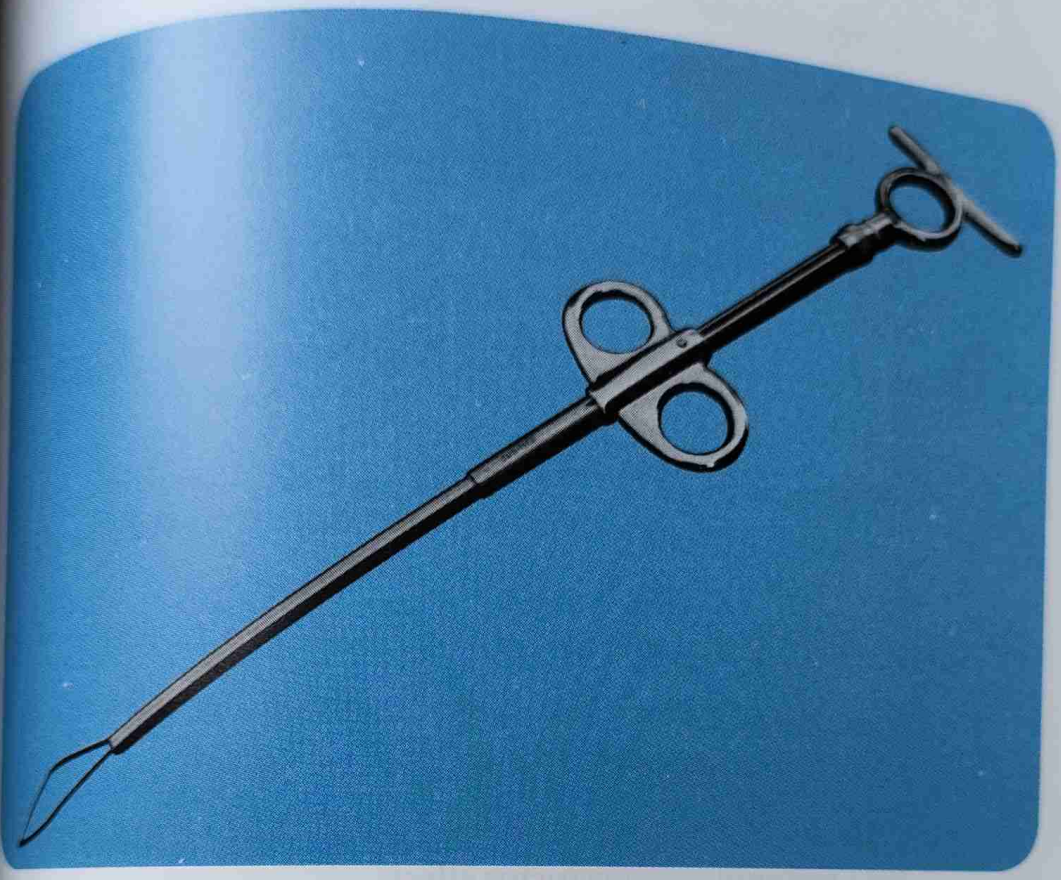
Questions

1. Name the given instrument.
2. What is the use of this instrument?
3. Name three other instruments or tools that can be used for this purpose.

Answers

1. Name of the instrument:
   - Gwynne Evan's tonsil dissector.
2. Use of the instrument:
   - This instrument is used during tonsillectomy.
   - It has two ends. One end is blunt while the other end is serrated.
   - Blunt end is used for the initial dissection to obtain a proper plane of dissection while the other serrated end is used to dissect the tonsil till its lower end.
3. Three other instruments:
   i. Harmonic scalpel.
   ii. Diathermy.
   iii. Diode Laser.

OSCE Station No 81



Observe the above photograph of an instrument and answer the following questions:

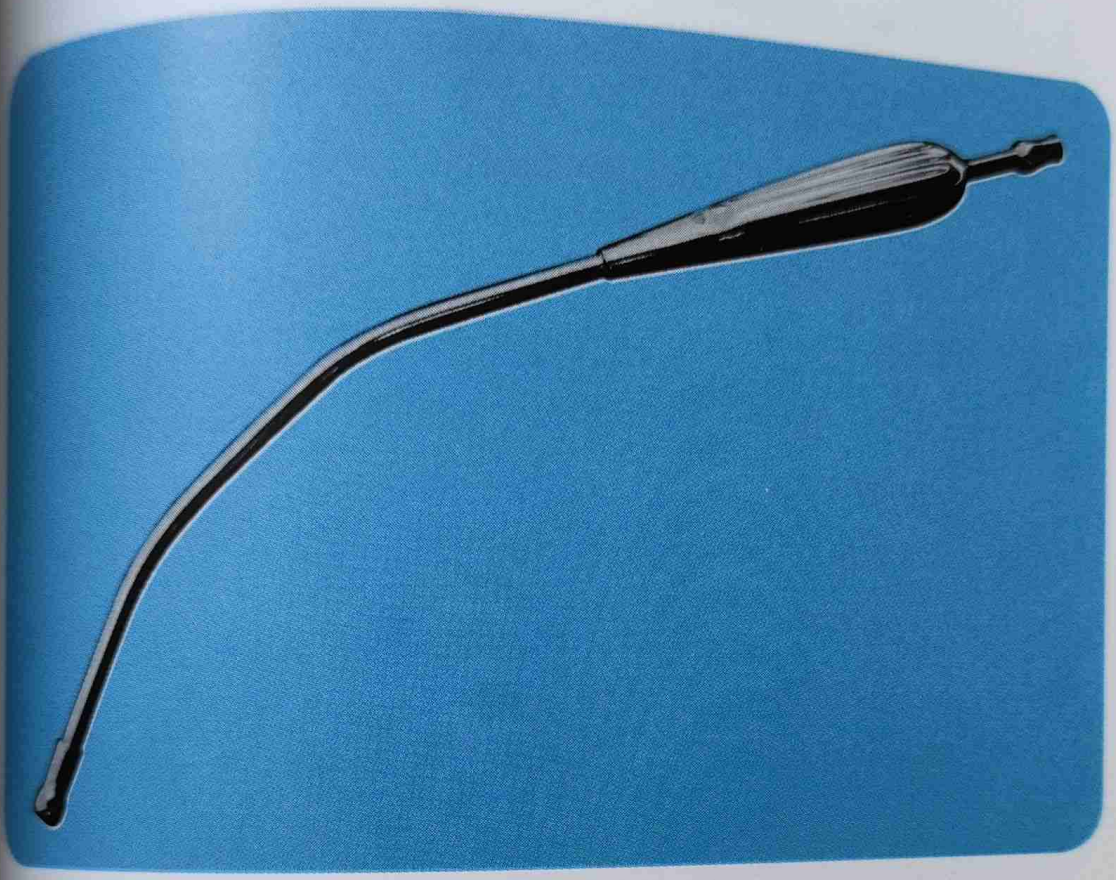
Questions

1. Name the given instrument.
2. What is the use of this instrument and how it works?
3. What is the advantage of using this instrument?

Answers

1. Name of the instrument:
   - Eve's tonsillar snare.
2. Use and how it works:
   - Eve's tonsillar snare is used to cut the pedicle or the lower end of the tonsil after dissection.
   - It has a wire at one end which can be drawn inwards.
   - The other end has three rings. The first ring at the top is for the thumb while the other two are for index and middle fingers.
   - When pressure is applied at this end, the wire at the other end goes inwards.
   - After dissection of the tonsil, the wire is passed through it upto its pedicle and pressure is applied on the other end. Thus the wire crushes and then cuts the pedicle.
3. Advantage of this instrument:
   - As the tonsillar snare first crushes and then cuts the pedicle so bleeding from the tonsillar artery does not occur.
   - Crushing of the pedicle causes release of thromboplastin, which has a powerful vasoconstrictor effect.

OSCE Station No 82



Observe the above photograph of an instrument and answer the following questions:

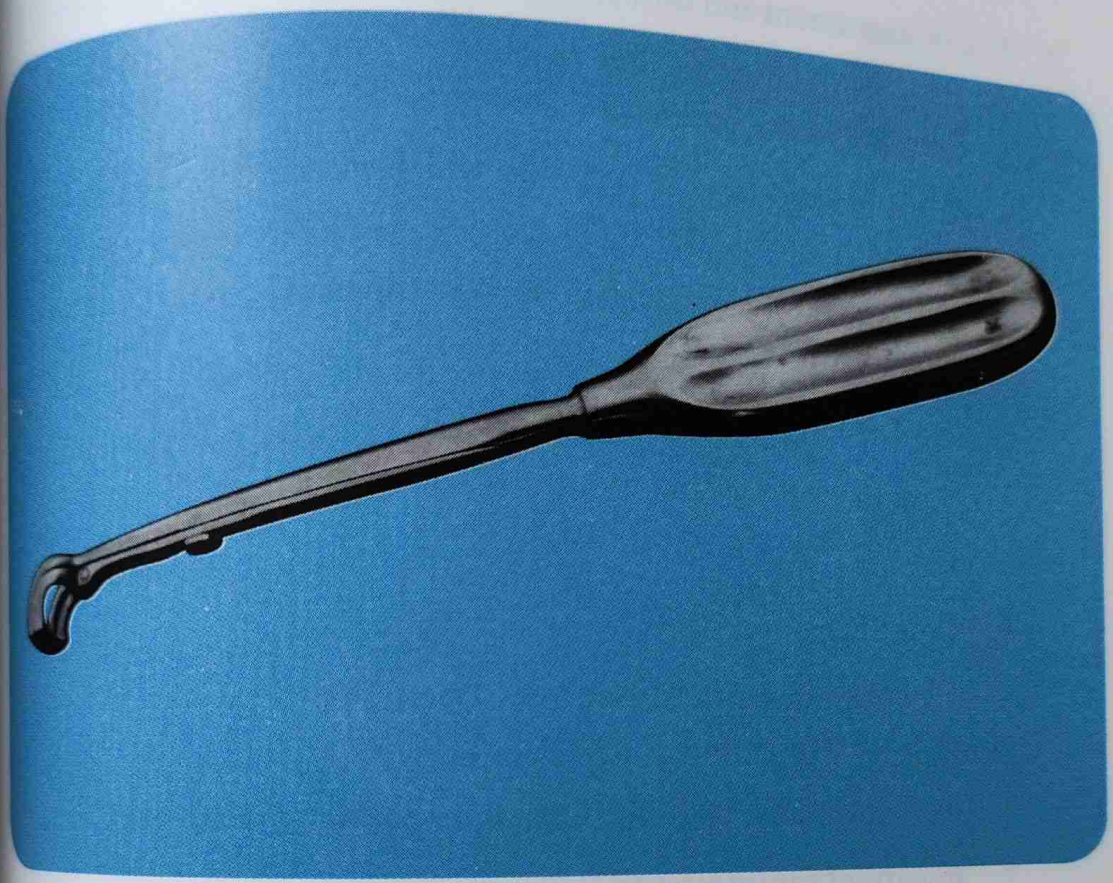
Questions

1. Name the given instrument.
2. What is the use of this instrument and how it works?
3. Name five surgical operations where this instrument can be used.

Answers

1. Name of the instrument:
   - Yankauer suction tube or Pharyngeal suction nozzle.
2. Use and how it works:
   - This instrument is used for suction cleaning of the oral cavity and the pharynx.
   - The tip of the tube has a rounded blunt cap with small holes. This prevents trauma to the dissection field.
   - The multiple openings at the tip of suction tube will facilitate suction even if the main opening is blocked.
3. Five surgical operations:
   - Tonsillectomy.
   - Adenoidectomy.
   - Glossectomy.
   - Maxillectomy.
   - Mandibulectomy.

OSCE Station No 83



Observe the above photograph of an instrument and answer the following questions:

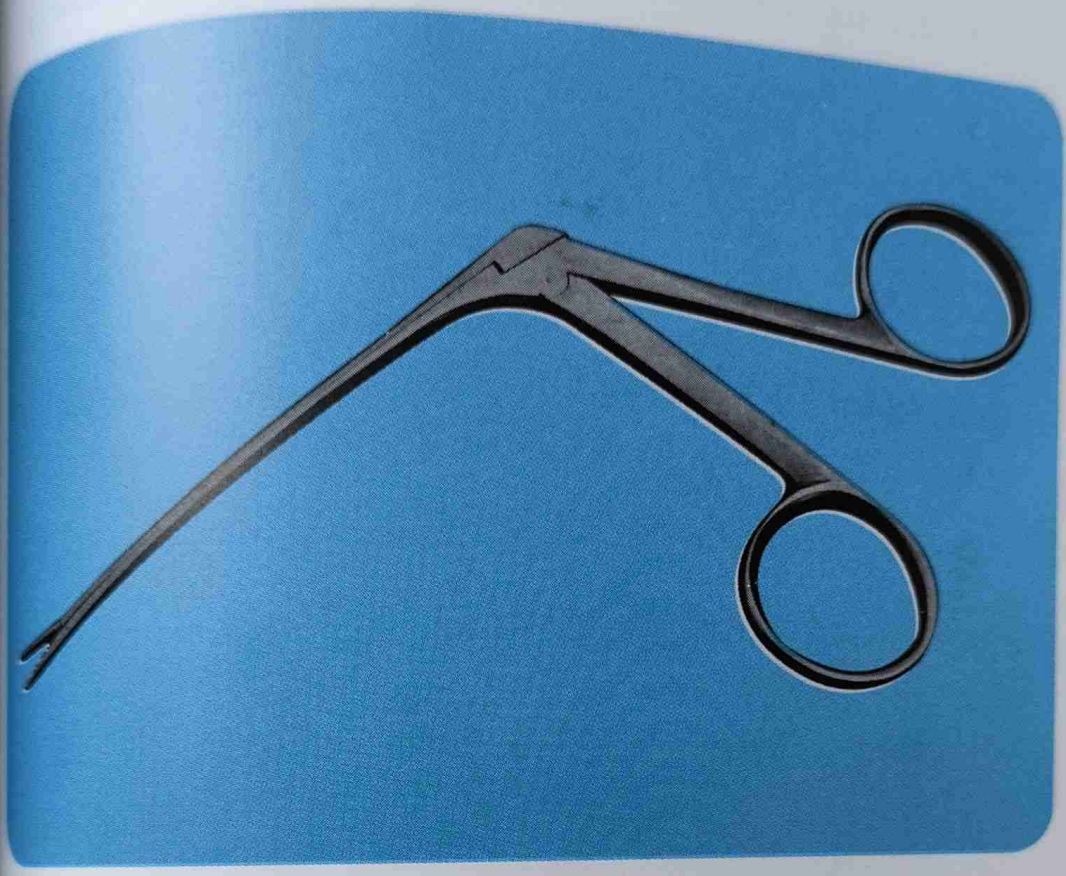
Questions

1. Name the given instrument.
2. What is the use of this instrument and how it works?
3. Outline the clinical features of the condition where this surgery is performed.

Answers

1. Name of the instrument:
   - St. Clair Thompson adenoid currette with guard or cage.
2. Use of instrument and how it works:
   - This instrument is used to currette out the adenoid tissue in adenoidectomy operation.
   - It has a sharp edge at one side which is used for cutting of the tissues.
   - The guard or cage is used to prevent slipping of the excised tissues into the throat.
3. Clinical features of enlarged adenoids:
   - Nasal obstruction and mouth breathing.
   - Snoring.
   - Voice change-buccal voice or rhinolalia clausa.
   - Adenoid facies-pinched nostrils, open mouth, prominent incisors and dull expressions.
   - Eustachian tube blockage leading to conductive deafness.
   - Recurrent ear infections.
   - Mental dullness.
   - Nocturnal eneuresis.
   - Sleep apnoea.

OSCE Station No 84



Observe the above photograph of an instruments and answer the following questions:

Questions

1. Name the above instrument and give reason for its name.
2. Enlist five uses of this instrument.

Answers

1. Name of the instruments:
   - Crocodile forceps or Alligator forceps.
   - It is named because its end opens like the mouth of a crocodile or alligator.
2. Five uses of the instrument: This instrument has so many uses in ENT surgeries.
   i. To hold and transfer graft material like temporalis fascia in tympanoplsty.
   ii. To hold and apply grommet in myringoplasty with grommet insertion.
   iii. To hold and apply ossicles or prosthesis in oosiculoplasty.
   iv. To hold and apply piston in stapedectomy.
   v. To remove flat foreign body like fish bone from the tonsil or posterior pharyngeal wall.

OSCE Station No 85

Observe the above photograph of a radio-imaging film and answer the following questions:

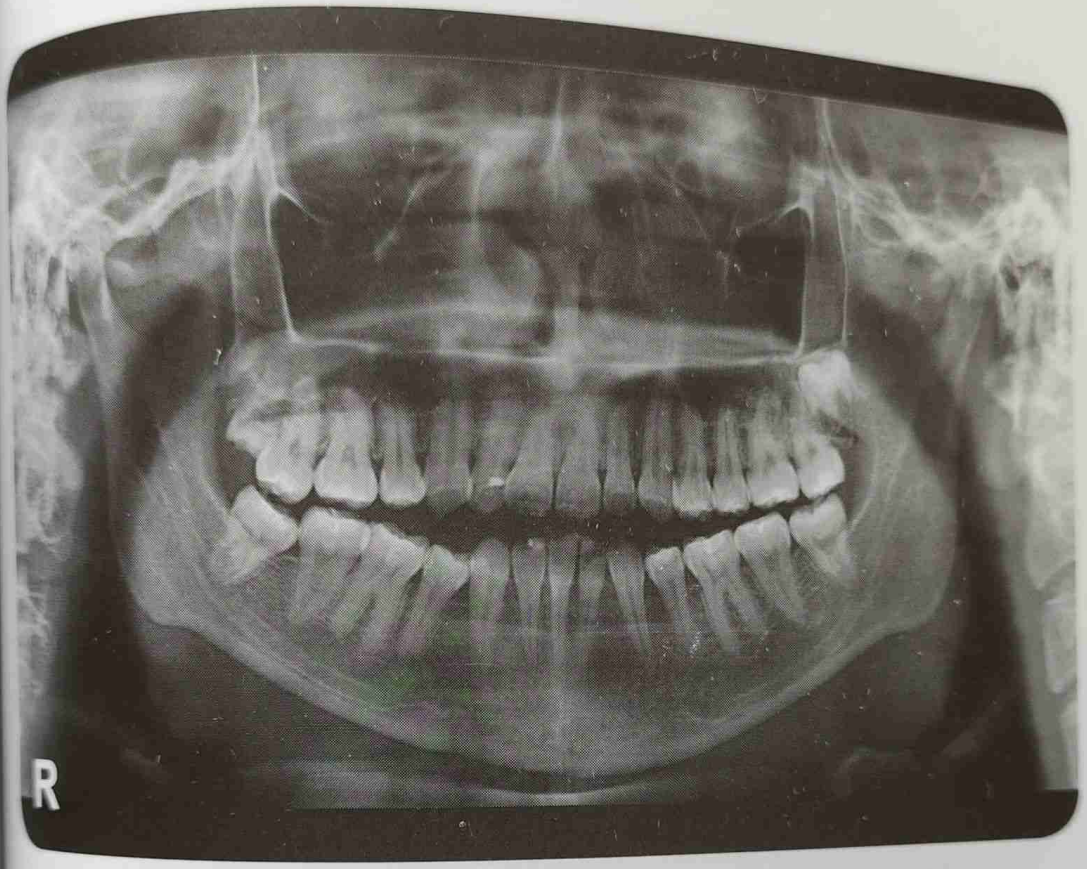
Questions

1. Name the type, site and view of this film.
2. What are the findings visible on this film?
3. What is the likely diagnosis in this patient?
4. Outline the steps of surgical operation performed to treat this condition.

Answers

1. Name of this film:
   - Type: Plain X-ray.
   - Site: Soft tissue of the nasopharynx.
   - View: Lateral view with open mouth.
2. Findings in the film:
   - This X-ray is showing a rounded and smooth soft tissue mass arising from the roof and the posterior wall of the nasopharynx.
   - This mass is touching the soft palate and the nasopharyngeal airway is completely occluded by this mass.
3. Likely diagnosis:
   - Enlarged adenoids.
4. Steps of surgical operation:
   - Enlarged adenoids is treated by adenoidectomy by conventional surgery or by endoscopic surgery.
   - It is done under general anaesthesia with oral endotracheal intubation.
   - In conventional surgery, the patient lies in Rose's position.
   - The mouth is opened by inserting a Boyle Davis mouth gag.
   - Adenoid currette is inserted through the mouth and by retracting the soft palate it is entered into the nasopharynx.
   - Adenoid tissues are engaged in the currette and with sweeping movement it is shaved off.
   - Haemostasis is achieved by packing the nasopharynx for sometimes.
   - In endoscopic surgery, adenoids are shaved by the microdebrider under direct vision through the nasal endoscope.

OSCE Station No 86



Observe the above photograph of a radio-imaging film and answer the following questions:

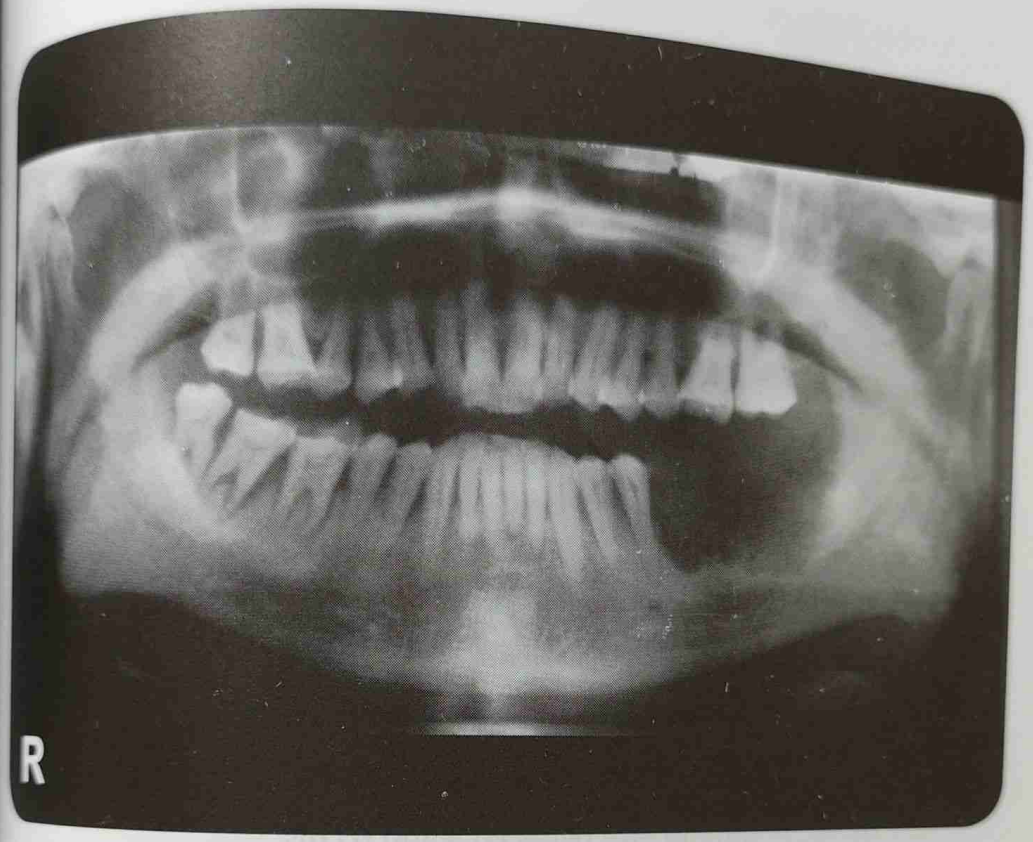
Questions

1. Name this investigation.
2. Describe the findings visible on this film.
3. Enlist three common indications for this investigation.

Answers

1. Name of the instrument:
   - Orthopantomogram (OPG) or Orthopantogram or Dental panaromic radiograph.
2. Visible findings:
   - It is showing whole of the mandible, maxilla, upper and lower teeth and temporo-mandibular joints.
   - There is no apparent gap between the teeth although the number of teeth are less. The condition of the teeth and its roots look normal.
   - The mandibular bone also looks normal with no erosion. The mental foramen and mandibular canal is normal.
   - The ramus, condyle and tempro-mandibular joint are all normal.
   - The maxilla and maxillary sinuses are also normal looking.
3. Three indications:
   - Carcinoma of the oral cavity for assessing involvement of the mandible.
   - Pathologies of the temporo-mandibular joint.
   - Dentigerous cyst.

OSCE Station No 87



Observe the above photograph of a radio-imaging film and answer the following questions:

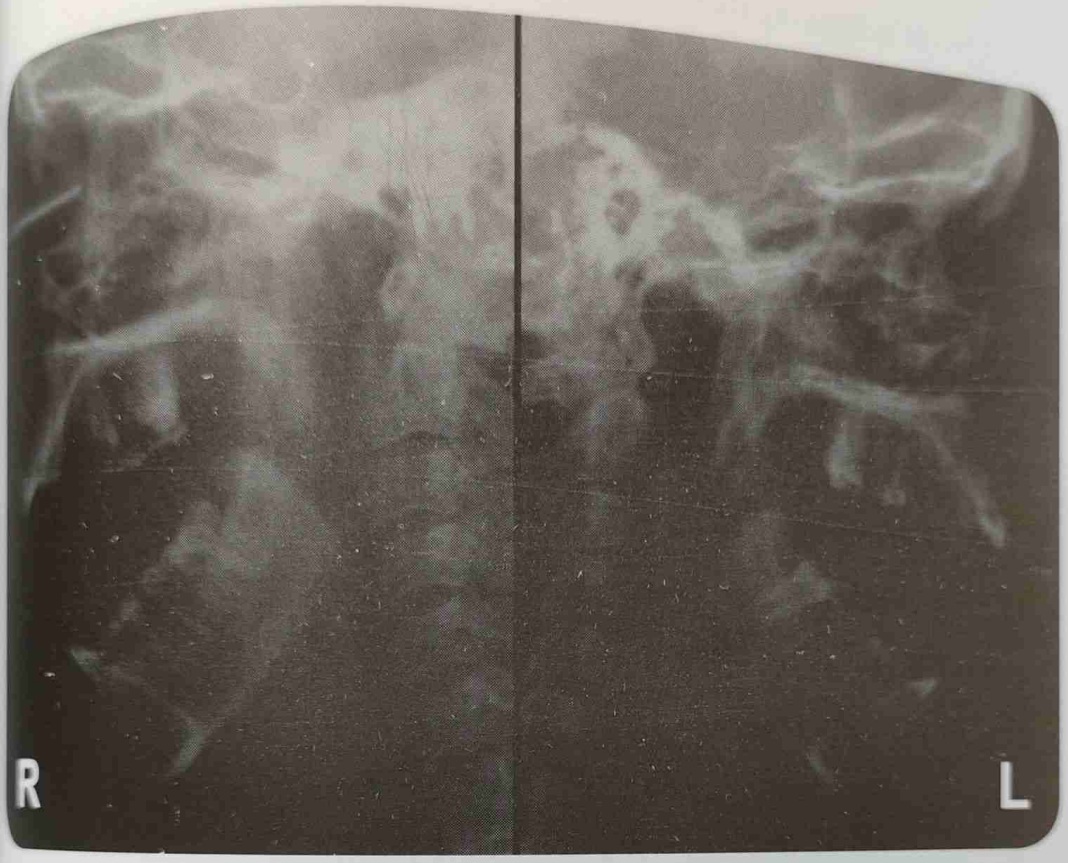
Questions

1. Name this investigation.
2. Describe the findings visible on this film.
3. What is the most likely diagnosis?
4. Outline the classification of this disease.

Answers

1. Name of the instrument:
   - Orthopantomogram (OPG).
2. Visible findings:
   - There is irregular bone erosion on the left side involving the upper part of the body of mandible and the adjacent ramus.
   - Teeth are also missing in the same region.
   - Rest of the mandible, temporo-mandibular joints and maxilla look normal.
3. Likely diagnosis:
   - This type of bony erosion is typically seen in cases of carcinoma of the oral cavity.
4. Classification:
   - According to UICC classification, T staging of the carcinoma of the oral cavity is as follows:
     - T_1 = tumour less than 2 cms in its maximum diameter.
     - T_2 = tumour size between 2 to 4 cms.
     - T_3 = tumour size between 4 and 6 cms.
     - T_4 = tumour size more than 6 cms or tumour extending to neighboring structures like mandible.

OSCE Station No 88



Observe the above photograph of a radio-imaging film of a young lady who came with the complaint of being unable to close her mouth for few hours. Answer the following questions:

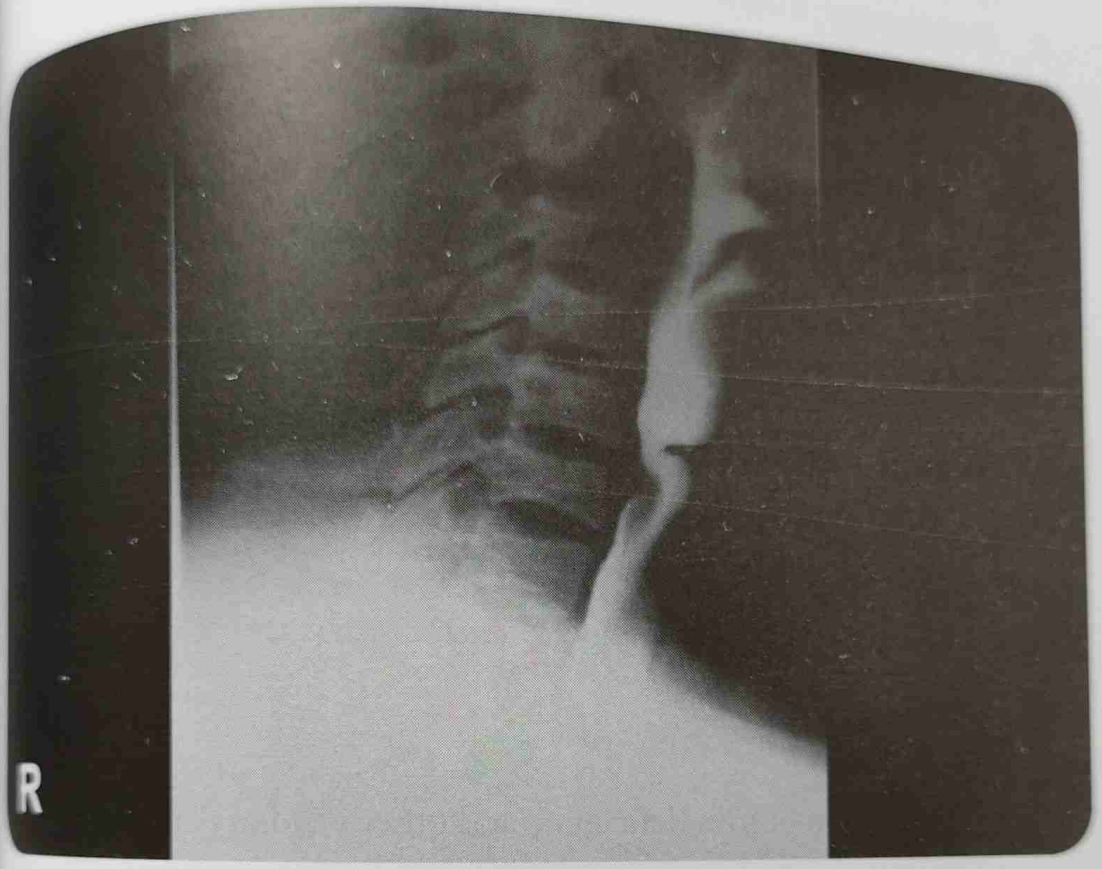
Questions

1. Describe the findings visible on the above radio-imaging film.
2. What is the most likely diagnosis?
3. How will you treat this condition?
4. What advice will you give to the patient after treatment?

Answers

1. Visible findings:
   - This is a plain X-ray of the face, lateral view of both sides.
   - It is showing that the mouth is in open position.
   - Condyles of the mandible on both the sides are not in its normal position, rather both are displaced anteriorly.
2. Likely diagnosis:
   - This is a case of bilateral acute temporo-mandibular joint dislocation.
3. Treatment:
   - The treatment of this condition is manual reduction of the temporo-mandibular joint.
   - Typically there is intense spasm of the muscles that needs good analgesia, sedation and muscle relaxation.
   - Patient is seated in an upright position facing forward.
   - With both the thumbs placed over the last lower molar teeth, steady pressure is applied downwards and posteriorly.
   - This will result in reduction of the joints.
4. Advice to the patient:
   - The patient is advised to avoid excessive opening of the mouth that may occur as in yawning, laughing and dental procedures.

OSCE Station No 89



Observe the above photograph of a radio-imaging film and answer the following questions:

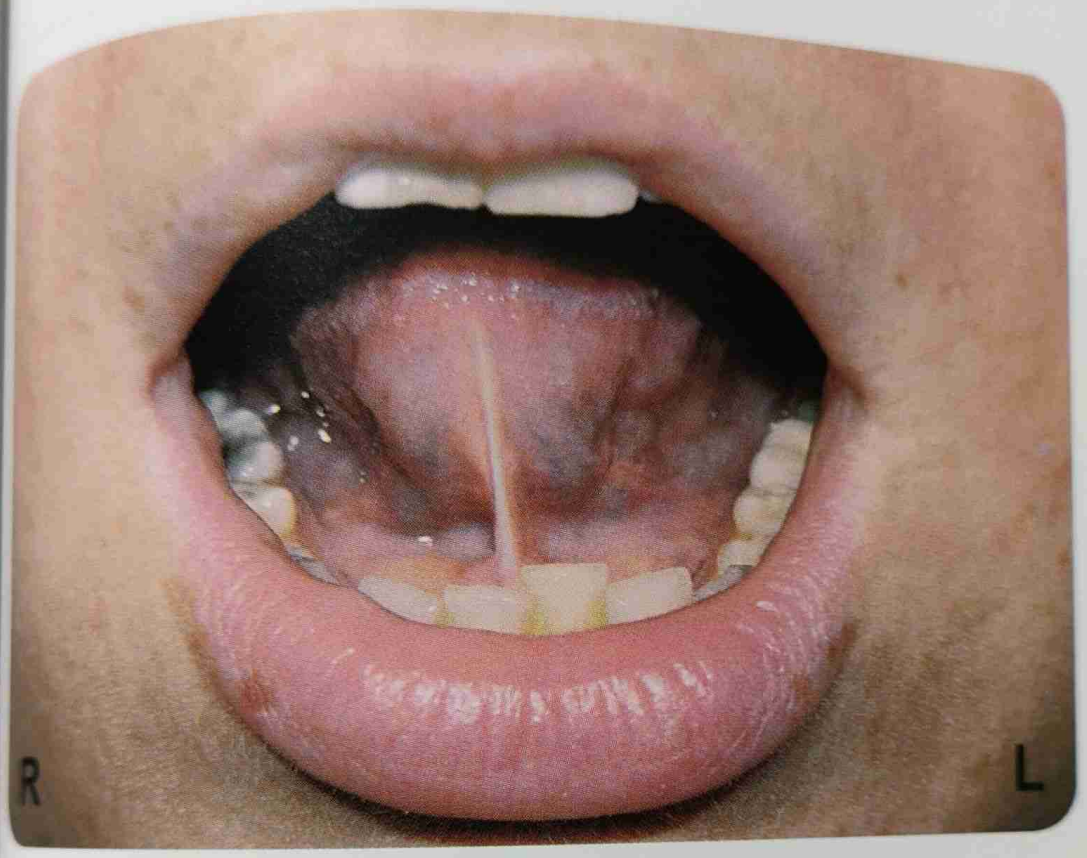
Questions

1. What is the name of this investigation?
2. Outline the findings visible on this film with diagnosis.
3. What further investigations are required in this patient?
4. How will you treat this patient?

Answers

1. Name of the instrument:
   - X-ray barium swallow showing the neck in lateral view.
2. Findings with diagnosis:
   - This film is showing the neck in lateral view with contrast (barium swallow) in the pharynx.
   - It is showing web formation in the hypopharynx.
   - Diagnosis is pharyngeal web due to Plummer Vinson's syndrome.
3. Further investigations:
   - Complete blood picture.
   - Serum iron studies including serum iron level and iron binding capacity.
   - Endoscopic examination of the hypopharynx and oesophagus.
   - Biopsy for histopathology when there is suspicion of malignant change in the lesion.
4. Treatment:
   - Correction of iron deficiency and other vitamin deficiency.
   - Endoscopic excision of the pharyngeal web.
   - Long term follow-up for any malignant change.

OSCE Station No 90



Observe the above photograph of the tongue of a young girl and answer the following questions:

Questions

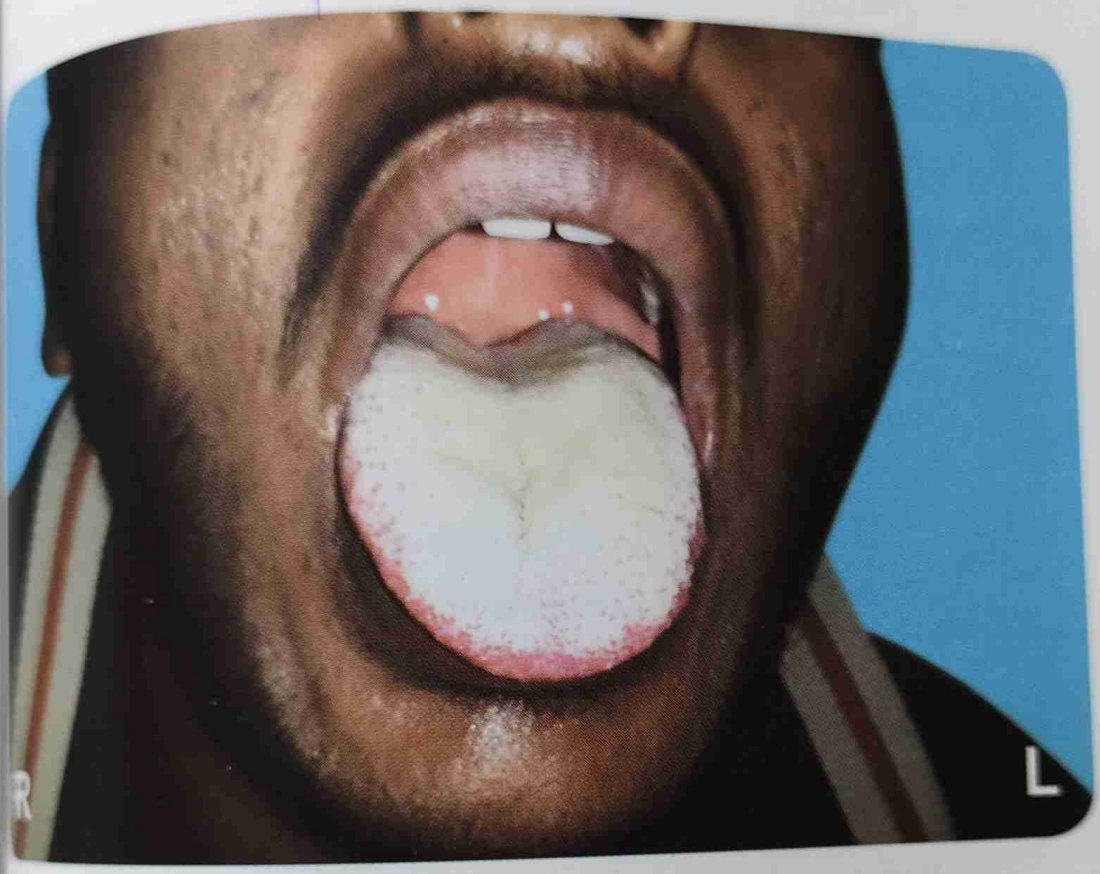
1. Describe the findings visible in this photograph with diagnosis.
2. What are the common problems associated with this condition?
3. What is the treatment of this condition?

Answers

1. Findings with diagnosis:
   - Under surface of the tongue and the floor of mouth is visible.
   - Frenulum of the tongue appears to be short, causing restriction in the tongue movement.
   - Diagnosis is tongue tie or ankyloglossia.
2. Common problems:
   - This condition is usually asymptomatic.
   - There is restricted tongue movement that may cause problems in breastfeeding, licking and sometimes speech.
   - The condition may improve as the child grows.
3. Treatment:
   - No treatment is required if the condition is asymptomatic.
   - Surgical division of the frenulum is required if it is causing restricted tongue movements.
   - Division of the frenulum can be done under local or sometimes under general anaesthesia.

OSCE Station No

90



Observe the above photograph of the tongue of an adult male patient. Answer the following questions:

Questions

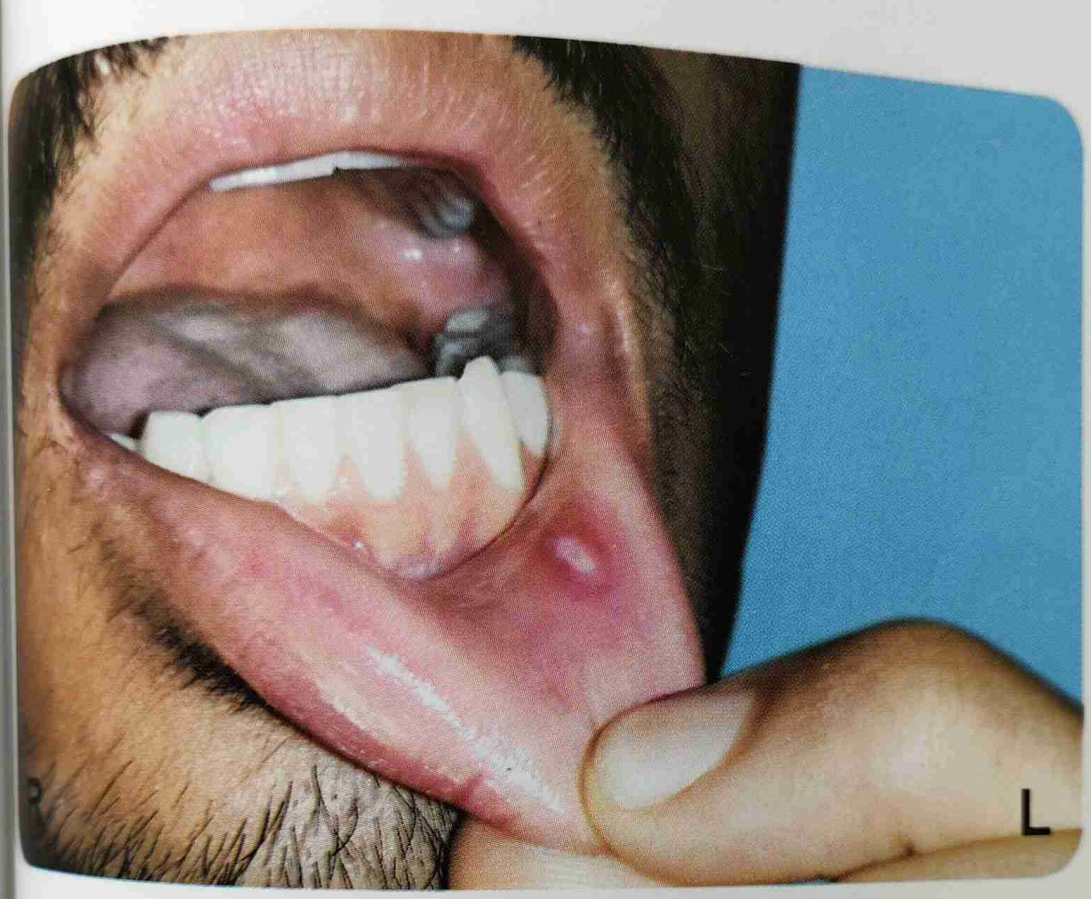
1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis?
3. Enlist the predisposing factors for this condition.
4. How will you treat this patient?

Answers

1. Visible findings:
   - This is a tongue of an adult male.
   - It is covered with a thick yellowish curd like patch covering almost whole of the upper surface of the tongue.
   - The mucosa of the tongue that is visible at the margin appears to be red and inflamed.
   - The part of the visible palate appears to be normal.
2. Likely diagnosis:
   - The most likely diagnosis is 'Oral Thrush' or acute pseudomembranous candidiasis.
3. Predisposing or risk factors:
   - Debilitated elderly persons, children or newborns.
   - Immuno-compromized patients.
   - Diabetes mellitus.
   - Patients on broad spectrum antibiotics or corticosteroids.
   - Patients on chemotherapy/cytotoxic drugs.
   - Radiation therapy in head and neck area.
   - AIDS.
   - Dehydrated patients/xerostomia.
4. Treatment:
   - Topical antifungal agents like nystatin and clotrimazole.
   - Systemic antifungal agents in resistant cases like ketoconazole, itraconazole or fluconazole.
   - Treatment of the predisposing or risk factor.

OSCE Station No

92



Observe the above photograph of the lower lip of a young adult male. Answer the following questions:

Questions

1. Describe the findings visible on this photograph.
2. What is the most likely diagnosis in this patient?
3. What is the aetiology of this condition?
4. What is the treatment of this condition?

Answers

1. Findings in the photograph:
   - There is a small (few mm.) superficial ulcer involving the mucosa of the inner surface of the lower lip.
   - The base of the ulcer is white and necrotic.
   - The surrounding mucosa is red forming a red halo.
   - Rest of the visible mucosa of the oral cavity looks normal.
2. Likely diagnosis:
   - Minor aphthous ulcer.
3. Aetiology of this condition:
   - Exact aetiology is unknown but several factors have been suggested like:
     - Auto-immune process.
     - Vitamin and nutritional deficiencies like B_{12}, folic acid and iron.
     - Hormonal changes.
     - Stress and psychogenic.
     - Viral.
4. Treatment:
   - Mainly symptomatic.
   - Topical application of local anaesthetic agent and topical steroid.
   - Correction of nutritional deficiency.
   - Cauterisation with 10% silver nitrate solution.

OSCE Station No 93

Observe the above photograph of the oropharynx of a young lady who presented with severe pain in the throat and high grade fever for last three days. Answer the following questions:

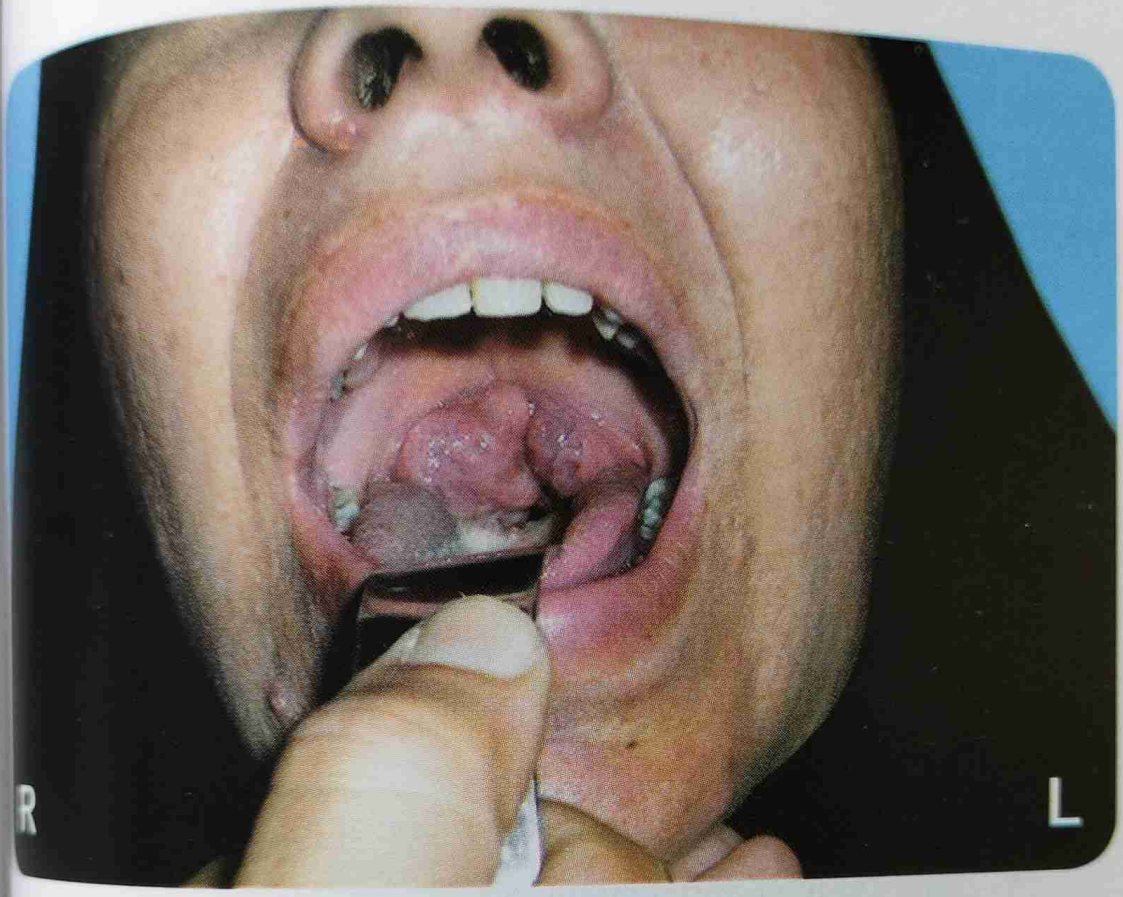
Questions

1. Describe the findings visible in this photograph
2. What is the most likely diagnosis in this patient?
3. What is the aetiology of this condition?
4. Enlist the complications that can occur if this condition is not treated properly.

Answers

1. Findings in the photograph:
   - This is a photograph of a young lady with open mouth using a tongue depressor showing the oropharynx and oral cavity.
   - Both the palatine tonsils are enlarged and congested with spots of yellowish pus in the crypts.
   - Anterior pillars and surrounding area is also inflamed.
   - Rest of the oral cavity appears normal.
2. Likely diagnosis:
   - Acute follicular tonsillitis.
3. Aetiology of this condition:
   - It is a bacterial infection which may be primary or secondary to viral infection.
   - Micro-organisms involved are mostly haemolytic streptococci.
   - Other micro-organisms are pneumococci, haemophilus influenzae, morexella catarrhalis and staphylococci.
4. Complications:
   - Peri-tonsillar abscess or quinsy.
   - Parapharyngeal abscess or neck abscess.
   - Spread of infection to other area like otitis media, lower respiratory tract infection, pneumonia.
   - Complications associated with haemolytic streptococci like rheumatic fever, acute glomerulonephritis, sub-acute bacterial endocarditis.
   - May change into recurrent or chronic tonsillitis.
   - Septicaemia.

OSCE Station No 94



Observe the above photograph of the oropharynx of a 28-year-old lady who presented with recurrent sore throat and difficulty in swallowing and speech. Answer the following questions:

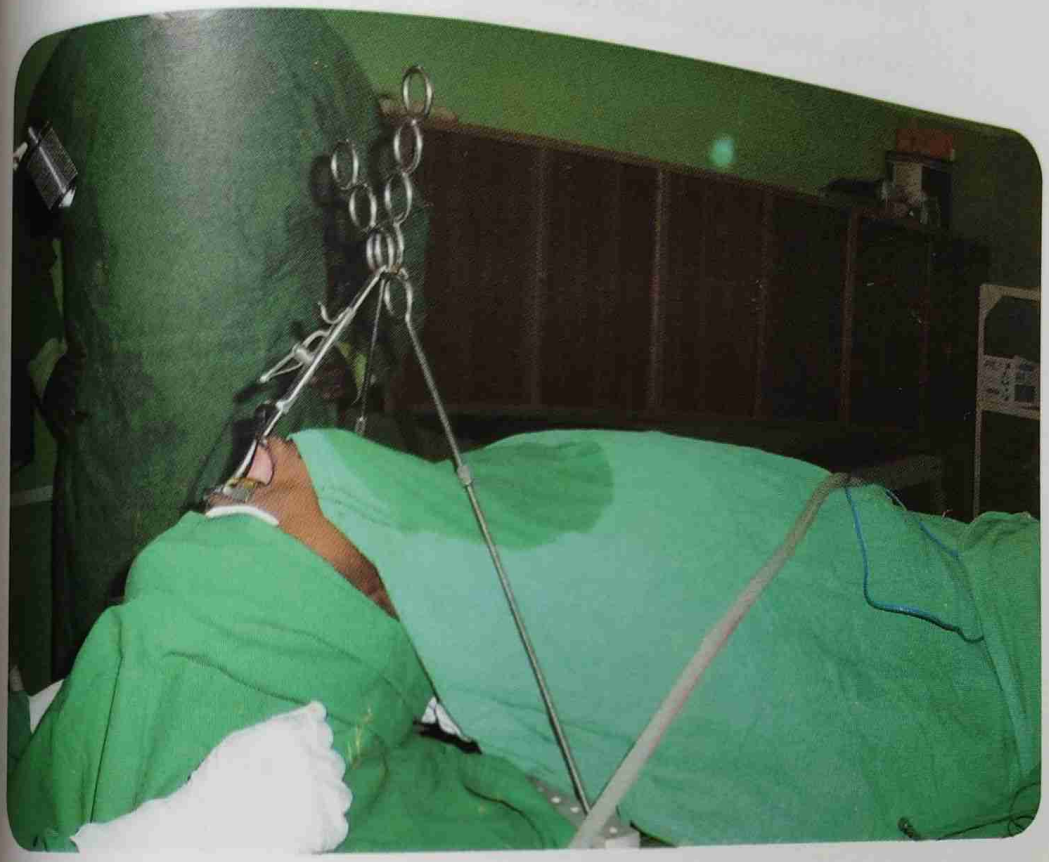
Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis in this patient?
3. How will you treat this condition?
4. Enlist the complications associated with the treatment of this condition.

Answers

1. Findings in this photograph:
   - This is a photograph of a lady with open mouth using a tongue depressor showing the oropharynx and oral cavity.
   - Both the palatine tonsils are grossly hypertrophied and almost touching each other (kissing tonsils).
   - Posterior pharyngeal wall is not visible due to enlarged tonsils.
2. Likely diagnosis:
   - Chronic parenchymatous tonsillitis.
3. Treatment:
   - Treatment of this condition is surgical removal of the palatine tonsils (tonsillectomy).
4. Complications of the surgery:
   - Haemorrhage which may be primary, reactionary and secondary.
   - Injury to surrounding structures like lips, gums, teeth, tongue, palate etc.
   - Dislocation of the temporo-mandibular joint.
   - Injury to inter-vertebral joints.
   - Aspiration of the blood with aspiration pneumonia.
   - Palatal injury resulting in velopharyngeal insufficiency.
   - Anaesthetic complications.
   - Referred earache.

OSCE Station No 95



Observe the above photograph of a patient who is being prepared for a surgery. Answer the following questions:

Questions

1. Describe the findings visible in this photograph.
2. What is the name of this position?
3. Name the surgical operations that can be done in this position.
4. Enlist the complications associated with this position and setup.

Answers

1. Findings in this photograph:
   - This is a photograph of a patient who is being prepared for surgery.
   - Patient is lying supine and neck is extended.
   - Boyle Davis mouth gag is in place with open mouth.
   - Mouth is suspended in position with the help of Draffin's suspension rods and Magauren plate.
2. Name of this position:
   - Rose's position.
3. Name of surgical operations:
   - Through this position and setup, following two surgical operations can be performed:
     - Tonsillectomy.
     - Adenoidectomy.
4. Complications of position and set-up:
   - Injury to inter-vertebral joints.
   - Dislocation of the temporo-mandibular joint.
   - Damage to the teeth especially upper incisor teeth.

OSCE Station No 96

Observe the above photograph of an 8-year-old girl who presented with hearing impairment and poor performance in school. Answer the following questions:

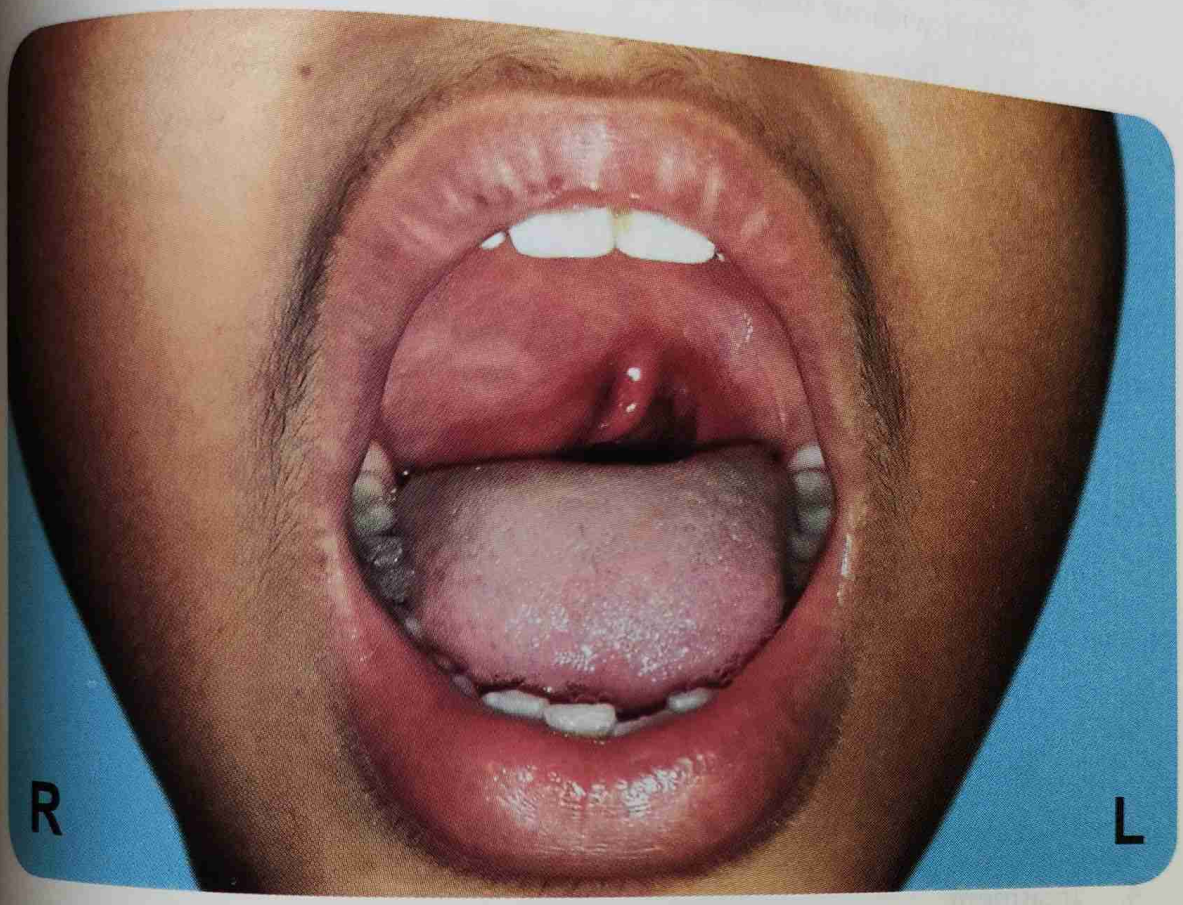
Questions

1. Describe the findings visible in the photograph.
2. What is the most likely diagnosis?
3. What further investigations are required for diagnosis in this patient? Also mention the expected findings on these investigations.

Answers

1. Findings in this photograph:
   - The photograph is showing the face of a 8-year-old girl.
   - The mouth is open with prominent upper incisor teeth.
   - External nostrils are narrow and pinched.
   - She is probably a mouth breather.
2. Likely diagnosis:
   - This is a case of adenoid facies.
   - This is typically seen in cases of enlarged adenoids.
3. Further investigations with expected findings:
   - Plain X-ray soft tissues of the nasopharynx, lateral view. This will show the enlargement of the adenoids with narrowing of the nasopharyngeal airway.
   - Nasal endoscopy: Enlarged adenoids will be visible.
   - Pure tone audiogram. It will show conductive type of deafness because of eustachian tube dysfunction.
   - Tympanogram. It will show either type B or type C graph.

OSCE Station No 97



Observe the above photograph of a 19 year-old man who presented with severe pain and high grade fever. Answer the following questions:

Questions

1. Describe the findings visible in the photograph.
2. What is the most likely diagnosis in this patient?
3. What are the common organisms responsible for this condition?
4. How will you treat this patient?

Answers

1. Findings:
   - This is a photograph of a 19-year-old male patient with open mouth without tongue depressor showing the oral cavity and the oropharynx.
   - Right palatine tonsil is pushed medially with marked congestion and oedema of the surrounding soft palate.
   - Uvula is also pushed on the opposite side with tip of uvula directed towards the right.
   - There is marked congestion of the other tonsil.
   - Mouth opening is quite adequate.
2. Likely diagnosis:
   - Peri-tonsillar abscess or quinsy of the right side.
3. Common organisms:
   - Mostly mixed organisms.
   - Both aerobes and anaerobes are present.
   - Common are streptococcus pyogenes and staphylococcus aureus.
4. Treatment:
   - Medical treatment including intravenous antibiotic, NSAIDs and antiseptic gargles.
   - Incision and drainage through most prominent part or at the junction of two imaginary lines, one vertical along the anterior pillar and one horizontal along the base of uvula.
   - Tonsillectomy after four to six weeks to prevent recurrence.

OSCE Station No 98

Observe the above photograph of the floor of the mouth of a 21-year-old lady. Answer the following questions:

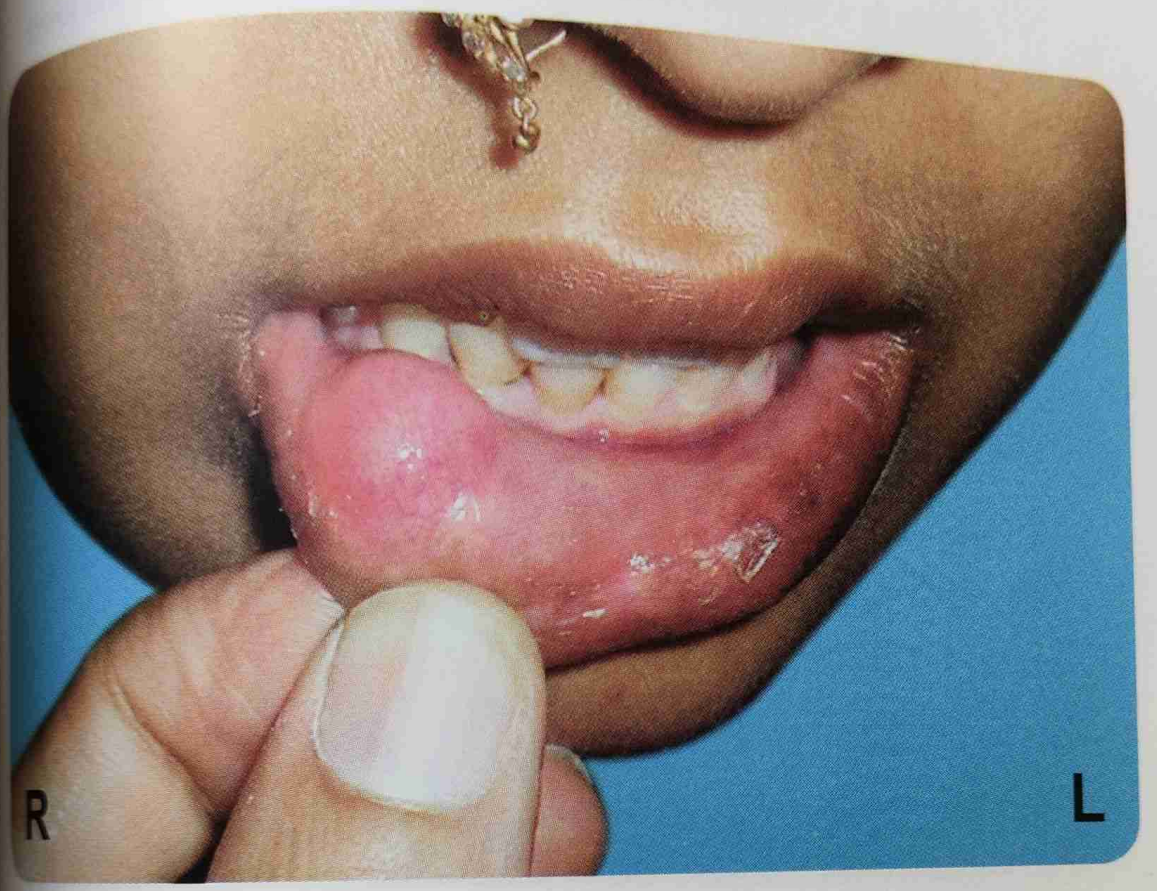
Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis in this patient?
3. Outline the pathology of this condition.
4. How will you treat this patient?

Answers

1. Findings in this photograph:
   - This is a photograph of a lady with open mouth showing the floor of the mouth.
   - A smooth, oval shape, bluish colour, cystic swelling is visible on the right side of the floor of the mouth. It is pushing the frenulum of the tongue on the opposite side.
   - Rest of the visible area of the tongue and floor of the mouth are normal.
2. Likely diagnosis:
   - Ranula most probably simple type.
3. Pathology of this condition:
   - Ranula is a retention cyst due to obstruction of the duct of sub-lingual salivary gland.
4. Treatment:
   - Excision of the cyst if possible.
   - Marsupialization or decapping if excision is difficult.

OSCE Station No 99



Observe the above photograph of the lower up of a 30-year-old lady. Answer the following questions:

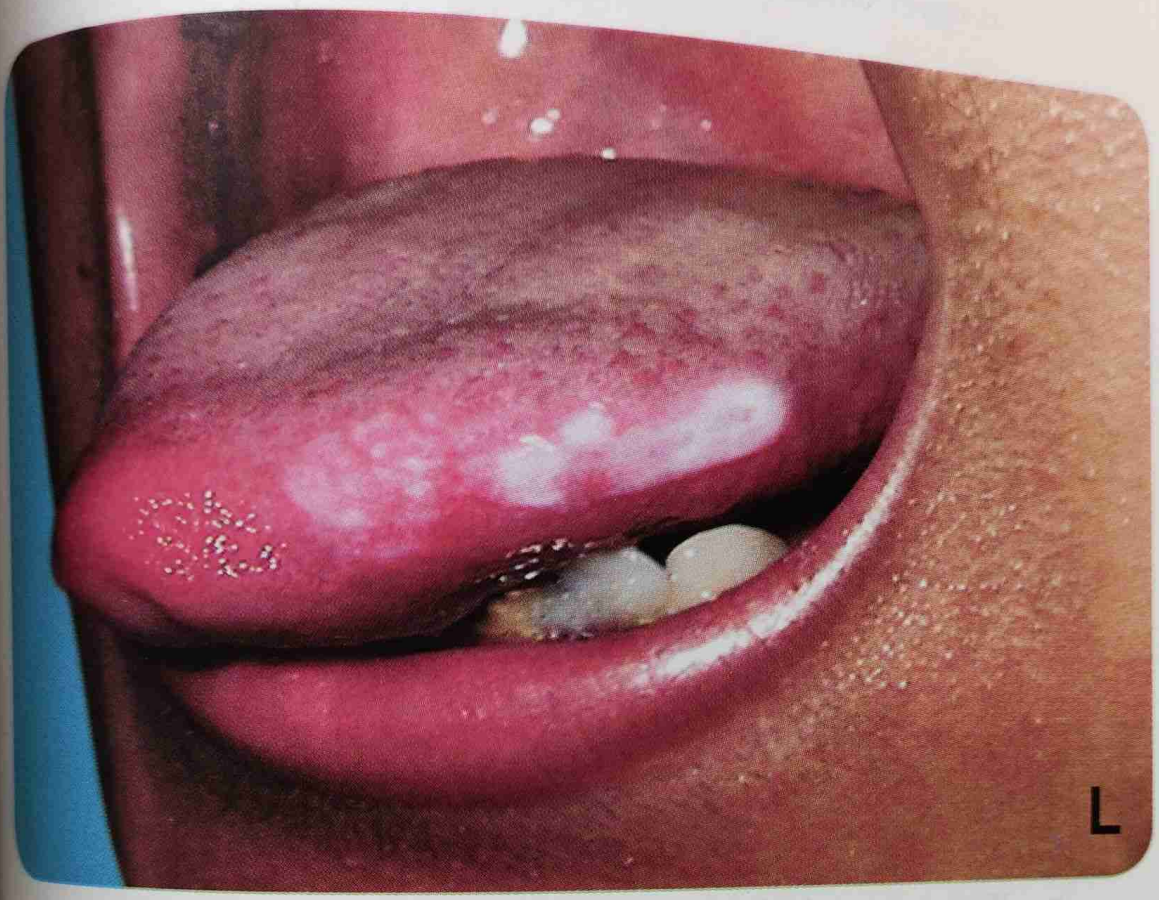
Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis in this patient?
3. Outline the pathology of this condition.
4. How will you treat this patient?

Answers

1. Findings in this photograph:
   - This is a photograph of the lower lip of a 30-year-old lady.
   - There is a smooth, rounded, cystic swelling visible on the lower lip on its inner mucosal surface.
2. Likely diagnosis:
   - Mucocele or mucous retention cyst.
3. Pathology of this condition:
   - It is a retention cyst formed due to blockage in the flow of secretion from the minor salivary gland.
4. Treatment:
   - Excision of the cyst.

OSCE Station No 100



Observe the above photograph of the tongue of a 42-year-old lady. Answer the following questions:

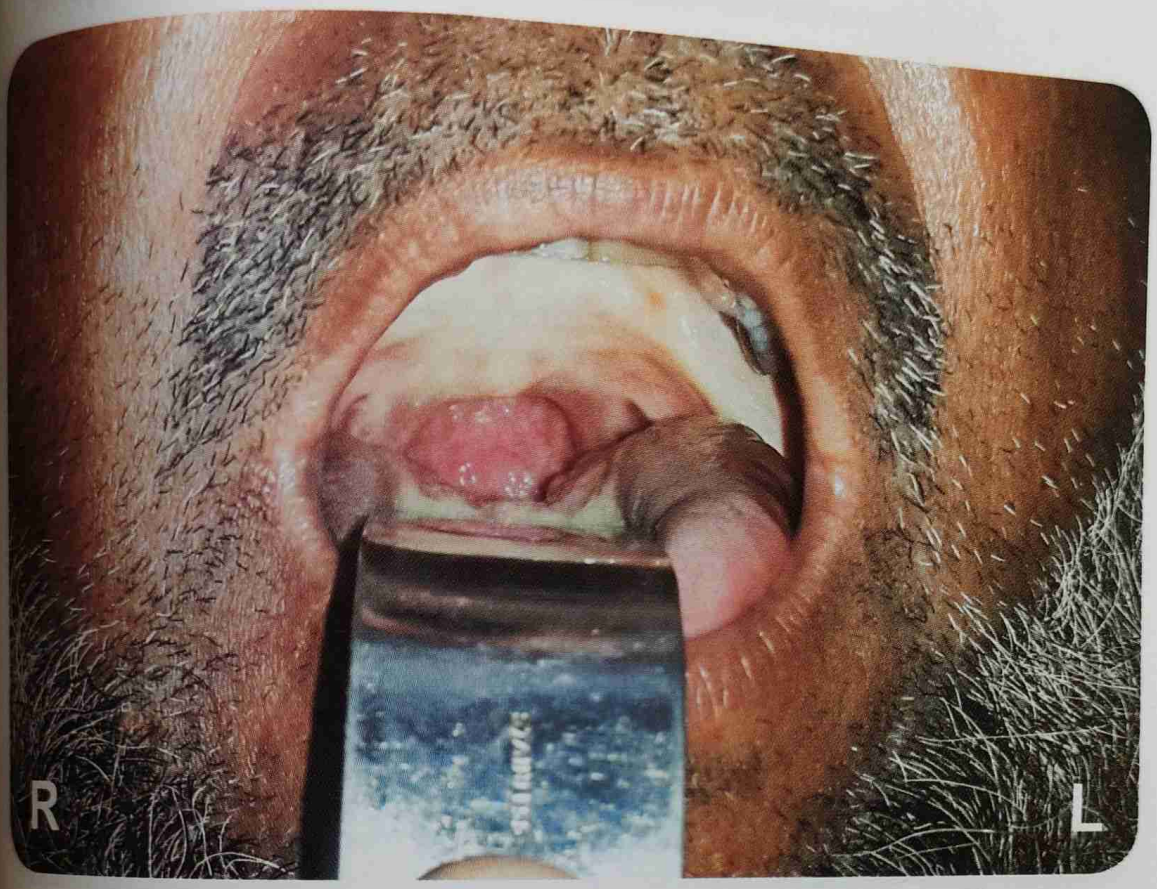
Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis?
3. Enlist the aetiological factors for this condition.
4. How will you treat this patient?

Answers

1. Findings:
   - This is a photograph of the tongue of a 42-year-old lady showing its upper surface and the left lateral border.
   - There is an irregular white, raised patch on the lateral border of the tongue occupying the middle third of the mobile tongue. Anteriorly it is not reaching up to the tip.
   - Rest of the upper surface of the tongue appears normal.
2. Likely diagnosis:
   - Oral leukoplakia.
3. Aetiological factors:
   - Tobacco chewing.
   - Betel nuts and paan chewing.
   - Smoking.
   - Alcohol intake.
   - Chronic trauma due to sharp tooth or ill fitting dentures etc.
4. Treatment:
   - Wait and watch if the lesion is not progressive.
   - Complete excisional biopsy.
   - Regular follow up.

OSCE Station No 101



Observe the above photograph of the oral cavity of a 51-year-old man. Answer the following questions:

Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis?
3. Briefly outline the pathology of this condition.
4. What are the different treatment options for this condition?

Answers

1. Visible findings:
   - This is a photograph of the oral cavity of a 51-year-old man.
   - There is marked sub-mucous fibrosis of the soft palate, hard palate and the anterior pillars.
   - Uvula is almost absent due to shrinkage.
   - Mouth opening is restricted.
2. Likely diagnosis:
   - Oral sub-mucous fibrosis with trismus.
3. Pathology of this condition:
   - The basic change in this condition is the deposition of excessive fibro-elastic tissue in the lamina propria.
   - The overlying mucosa may show epithelial atrophy and sometime vesicle formation.
4. Treatment options:
   - Local corticosteroid injection.
   - Local injection of hyaluronidase with or without corticosteroid.
   - Jaw opening exercises.
   - Correction of dietary deficiencies.
   - Surgical release of the fibrous bands and covering with skin or mucosal flaps.
   - Use of laser to release fibrous bands.

OSCE Station No 102

Observe the above photograph of the oral cavity of a 48-year-old lady who is a paan chewer. Answer the following questions:

Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis?
3. What further investigations are required in this case?
4. How will you treat this patient?

Answers

1. Findings:
   - The tongue and oral cavity of a 48-year-old lady is visible in this photograph.
   - There is an irregular fungating growth involving the lateral border of the tongue on left side in its middle third extending on the under surface of the tongue reaching up to the floor of the mouth. Extension on the dorsum of the tongue and posterior limit could not be assessed on this photograph.
   - Many teeth are missing and some are stained with paan.
2. Likely diagnosis:
   - Malignant tumour of the tongue probably squamous cell carcinoma
3. Further investigations:
   - Punch biopsy for histopathology.
   - CT scan with contrast from skull base to mediastinum for primary lesion and nodal metastasis.
   - MRI with contrast in selected cases.
   - Baseline investigations when the surgery is planned.
4. Treatment:
   - Surgical excision with safe margins (partial or hemi-glossectomy).
   - Neck dissection for nodes depending upon the stage.
   - Post-operative chemo-radiation if required depending upon the stage.

OSCE Station No

103

Observe the above photograph of the oral cavity of a 41-year-old man who is a paan chewer. Answer the following questions:

Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis?
3. What further investigations are required in this case?
4. How will you treat this patient?

Answers

1. Findings visible:
   - This is a photograph of the oral cavity of a 41-year-old man.
   - There is an irregular, fungating growth visible, involving the gingivo-labial sulcus on the left side with involvement of the adjacent gums and cheek.
   - Anteriorly it is not reaching the midline.
   - Posterior limit could not be identified in this photograph.
   - Mouth opening appears to be restricted.
   - Most of the teeth are stained with paan.
2. Likely diagnosis:
   - Malignant tumour of the oral cavity most probably squamous cell carcinoma.
3. Further investigations:
   - Punch biopsy for histopathology.
   - CT scan with contrast from skull base to mediastinum for primary lesion and nodal metastasis.
   - OPG for involvement of the mandible.
   - Baseline investigations when the surgery is planned.
4. Treatment:
   - Surgical excision of the lesion with safe margins along with mandible and teeth if involved.
   - Neck dissection for nodes depending upon the stage.
   - Post-operative chemo-radiation if required depending upon the stage.

SECTION 04

LARYNX AND TRACHEA

OSCE Station No 104

Observe the above photograph of an instrument and answer the following questions:

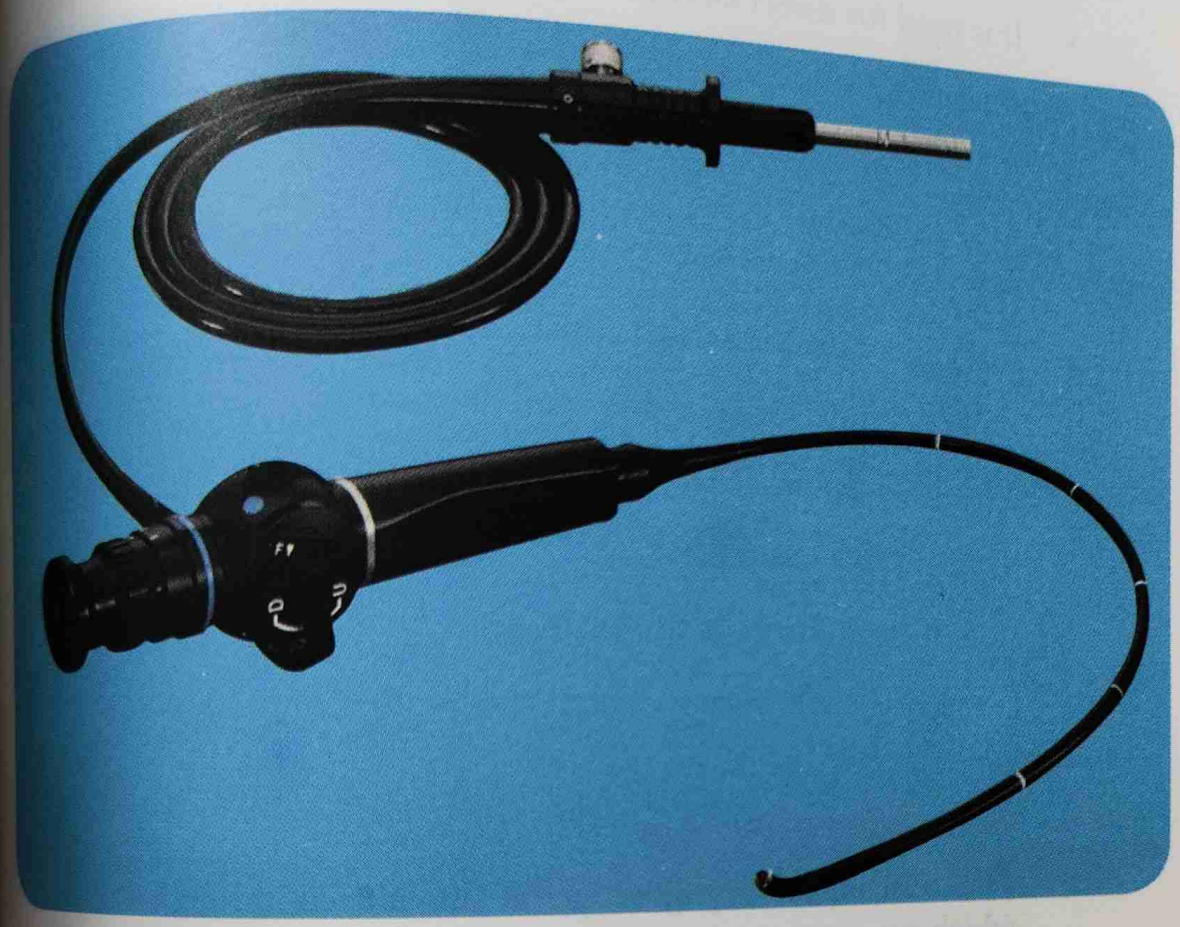
Questions

1. Name the given instrument and its use.
2. Name four common indications for its use.
3. Enlist the common complications of this procedure.

Answers

1. Name of the instrument and its use:
   - Anterior commissure type of Rigid Direct Laryngoscope.
   - It is used for performing direct laryngoscopy.
2. Four common indications:
   - For removal of foreign body from the larynx or hypopharynx.
   - For removal of benign lesions like vocal nodule, vocal polyp etc.
   - For examination of the larynx specially the hidden areas.
   - For taking biopsy of the malignant lesion.
3. Common complications of the procedure:
   - General anaesthesia complications.
   - Damage to the lips, teeth, tongue, oral cavity, palate etc.
   - Laryngeal oedema due to excessive manipulation.
   - Trauma to vocal cords and other structures of the larynx.
   - Bleeding with subsequent aspiration.
   - Injured tooth may dislodge and get impacted in the aero-digestive tract.

OSCE Station No 105



Observe the above photograph of an instrument and answer the following questions:

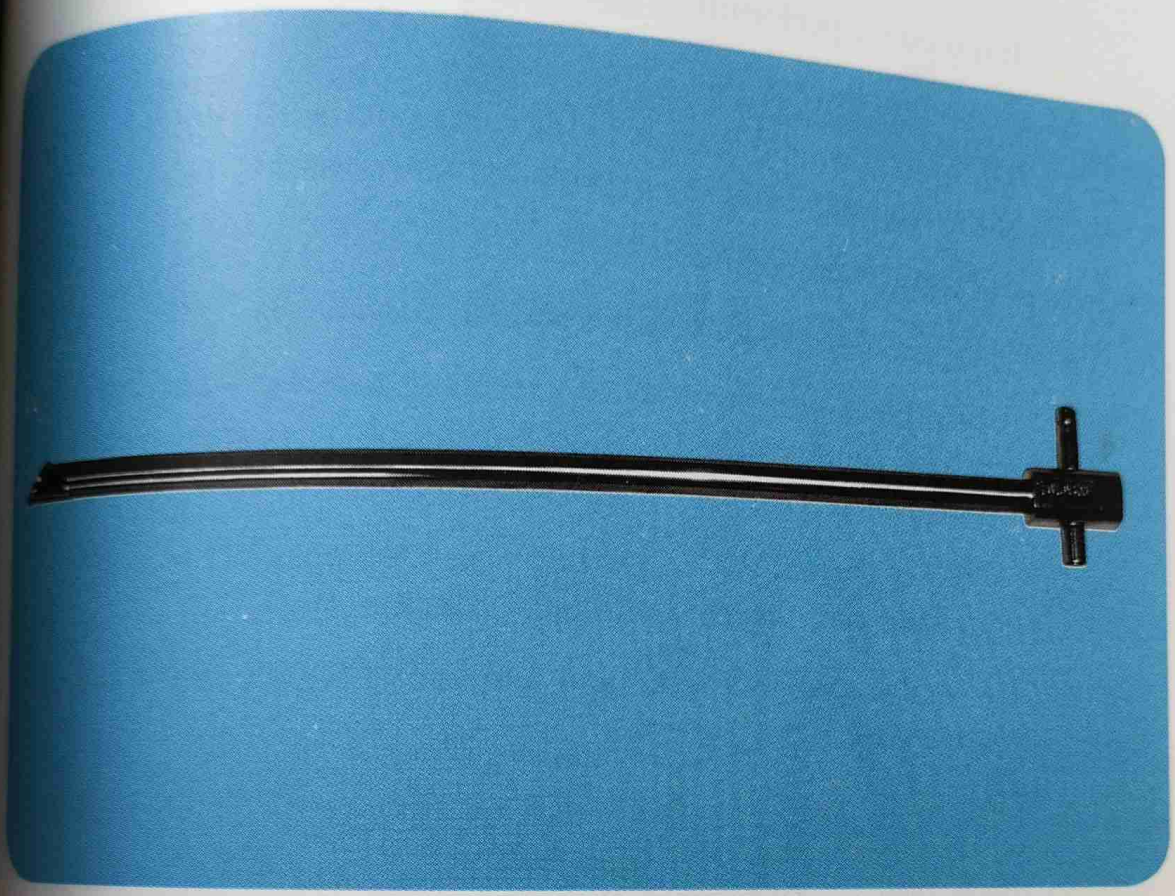
Questions

1. Name the given instrument and what is its use?
2. What are the advantages of using this instrument?
3. Outline the steps of this procedure.

Answers

1. Name of the instrument and its use:
   - Flexible fibre-optic direct laryngoscope.
   - It is used for direct laryngoscopy (FODL).
2. Advantages of its use:
   - It is done in local anaesthesia.
   - It is done as an OPD procedure and hospital admission is not required.
   - Mobility of the vocal cords can be assessed accurately.
   - Camera can be attached and seen on monitor.
   - The findings can be recorded.
3. Steps of the procedure:
   - Patient sits in front of the examiner.
   - Nasal cavity and pharynx is sprayed with 10% xylocaine solution for anaesthesia.
   - Nasal cavity is examined first for patency.
   - The fibre-optic laryngoscope is introduced through the nose which is more patent.
   - When the nasopharynx is reached, the tip of the scope is bent downwards and it is pushed further.
   - The larynx and hypopharynx is examined.
   - The abduction of the vocal cords is assessed by asking the patient to breath deeply and adduction is assessed by asking to say 'Aaa' or 'Eee'.
   - After complete examination, laryngoscope is withdrawn slowly and gently.

OSCE Station No 106



Observe the above photograph of an instrument and answer the following questions:

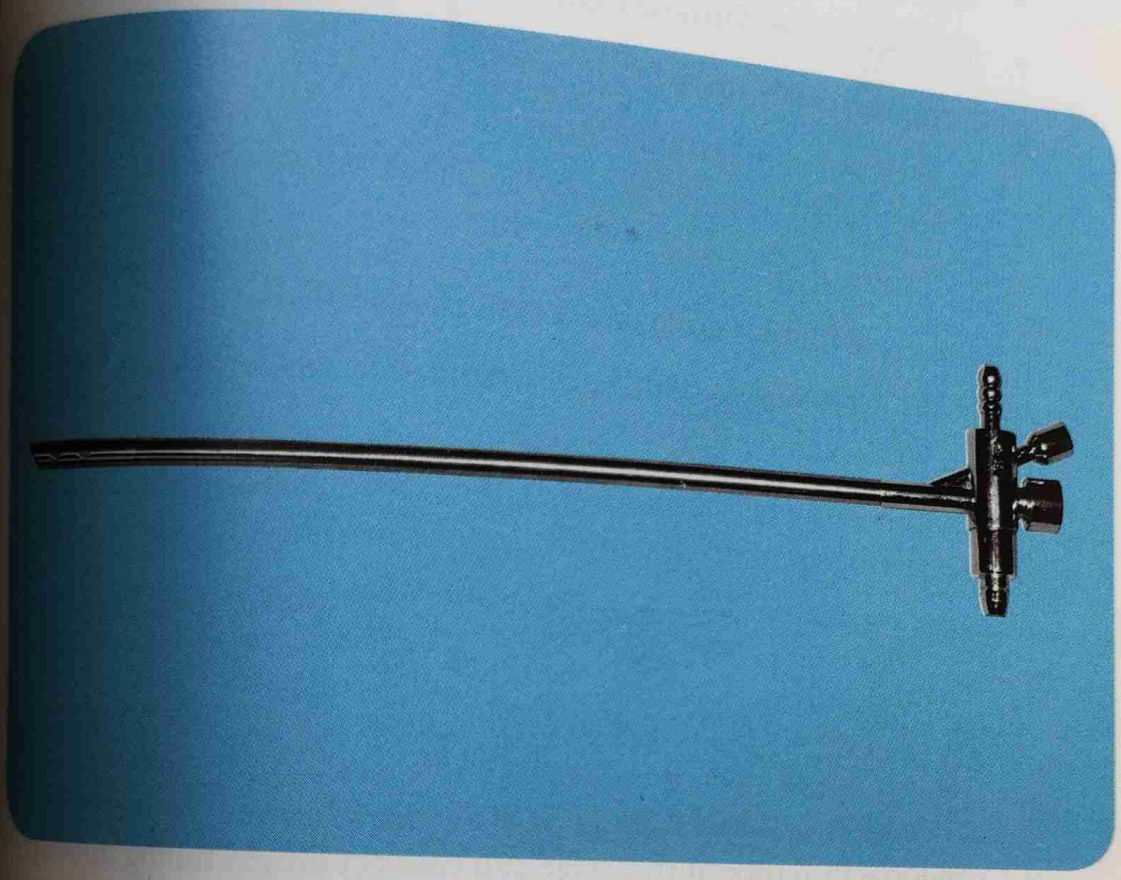
Questions

1. Name the given instrument with its use.
2. What is the most common indication for using this instrument?
3. Outline the steps of surgical procedure where this instrument is used.
4. Name the common complications of this surgical procedure.

Answers

1. Name of the instrument:
   - Rigid oesophagoscope.
   - It is used for performing rigid oesophagoscopy.
2. Most common indication:
   - The most common indication for using this instrument is removal of foreign body from the hypopharynx or oesophagus.
3. Steps of surgical procedure:
   - This procedure is done under general anaesthesia.
   - Patient lies supine with head extended at atlanto-occipital joint and neck slightly flexed so that mouth, pharynx and oesophagus are in one line.
   - Mouth is opened with a gauze piece. Oesophagoscope is held in right hand and introduced through the mouth.
   - Tip of the epiglottis and then arytenoids are identified and the scope is passed posterior to it.
   - Crico-pahryngeal sphincter is normally closed. Scope is passed when it opens with gentle pressure.
   - Oesophagoscope is further passed down till the lower end.
   - After the procedure it is withdrawn slowly.
4. Complications of the procedure:
   - General anaesthesia complications.
   - Damage to lips, oral cavity, pharynx, teeth etc.
   - Osophageal perforation.
   - Hypoxia due to tracheal compression during the procedure.

OSCE Station No 107



Observe the above photograph of an instrument and answer the following questions:

Questions

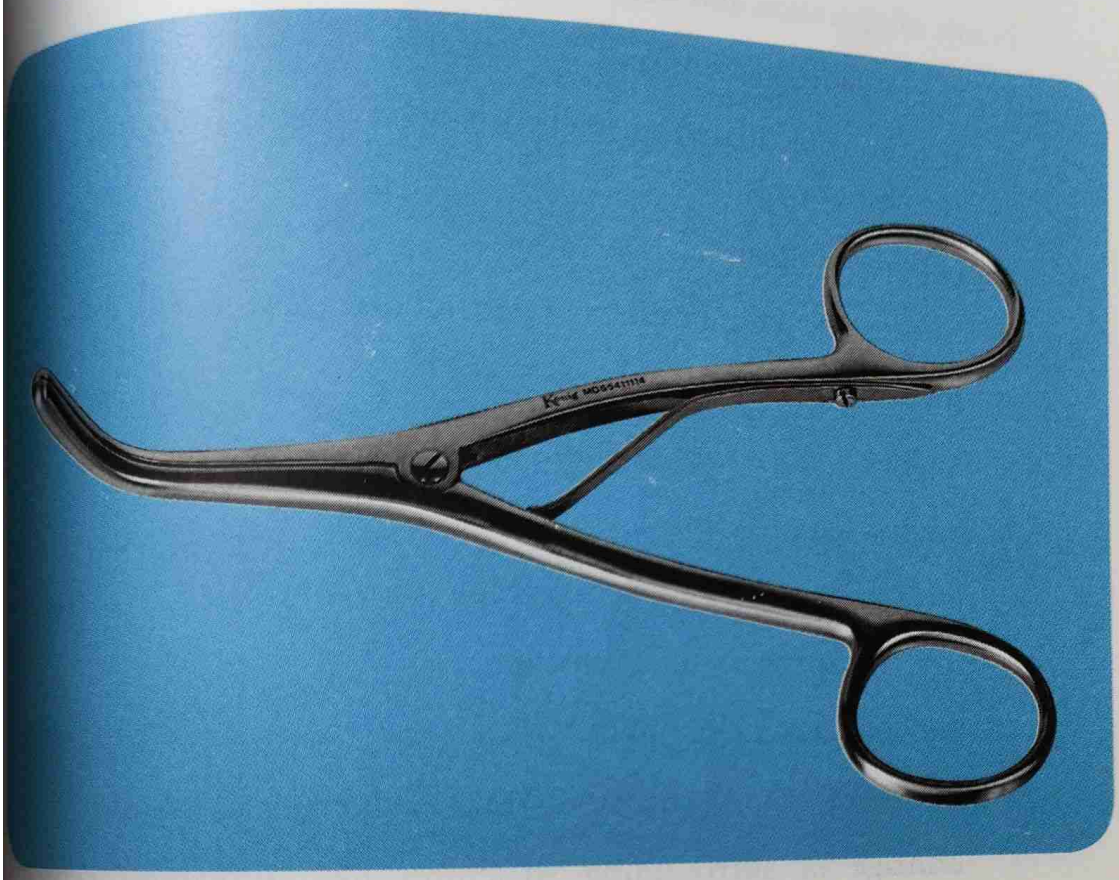
1. Name the given instrument with its use.
2. What is the most common indication for using this instrument?
3. Outline the steps of surgical procedure where this instrument is used.

Answers

1. Name of the instrument:
   - Rigid bronchoscope.
   - It is used for performing rigid bronchoscopy.
2. Most common indication:
   - The most common indication for the use of this instrument is removal of foreign body from the tracheo-bronchial tree.
3. Steps of surgical procedure:
   - This procedure is done under general anaesthesia.
   - Patient lies supine with head extended at atlanto-occipital joint and neck slightly flexed.
   - Mouth is opened with a gauze piece. Bronchoscope is held in right hand and introduced through the mouth.
   - Tip of the epiglottis is identified and the scope is passed posterior to it.
   - Vocal cords are identified and the scope is rotated 90^0 towards the right and then introduced through the glottis. If the endotracheal intubation is done, then anaesthetist is asked to withdraw endotracheal tube at this stage and connect the gas tubing directly to the bronchoscope anaesthesia channel.
   - In children and infant first sliding panel laryngoscope is passed and bronchoscope is then passed through the laryngoscope. Then laryngoscope is withdrawn by opening the sliding panel.
   - Bronchoscope is further advanced and whole the tracheo-bronchial tree is examined.
   - After the procedure is over, bronchoscope is withdrawn slowly.

OSCE Station No

108



Observe the above photograph of an instrument and answer the following questions:

Questions

1. Name the given instrument.
2. Name the surgical operation and the step where this is used.
3. Enumerate the complications of this surgical operation.

Answers

1. Name of the instrument:
   - Trousseau Tracheal Dilator.
2. Name of operation and step:
   - It is used in tracheostomy operation.
   - It is used to dilate the tracheostoma during introduction of the tracheostomy tube.
3. Complications of surgical operation:
   - Anaesthetic complications of general or local anaesthesia.
   - Bleeding with resultant aspiration.
   - Sudden apnoea after opening of trachea.
   - Surgical emphysema.
   - Displacement of the tracheostomy tube.
   - Lower respiratory tract infection.
   - Pneumothorax.
   - Blockage of the tracheostomy tube with resultant hypoxia.
   - Damage of surrounding structures like oesophagus, cervical pleura, recurrent laryngeal nerve, thyroid ima artery.
   - Dysphagia.
   - Tracheo-osophageal fistula or tracheo-cutaneous fistula.
   - Perichondritis of the cricoid cartilage and resultant stenosis later on.
   - Difficult decannulation

OSCE Station No 109

Observe the above photograph of a tube and answer the following questions:

Questions

1. Name the given tube and the operation where it is used.
2. What are the advantages of using this tube?
3. What are the disadvantage of using this tube?

Answers

1. Name of the instrument:
   - Tracheostomy tube with cuff (Portex-single lumen).
   - It is used in tracheostomy operation.
2. Advantages:
   - Cuff is present in this tube which prevents trickling down of blood and secretions into lower respiratory tract.
   - It is non-metallic tube so there is no problem during CT scan, MRI or radiation therapy.
3. Disadvantages:
   - It is a single tube so cleaning is difficult and blockage of the tube can occur frequently.
   - Patient cannot speak when the tube is in place as there is no phonation hole in it.

OSCE Station No 110

Observe the above photograph of a tube and answer the following questions:

Questions

1. Name the given tube and the operation where it is used.
2. What are the advantages of using this tube?
3. What are the disadvantages of using this tube?
4. Enumerate the post-operative care after this operation.

Answers

1. Name of the instrument:
   - Tracheostomy tube-double lumen with cuff (Shilley's tracheostomy tube)
2. Advantages:
   - Cuff is present in this tube which prevents trickling down of blood and secretions into lower respiratory tract.
   - It is non-metallic tube so there is no problem during CT scan, MRI or radiation therapy.
   - It is a double lumen tube (inner and outer tube) so cleaning of the tube is easy.
3. Disadvantages:
   - Patient cannot speak when the tube is in place as there is no phonation hole in it.
4. Post-operative care:
   - Patient must be kept supine and upright in bed.
   - Tracheostomy tube should be properly secured in place.
   - Regular suction and cleaning of the inner tube must be done.
   - Proper humidification of the inspired air.
   - Cuff of the tube should be deflated for few minutes after regular interval to prevent pressure necrosis of the tracheal rings.

OSCE Station No 111

Observe the above photograph of a gadget that is used by patients after total laryngectomy. Answer the following questions:

Questions

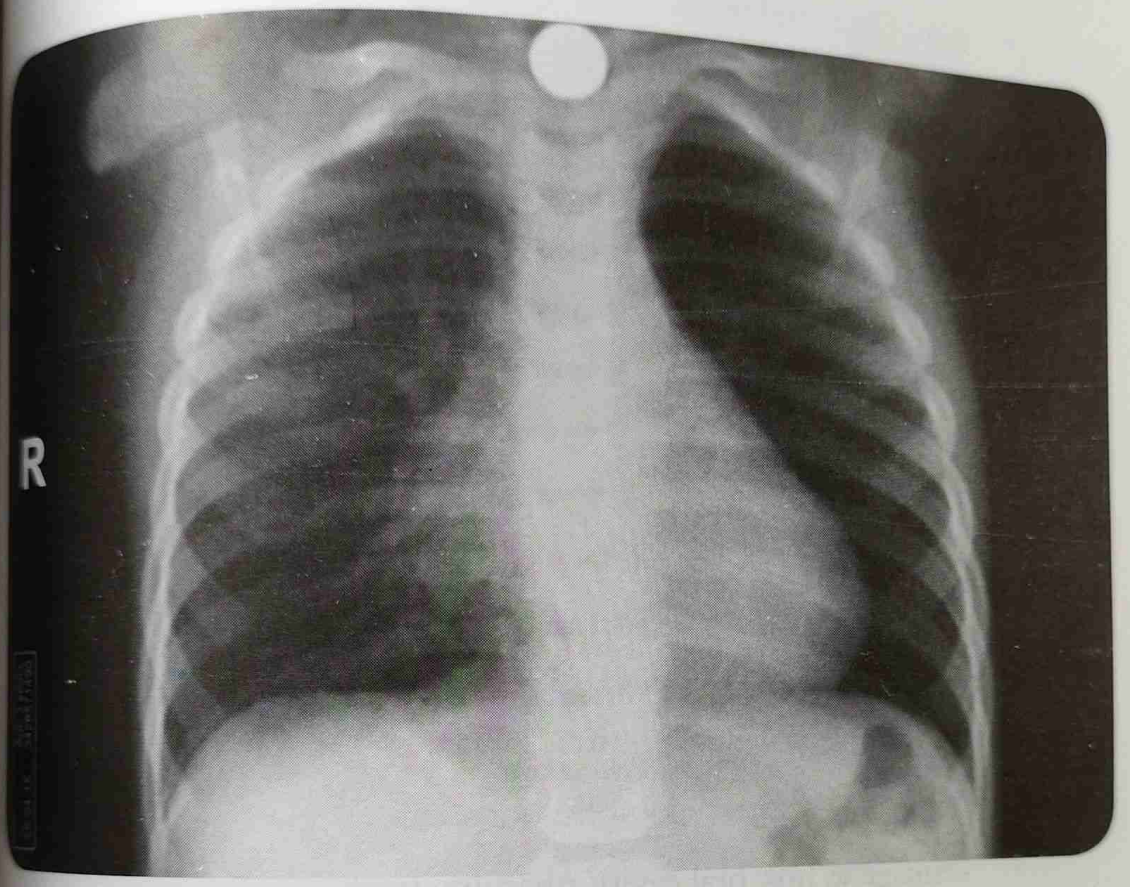
1. Name the above gadget.
2. How does it work?
3. What are the advantages of using this gadget?
4. What are the disadvantages of using this gadget?

Answers

1. Name of the gadget:
   - External hand held Electrolarynx.
2. Working of this gadget:
   - This is an external hand held electrolarynx for speech rehabilitation after total laryngectomy.
   - This is an electromagnetic vibrator which produces sound.
   - It is held on the outer aspect of the neck and the button is pushed.
   - Sound is produced by this vibrator that goes inside the pharynx.
   - Articulation is then done by the patient in usual manner.
3. Advantages:
   - Easy to use. No added training is required.
   - Patient can speak long sentences.
   - No additional surgery is required.
4. Disadvantages:
   - Voice of the patient is monotonous and robotic.
   - One hand is always in use for holding it.
   - Requires constant maintenance for proper working like battery replacement.

OSCE
Station No

112



Observe the above photograph of a radio-imaging film and answer the following questions:

Questions

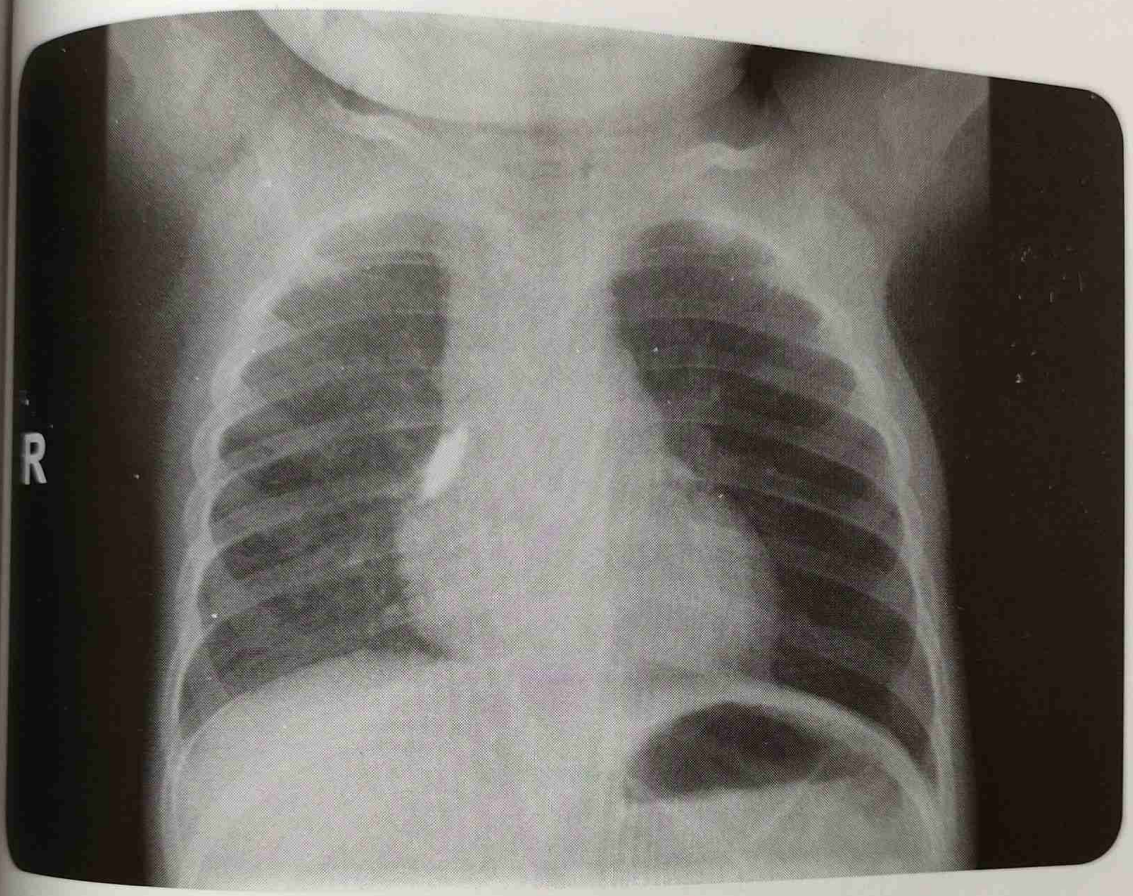
1. Name the type, site and view of this film.
2. Outline the findings visible on this film with diagnosis.
3. How will you treat this patient?
4. Enlist the complications associated with this treatment.

Answers

1. Name of this film:
   - Type: Plain X-ray.
   - Site: Chest and neck.
   - View: Antero-posterior view.
2. Findings in the film:
   - This X-ray is showing a rounded, radiopaque shadow in the midline in the root of the neck.
   - Most probably this is a foreign body (most likely coin) impacted at the crico-pharynx.
   - Exact location of the foreign body cannot be ascertained on single view (lateral view is also needed).
3. Treatment:
   - Treatment is removal of the foreign body either through direct laryngoscopy and if not possible then oesophagoscopy.
4. Complications of the procedure:
   - General anaesthesia complications.
   - Damage to lips, oral cavity, pharynx, teeth etc.
   - Laryngeal oedema.
   - Osophageal perforation.
   - Foreign body slippage and obstruction lower down in the digestive tract.

OSCE Station No

113



Observe the above photograph of a radio-imaging film and answer the following questions:

Questions

1. Name the type, site and view of this film.
2. Outline the findings visible on this film with diagnosis.
3. How will you treat this patient?
4. Enlist the complications associated with this treatment.

Answers

1. Name of this film:
   - Type: Plain X-ray.
   - Site: Chest.
   - View: Postero-anterior view.
2. Visible findings:
   - It is showing an irregular radiopaque shadow most probably a foreign body in the thoracic region on the right side.
   - Exact location of the foreign body cannot be ascertained on single view (lateral view is also needed). Most probably it is impacted in the right main bronchus.
   - Broncho-vascular marking is more prominent on the right side showing inflammatory changes in the lung parenchyma.
3. Treatment:
   - Treatment is removal of the foreign body through rigid bronchoscopy.
4. Complications of the procedure:
   - Anaesthetic complications.
   - Injury to structures in the oral cavity, pharynx, larynx and tracheo-bronchial tree.
   - Laryngeal oedema.
   - Hypoxia during the procedure.

OSCE Station No

114

Observe the above photograph of a radio-imaging film and answer the following questions:

Questions

1. Name the type, site and view of this film.
2. Outline the findings visible on this film with diagnosis.
3. How will you treat this patient?
4. Enlist the complications associated with this treatment.

Answers

1. Name of this film:
   - Type: Plain X-ray.
   - Site: Soft tissues of the neck.
   - View: Lateral view.
2. Findings in the film:
   - This X-ray is showing an irregular radiopaque shadow in the region of hypopharynx at the level of C6 and C7.
   - Exact location of the foreign body cannot be ascertained on single view (AP view is also needed).
   - Most probably this is a foreign body (most likely bone piece) impacted at the upper osophageal sphincter.
3. Treatment:
   - Treatment is removal of the foreign body either through direct laryngoscopy and if not possible then oesophagoscopy.
4. Complications of the procedure:
   - General anaesthesia complications.
   - Damage to lips, oral cavity, pharynx, teeth etc.
   - Laryngeal oedema.
   - Osophageal perforation.
   - Foreign body slippage and obstruction lower down in the digestive tract.

OSCE Station No 115

Observe the above photograph of a radio-imaging film of a child who came with the complaint of dyspnoea and stridor for last one day. Answer the following questions:

Questions

1. Describe the findings visible on the above radio-imaging film.
2. What is the most likely diagnosis?
3. Name the organism responsible for this condition.
4. What should in clinical examination be avoided in such patients and why?
5. How will you treat this condition?

Answers

1. Visible findings:
   - This is a plain X-ray of the soft tissues of neck, lateral view.
   - The epiglottis appears to be swollen and oedematous. This is known as Thumb's sign.
   - The airway appears to be narrowed due to swelling of the epiglottis.
2. Likely diagnosis:
   - This is a case of acute epiglottitis or supraglottic laryngitis.
3. Organism responsible for this condition:
   - Haemophilus influenzae is the usual organism responsible for this condition.
4. Clinical examination avoided in this case:
   - Indirect laryngoscopy should be better avoided because it can worsen the condition and may cause complete respiratory obstruction.
5. Treatment:
   - Patient needs hospitalization.
   - Parenteral antibiotic against haemophilus influenzae.
   - Systemic steroids to relieve oedema and respiratory obstruction.
   - Adequate intravenous fluid.
   - Proper oxygenation.
   - Tracheostomy in cases of marked respiratory obstruction.

OSCE Station No

116

Observe the above photograph where some maneuver is being performed on a patient. Answer the following questions:

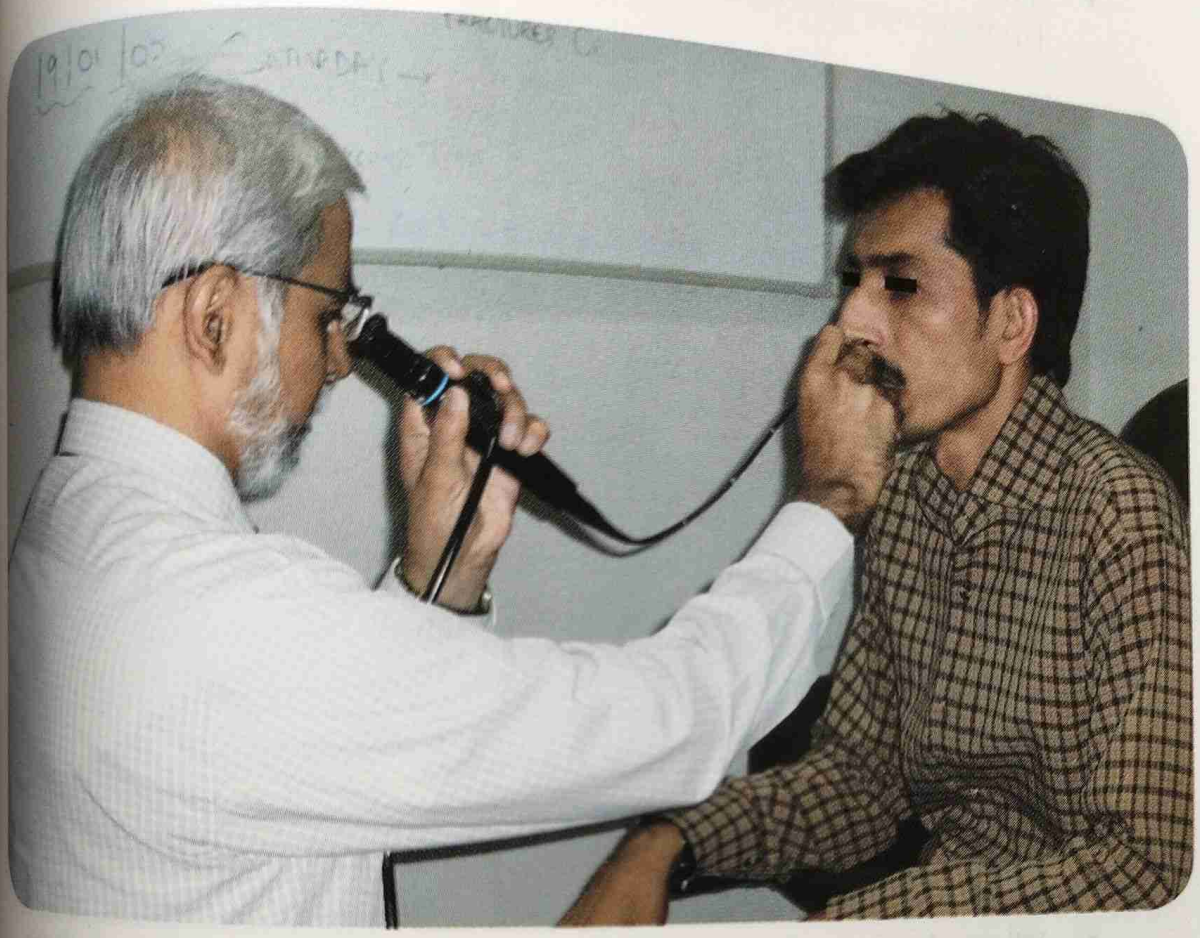
Questions

1. Name the maneuver which is being performed in this photograph.
2. What is the indication for this maneuver?
3. Outline the method of performing this maneuver.

Answers

1. Name of the maneuver:
   - Heimlich's maneuver.
2. Indication for this maneuver:
   - This maneuver is done to dislodge the foreign body from the larynx.
3. Method of this maneuver:
   - The person performing this maneuver stands behind the patient and places his arm around the patient's lower chest and epigastric region.
   - With both of his arms, he gives a sudden thrust directed upwards and backwards below the epigastrium.
   - This compresses the abdomen and as a result air escapes from the lungs and causes dislodgement of the foreign body.

OSCE Station No 117



Observe the above photograph where some procedure is being performed on a patient. Answer the following questions:

Questions

1. Name the procedure which is being performed in this photograph.
2. What are the indications for this procedure?
3. Outline the steps of this procedure.

Answers

1. Name of the procedure:
   - The name of this procedure is flexible fibre-optic direct laryngoscopy (FODL).
2. Indications:
   - This procedure is mainly done for examination of the larynx and hypopharynx.
   - Biopsy from a lesion in these areas can be taken if the biopsy channel is present in the flexible fibre-optic laryngoscope.
   - Assessment of the vocal cords mobility can be done through this procedure.
3. Steps of this procedure:
   - Patient sits in front of the examiner.
   - Nasal cavity and pharynx is sprayed with 10% xylocaine solution for anaesthesia.
   - Nasal cavity is examined first for patency.
   - The fibre-optic laryngoscope is introduced through the nose which is more patent.
   - When the nasopharynx is reached, the tip of the scope is bent downwards and it is pushed further.
   - The larynx and hypopharynx is examined.
   - The abduction of the vocal cords is assessed by asking the patient to breath deeply and adduction is assessed by asking to say 'Aaa' or 'Eee'.
   - After complete examination, laryngoscope is withdrawn slowly and gently.

OSCE Station No 118

Observe the above photograph where some surgical procedure is being performed on a patient. Answer the following questions:

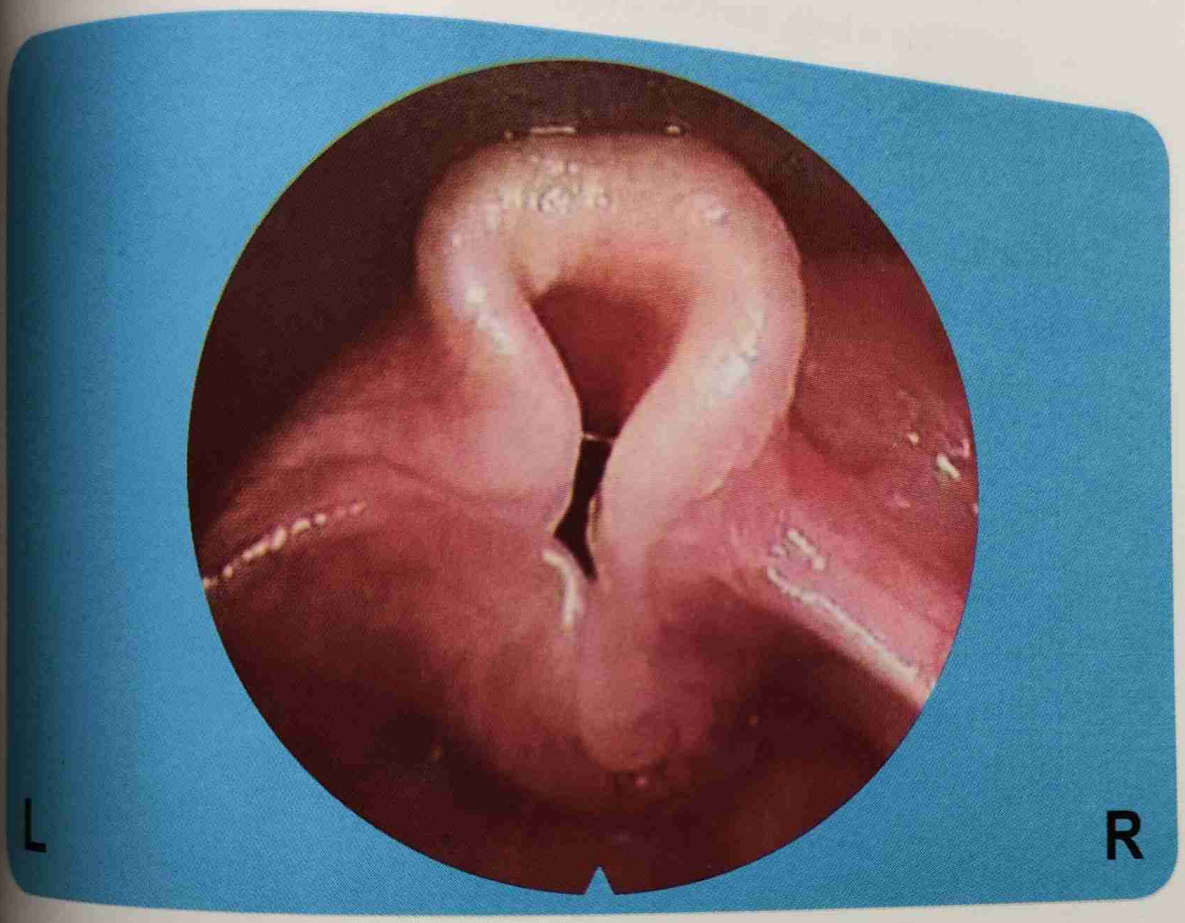
Questions

1. Name the surgical procedure which is being performed in this photograph.
2. What is the main advantage of this procedure?
3. Name four common indications for this surgical procedure.

Answers

1. Name of surgical procedure:
   - This surgical procedure is called 'Microlaryngoscopy'.
2. Main advantage of this procedure:
   - The main advantage of this procedure is that the examined part is seen magnified as it is seen under operating microscope.
3. Four common indications:
   - Excision of vocal nodules.
   - Stripping of the vocal cords.
   - Cordectomy.
   - Excision of vocal polyp or papilloma.

OSCE Station No 119



Observe the above photograph of the larynx and answer the following questions:

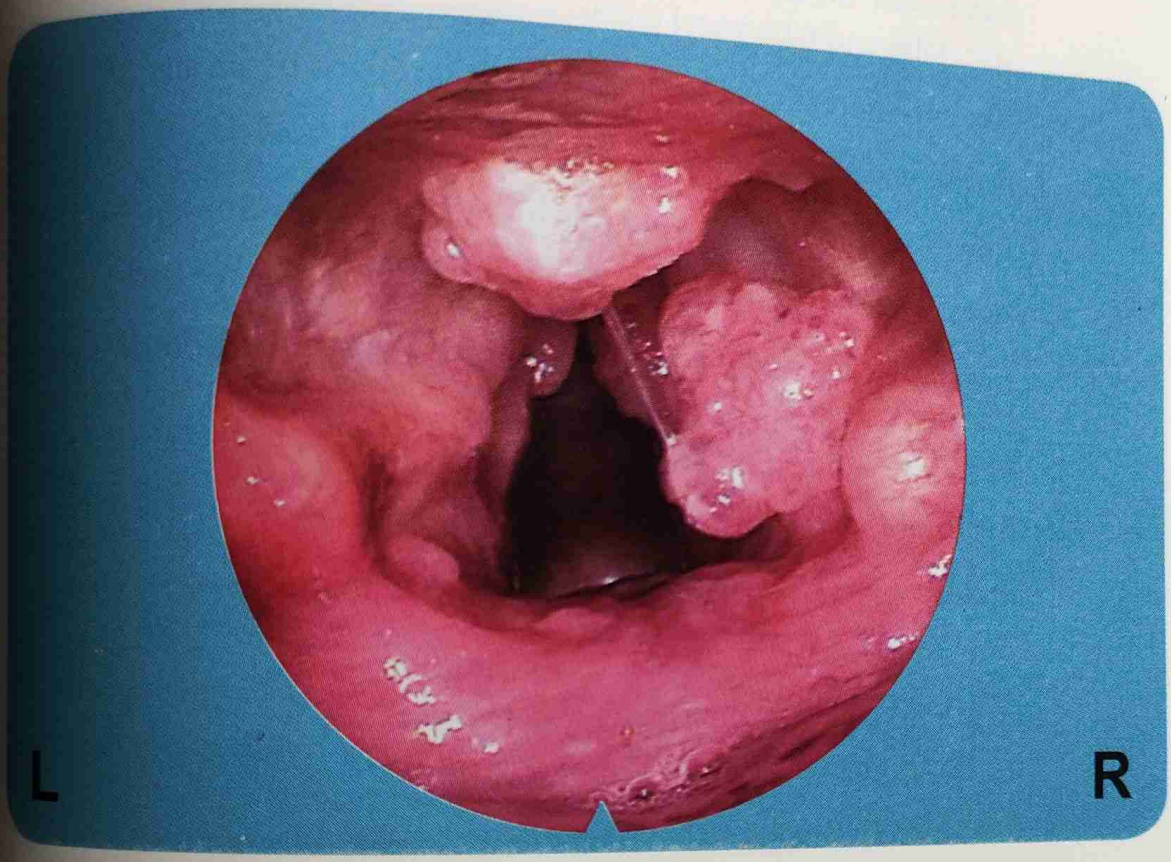
Questions

1. Describe the findings visible on this photograph.
2. What is the most likely diagnosis in this patient?
3. What is the treatment of this condition?

Answers

1. Findings in the photograph:
   - Mucosa of the larynx is thick and lax.
   - Epiglottis is long, narrow and folded-Omega shaped epiglottis.
   - Ary-epiglottic folds are approximated.
   - Cruciform laryngeal inlet.
2. Likely diagnosis:
   - The most likely diagnosis is Laryngomalacia.
3. Treatment:
   - The condition resolve spontaneously as the child grows.
   - Reassurance and explaining the nature of the disease to the parents.
   - Symptomatic treatment.
   - Tracheostomy may be needed but it should be avoided as far as possible.

OSCE Station No 120



Observe the above photograph of the larynx and answer the following questions:

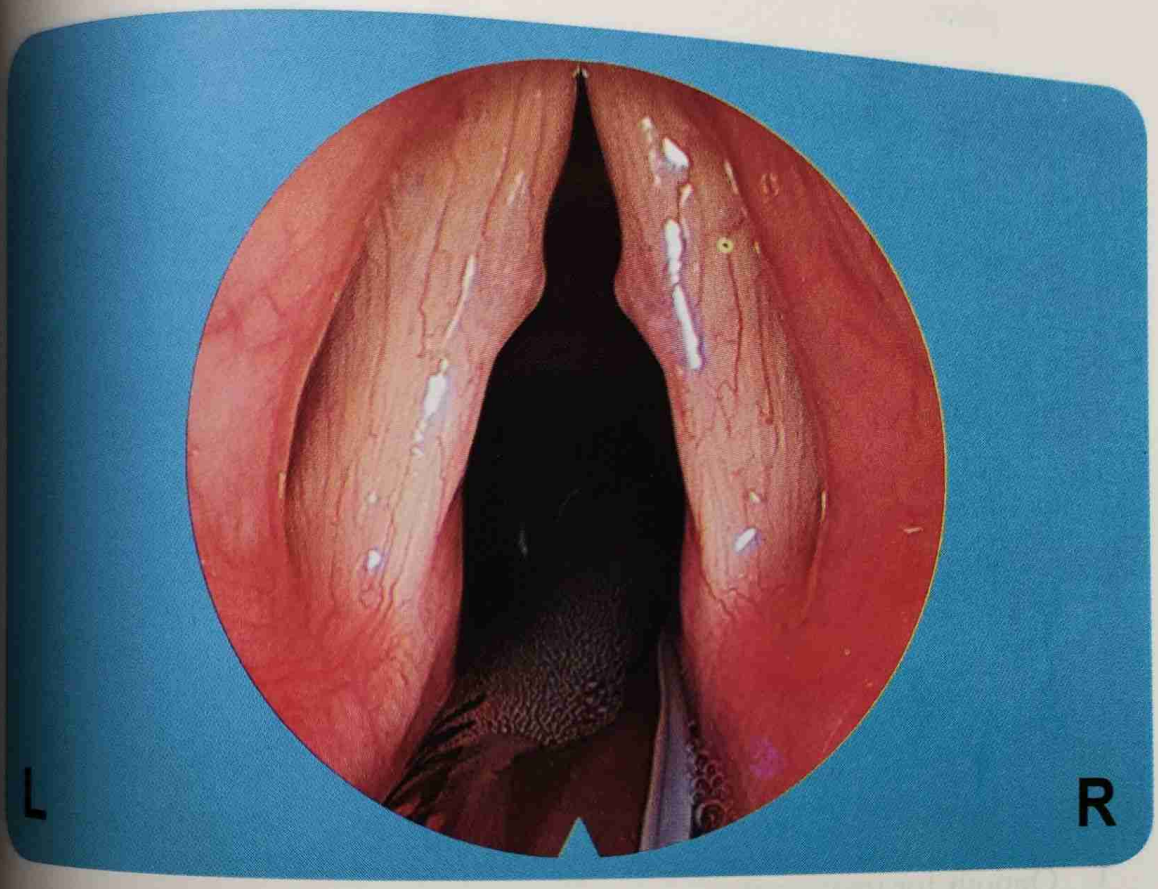
Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis in this patient?
3. What is the aetiology of this condition?
4. What is the treatment of this condition?

Answers

1. Findings in the photograph:
   - This is a photograph of the larynx showing multiple and irregular outgrowth on the laryngeal mucosa involving the supraglottic area, false and true vocal cords.
   - The sub-glottic area also appears to be involved by similar growth.
2. Likely diagnosis:
   - The most likely diagnosis is Multiple Laryngeal Papillomatosis
3. Aetiology of this condition:
   - The exact aetiology is unknown but Human Papilloma Virus (mainly type 6 and 11) is considered to be responsible for this condition.
4. Treatment of this condition:
   - Endoscopic removal of the papilloma with minimal trauma to mucosa by:
     - microlaryngeal cold instruments.
     - laser like CO_2, diode etc.
     - microdebrider.
     - electrocautery.
     - cryotherapy.
   - Adjuvant medical therapy:
     - interferon.
     - antiviral agents.

OSCE Station No 121



Observe the above photograph of the larynx and answer the following questions:

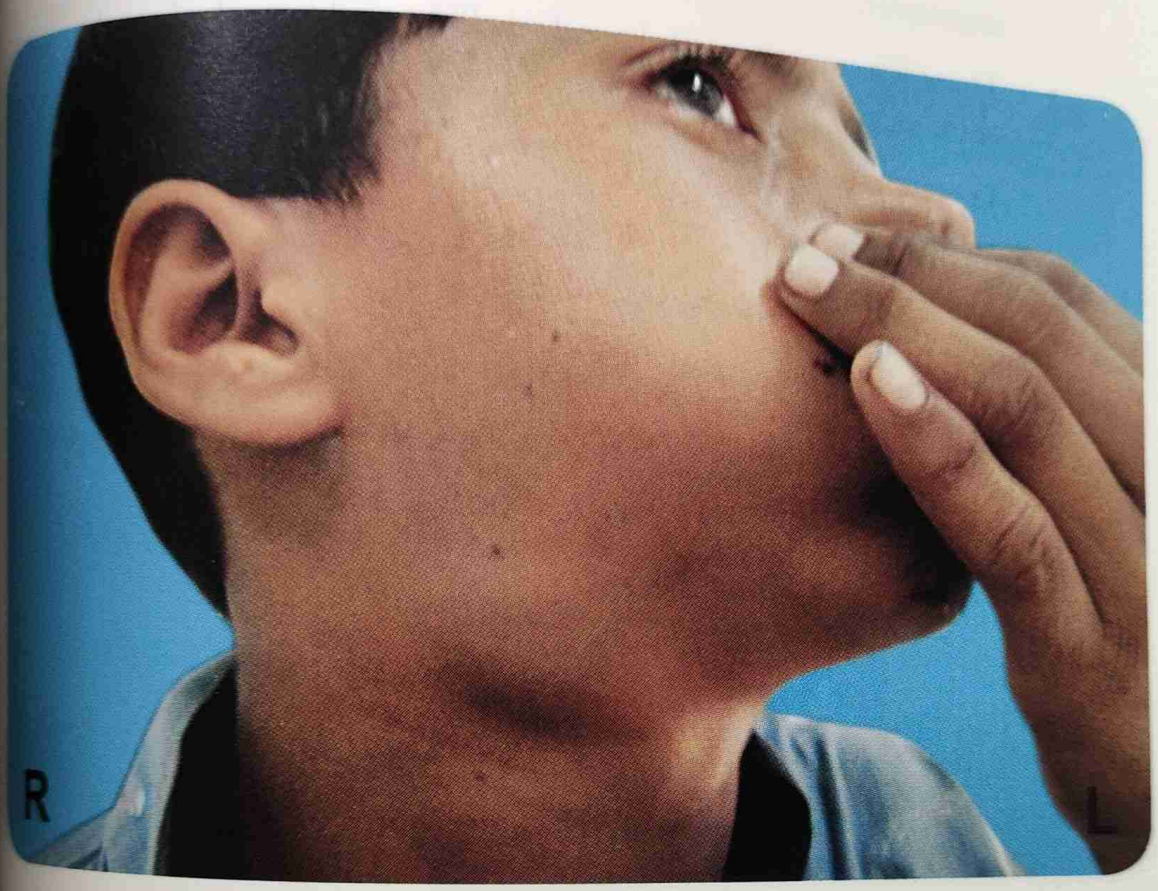
Questions

1. Describe the findings visible in this photograph with diagnosis.
2. Outline the aetiology and pathogenesis of this condition.
3. What are the options available for treatment in this patient?
4. What will you advise the patient to prevent recurrence of this condition in future?

Answers

1. Findings in this photograph:
   - Both the true vocal cords are visible with endotracheal tube in place.
   - There are nodular and symmetrical thickenings on both vocal cords at the junction of anterior one-third and posterior two-third.
   - The diagnosis is vocal nodules
2. Aetiology and pathogenesis:
   - This condition is due to vocal abuse, seen in singers, teachers, hawkers and actors etc. It is also seen in mothers of young children who shout a lot and persons talking to the deaf.
   - These people squeeze their voice excessively.
   - As a result of this small haematoma is formed at the point of maximum impact of vocal cords.
   - Due to repeated straining this haematoma may organize and forms nodular thickening.
   - These are bilateral, grayish white in colour and at the junction of anterior one-third and posterior two-third of the cords.
3. Options for treatment
   - Surgical excision of the nodule through micro-laryngoscopy
   - Endoscopic laser excision.
   - Excision by microdebrider.
4. Advice to prevent recurrence:
   - Avoid vocal abuse and shouting in future.
   - Speech therapy should be done.

OSCE Station No 122



Observe the above photograph of a patient who is performing Valsalva's maneuver. Answer the following questions:

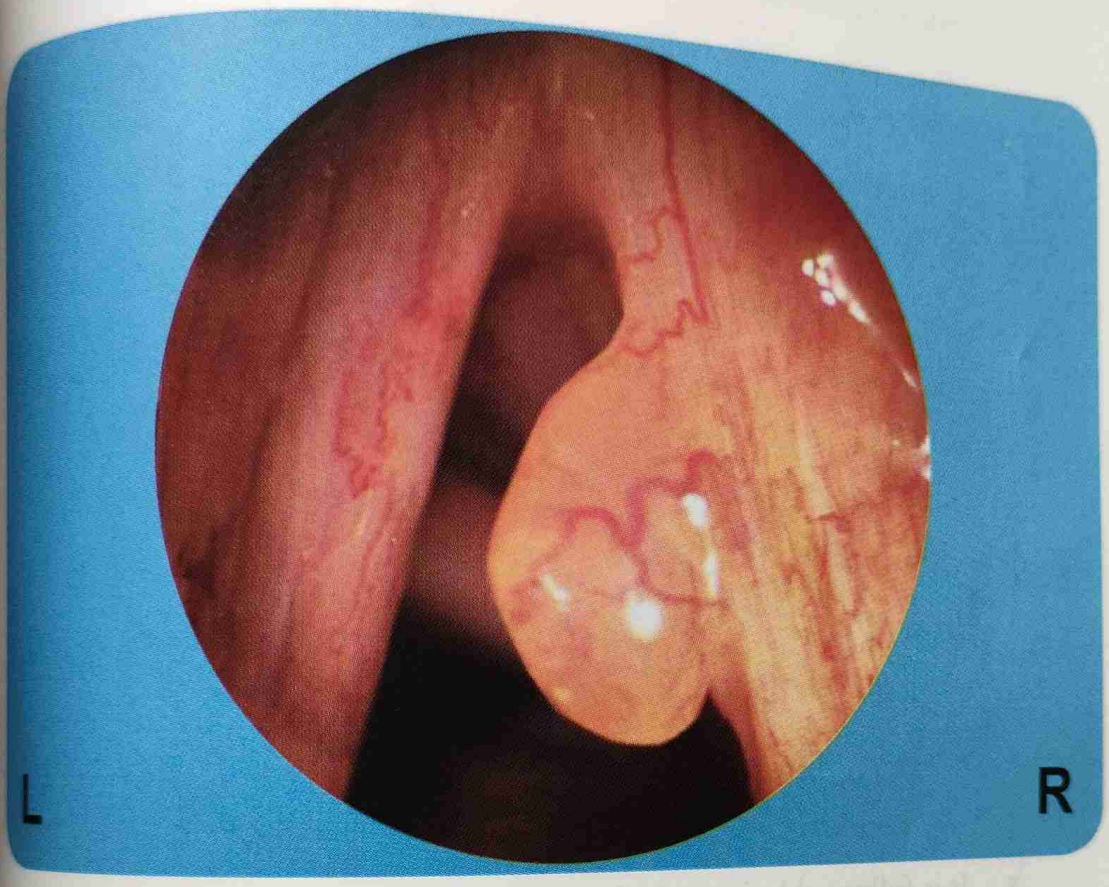
Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis?
3. What is the aetiology of this condition?
4. What are the clinical types of this condition?
5. What is the treatment of this condition?

Answers

1. Findings in this photograph:
   - This is a photograph of a patient who is performing Valsalva's maneuver.
   - There is a smooth, oval shaped swelling visible in the lateral aspect of the upper neck.
   - There is no sign of inflammation in the swelling.
2. Most likely diagnosis:
   - The most likely diagnosis is Laryngocele.
3. Aetiology of this condition:
   - Expiration against resistance causes the formation of laryngocele.
   - It is commonly seen in glass blower and trumpeters.
4. Clinical types:
   - Internal.
   - External.
   - Mixed or combined internal and external.
5. Treatment of this condition:
   - Internal laryngocele is excised or marsupialized endoscopically.
   - External and combined types is treated by excision through the neck.

OSCE Station No 123



Observe the above photograph of the larynx and answer the following questions:

Questions

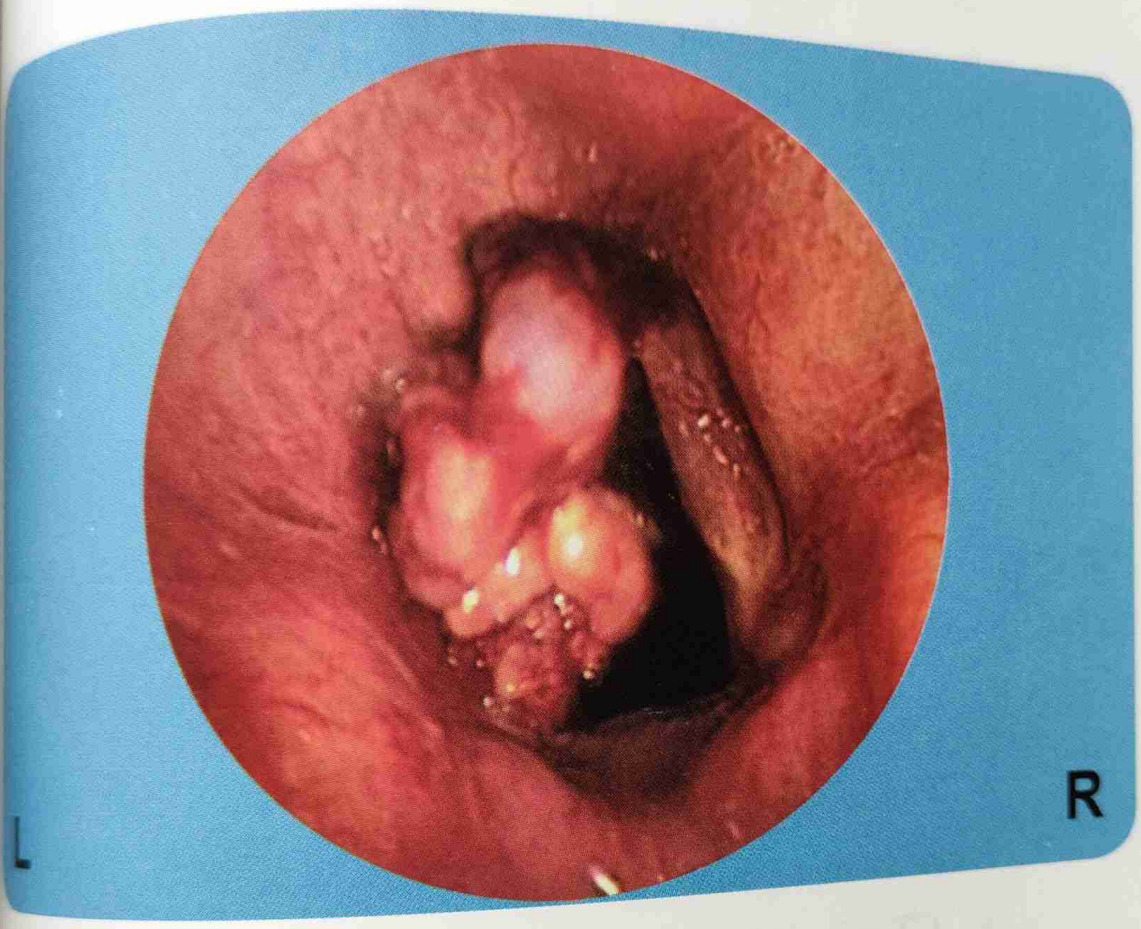
1. Describe the findings visible in the photograph.
2. What is the most likely diagnosis?
3. What is the aetiology of this condition?
4. How will you treat this patient?

Answers

1. Findings in this photograph:
   - This is a endoscopic photograph of the larynx showing both the true vocal cords.
   - There is a smooth and somewhat pedunculated outgrowth on the right vocal cord involving its middle third.
2. Likely diagnosis:
   - The most likely diagnosis is vocal cord polyp.
3. Aetiology of this condition:
   - Exact aetiology is unknown.
   - Probably it is a response of traumatic abrasion, vocal abuse, smoking or unresolved infection.
4. Treatment:
   - Treatment is endoscopic excision by:
     - microlaryngeal instruments.
     - laser like CO_2 or diode.
     - microdebrider.
   - It is followed by speech therapy.

OSCE Station No

124



Observe the above photograph of the larynx and answer the following questions:

Questions

1. Describe the findings visible in the photograph.
2. What is the most likely diagnosis in this patient?
3. Enlist all the investigations required in this patient.

Answers

1. Findings:
    - This is a laryngoscopic photograph showing the glottic and part of supraglottic region.
    - There is an irregular fungating growth on the left side of the larynx. It is involving the whole length of the true and false vocal cords and extending on the adjacent supraglottic region. Anteriorly is reaching upto the anterior commissure but right true vocal cord is not involved. Posteriorly it is reaching upto the posterior commissure. Sub-glottic extension cannot be assessed on this photograph.
    - Mobility of the cords cannot be assessed.
2. Likely diagnosis:
    - The most likely diagnosis is malignant growth of the larynx, most probably squamous cell carcinoma.
3. Further investigations:
    - For histological diagnosis:
        - Punch biopsy and histopathology.
    - For nodal metastasis:
        - CT scan with contrast from skull base to mediastinum.
        - FNAC if neck swelling is present.
        - Ultrasonography of the neck
    - For distant metastasis: if there is suspicion.
        - Whole body bone scan.
        - Liver function tests.
        - Renal function tests.
        - Ultrasonography of the abdomen.
    - Other baseline investigations for surgery:
        - Blood CP/ESR, PT, APTT, blood grouping/cross matching, RBS, viral markers etc.

OSCE Station No 125

Observe the above photograph of the neck of a 49-year-old man. Answer the following questions:

Questions

1. Describe the findings visible in this photograph with name of surgery done on this patient.
2. Name the incision used in this surgery.
3. Enlist the problems that patient will face after this surgery.

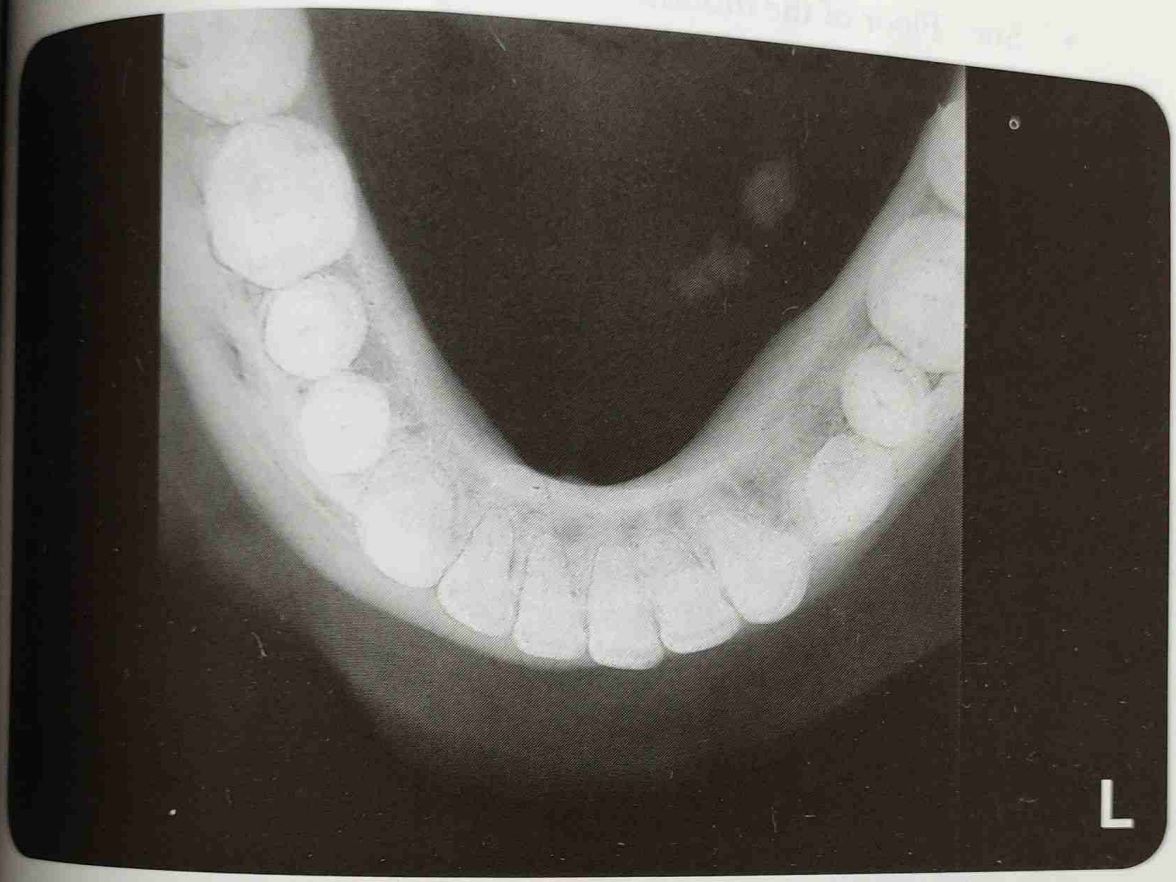
Answers

1. Findings in this photograph:
   - This is a photograph of the neck of a 49-year-old patient.
   - Permanent tracheostome has been made in this patient and stitches are also in place.
   - U-shaped incision mark of the surgery is also visible (stitches removed).
   - Two cotton plugs are also present on both side of the neck, most probably sealing of the wound for drains.
   - The surgery done on this patient is total laryngectomy.
2. Name of incision:
   - The incision used for this surgery is U-shaped modified Gluck Sorenson incision.
3. Problems faced after this surgery:
   - The voice or speech will be lost.
   - Swallowing problems like dysphagia.
   - Tracheostomal problems like crusting, recurrent infections, stenosis, problem in swimming, bathing or in taking shower.
   - Problems due to loss of glottic occlusion like weight lifting, defecation, micturation, parturation etc.
   - Psycho-social problems.

SECTION 05

HEAD AND NECK

OSCE Station No 126



Observe the above photograph of a radio-imaging film and answer the following questions:

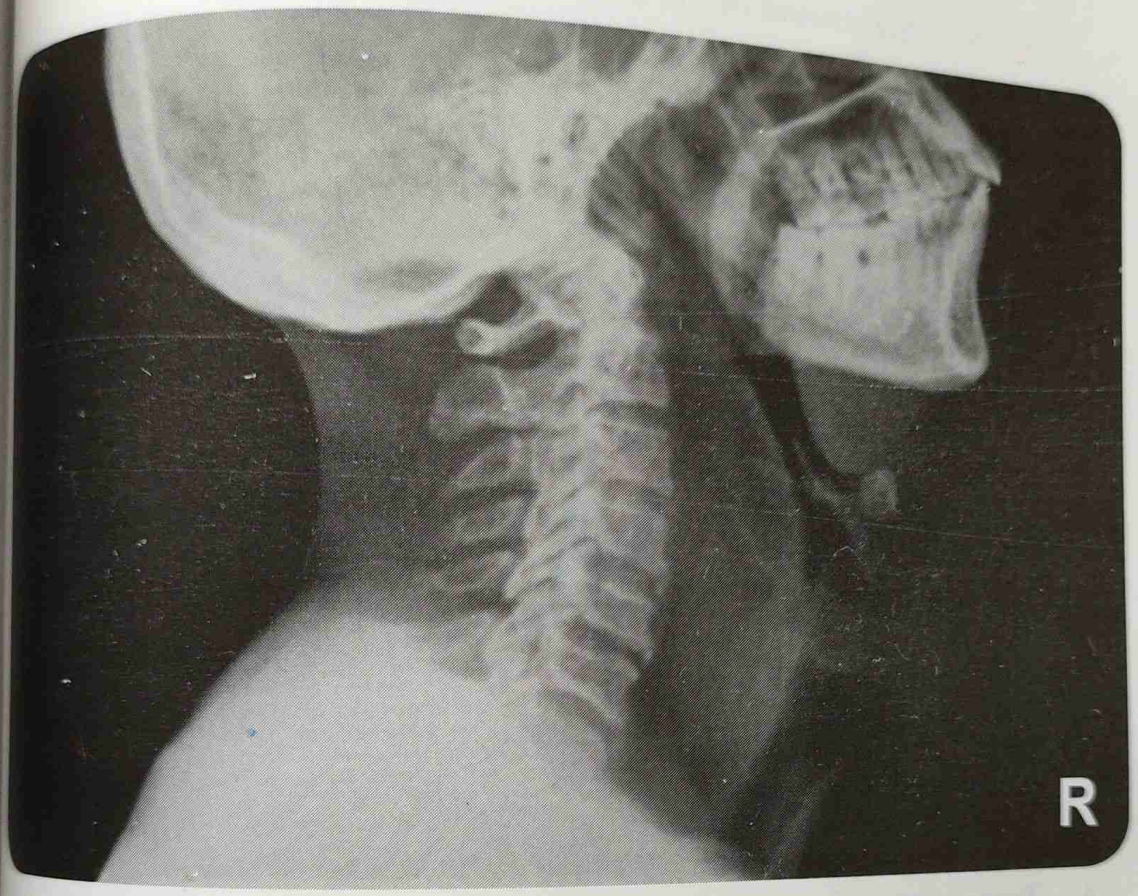
Questions

1. Name the type, site and view of this film.
2. Outline the findings visible on this film with diagnosis.
3. How will you treat this patient?

Answers

1. Name of the film:
   - Type: Plain X-ray.
   - Site: Floor of the mouth.
   - View: Occlusal view.
2. Visible findings:
   - This X-ray is showing the anterior part of the mandible with teeth.
   - Multiple small radiopaque shadows are visible in the area of sub-mandibular gland duct on the left side.
   - The diagnosis is sub-mandibular gland duct stones on the left side.
3. Treatment:
   - Small stones in the distil duct can be dislodged by medical treatment like:
     - by increasing the salivary flow by drugs and fluids
     - by reducing the oedema in the duct by anti-inflammatory drugs and antibiotic if there is superadded infection.
     - by massaging of the duct
   - Intra-oral removal of the stone by opening the duct, if it is anteriorly placed stones.
   - Complete removal of the sub-mandibular gland with its duct, if the stone is lying posteriorly in the duct and within the gland tissues.

OSCE Station No 127



Observe the above photograph of a radio-imaging film and answer the following questions:

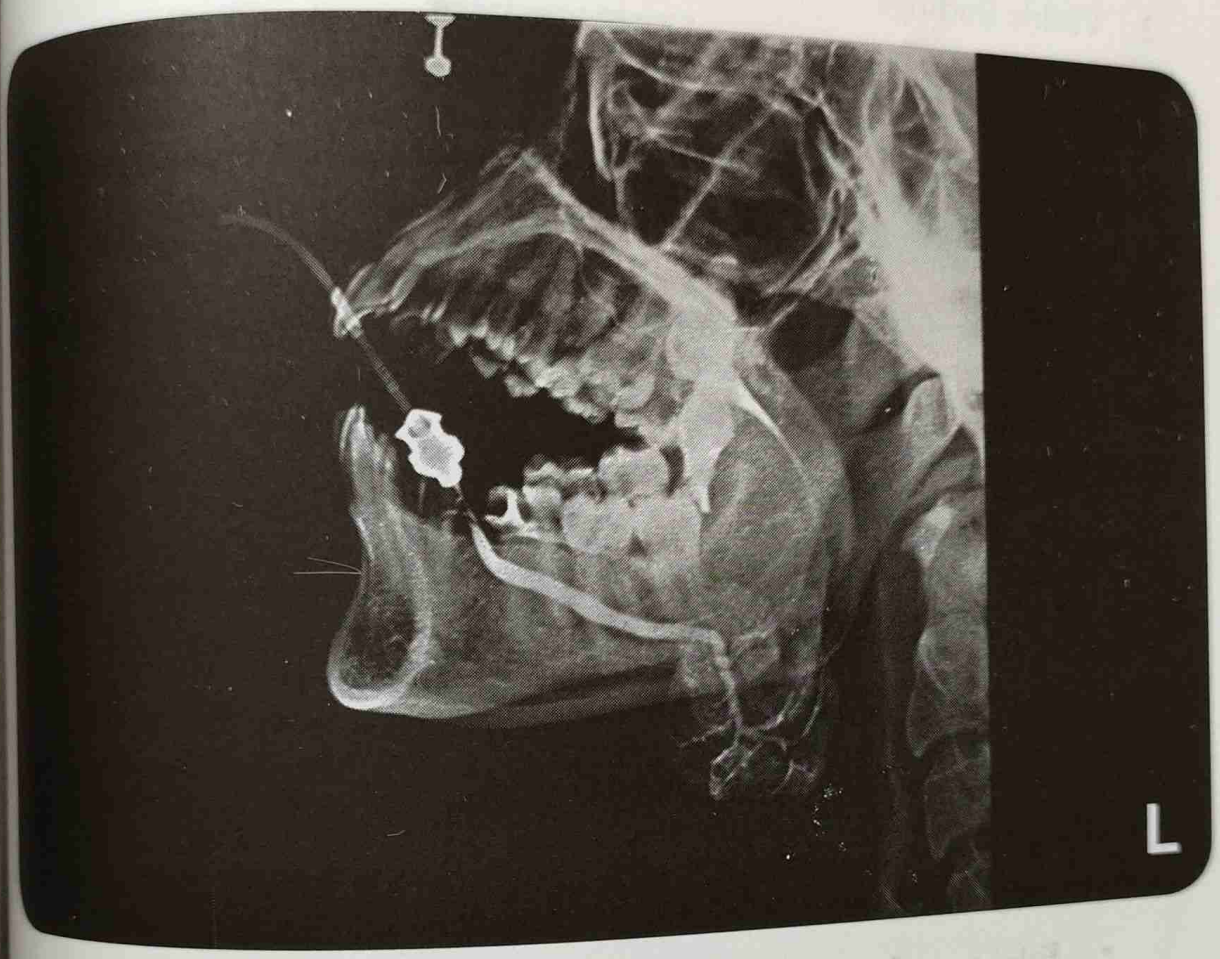
Questions

1. Name the type, site and view of this film.
2. Outline the findings visible on this film with diagnosis.
3. What are the different clinical types of this condition?
4. How will you treat this patient?

Answers

1. Name of the film:
   - Type: Plain X-ray.
   - Site: Soft tissues of the neck.
   - View: Lateral view.
2. Visible findings:
   - This is an X-ray most probably of a child.
   - It is showing widening of the prevertebral area at the level of cervical vertebrae, maximum at C4 and C5. Lower extension cannot be assessed on this X-ray.
   - As a result of this larynx and trachea are pushed anteriorly but airway appears patent.
   - Slight straightening of the cervical vertebrae.
   - The most probable diagnosis is Acute Retropharyngeal Abscess.
3. Clinical types:
   - Acute retropharyngeal abscess.
   - Chronic retropharyngeal abscess.
4. Treatment:
   - Admit the patient in hospital.
   - Immediate incision and drainage through the oral cavity under local or general anaesthesia.
   - Send the pus for culture and sensitivity.
   - Start broad spectrum parenteral antibiotic and change it according to C/S report later on.
   - Supportive treatment like intravenous fluid, analgesics and anti-inflammatory drugs.

OSCE Station No 128



Observe the above photograph of a radio-imaging film and answer the following questions:

Questions

1. Name this investigation.
2. Outline the findings visible on this film with diagnosis.
3. Enlist three common indications for performing this imaging.
4. Name three complications of this imaging.

Answers

1. Name of the investigation:
   - This is a sialogram of sub-mandibular salivary gland and its duct.
2. Visible findings:
   - Radiopaque dye is being injected in the sub-mandibular duct (cannula is in place).
   - Whole of the sub-mandibular duct and its branches in the gland are visible.
   - Whole of the ductal system is patent.
   - No compression or space occupying lesion in the gland.
   - This is a sialogram of a normal sub-mandibular gland and its duct.
3. Three common indications:
   - Stone in the sub-mandibular duct or gland (sialolithiasis).
   - Stenosis or stricture in the sub-mandibular duct.
   - Space occupying lesion in the sub-mandibular gland.
4. Three complications:
   - Sialoadenitis.
   - False tract formation and extravasation of the dye.
   - Allergic reaction to the injected dye.

OSCE Station No 129

Observe the above photograph of a child who presented with high grade fever for last two days. He has similar findings on the other side as well. Answer the following questions:

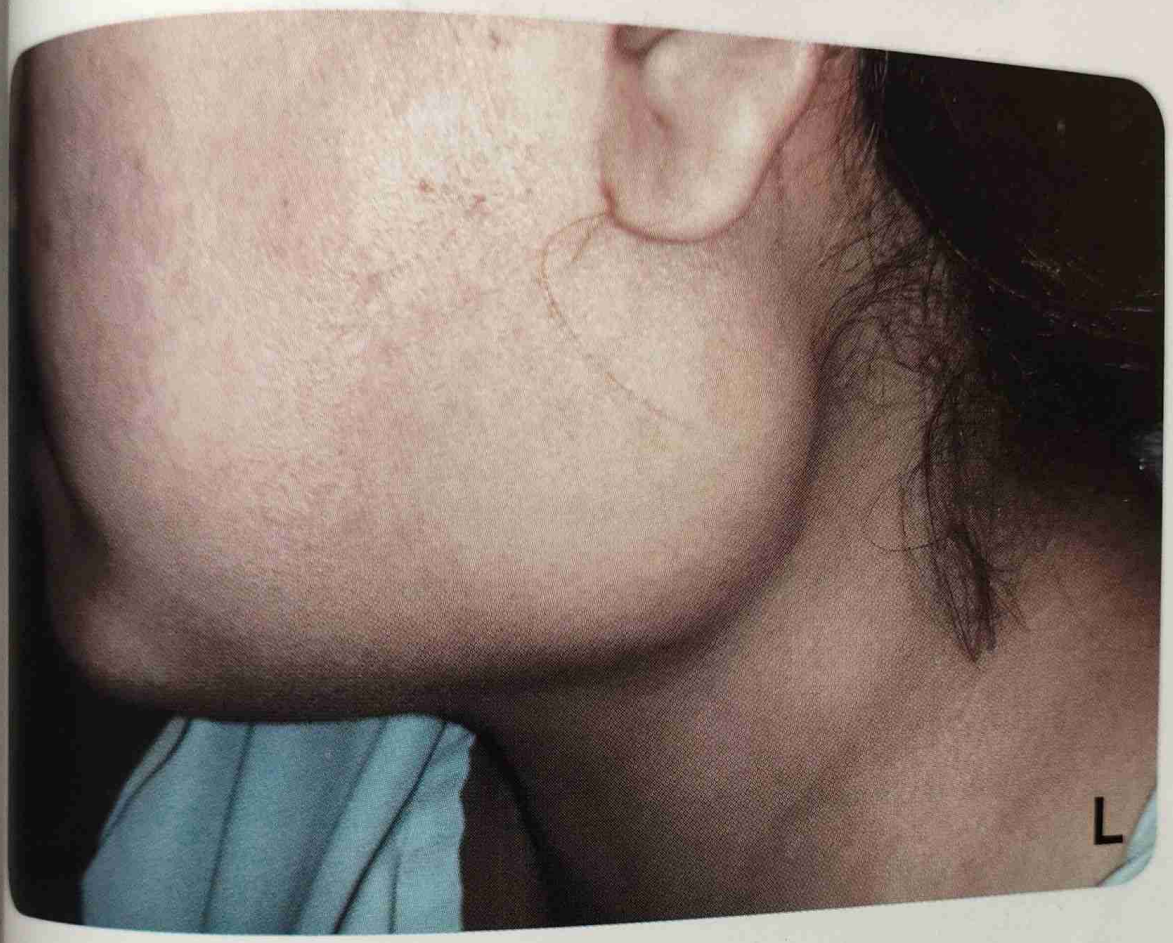
Questions

1. Outline the findings visible on this photograph with diagnosis.
2. What are the causative organisms of this condition?
3. How will you treat this patient?
4. Enlist the complications of this condition.

Answers

1. Visible findings with diagnosis:
    - This is a photograph of a child showing the face, parotid region and neck.
    - There is a diffuse bulging present in the parotid region with signs of inflammation (red in colour).
    - The most probable diagnosis is viral parotitis (Mumps).
2. Causative organisms:
    - The most common organism for this condition is mumps virus.
    - The other viruses like ECHO and Coxsackie virus may also cause this.
3. Treatment:
    - Bed rest.
    - Good oral hygiene.
    - Soft and liquid diet.
    - Analgesics and NSAID.
    - Local heat fomentation.
4. Complications of this condition:
    - Epididymo-orchitis.
    - Pancreatitis.
    - Encephalitis.
    - Sensori-neural hearing loss.

OSCE Station No 130



Observe the above photograph of a 38-year-old lady who presented with painless and gradually increasing swelling as shown above for last four years. Answer the following questions:

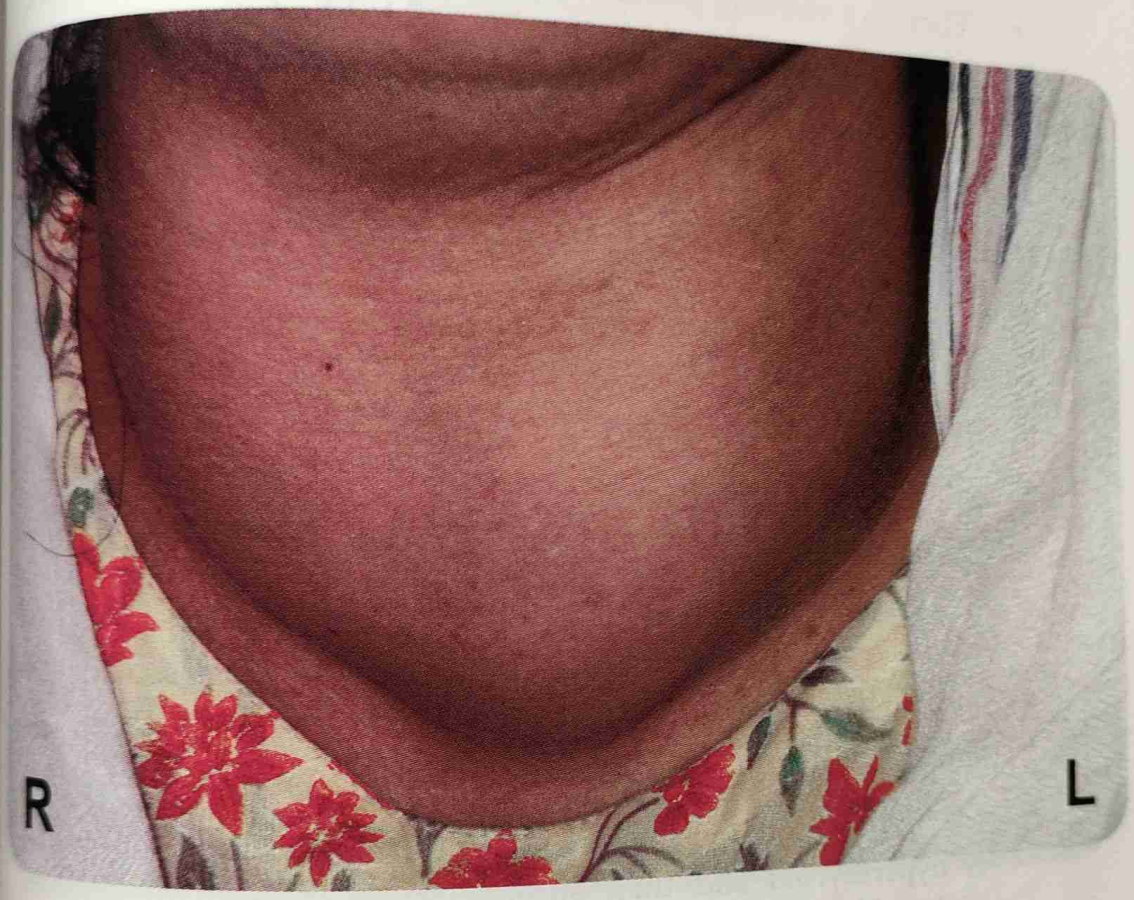
Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis?
3. What investigations are required in this patient?
4. How will you treat this patient?

Answers

1. Visible findings:
    - This is a photograph of a 38-year-old lady showing the left parotid region and the neck laterally.
    - There is a single, smooth, oval shaped swelling present in the left parotid region.
    - Skin over the swelling is normal with no sign of inflammation.
2. Most likely diagnosis:
    - The most likely diagnosis is benign tumour of the parotid gland, most probably pleomorphic adenoma.
3. Investigations required:
    - FNAC of the swelling for histological diagnosis.
    - CT scan with contrast or MRI for extension of the tumour.
    - Baseline investigations for surgery.
4. Treatment:
    - The treatment for this patient is surgery-superficial parotidectomy.

OSCE Station No 131



Observe the above photograph of the neck of a 43-year-old lady who presented with gradually increasing swelling as shown above for last seven to eight years. Answer the following questions:

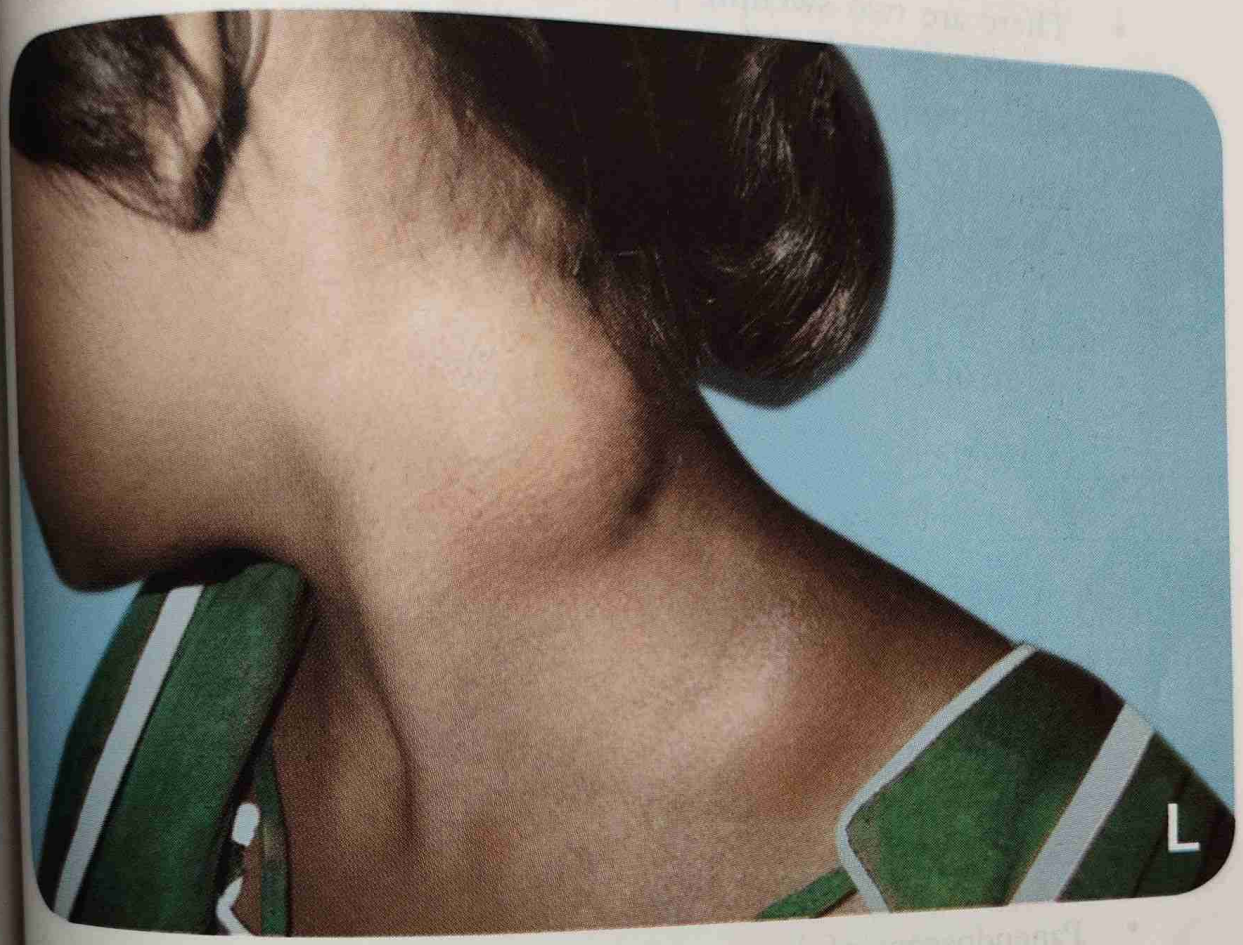
Questions

1. Describe the findings visible in this photograph.
2. What is the most likely diagnosis?
3. What investigations are required in this patient?
4. How will you treat this patient?

Answers

1. Visible findings:
   - This photograph is showing the neck of a 43-year-old lady.
   - There is a swelling present in front and lateral aspect of the neck, more prominent on the right side, probably diffuse enlargement of the thyroid gland with multiple nodularity.
2. Most likely diagnosis:
   - The most likely diagnosis is multinodular goiter.
3. Investigations:
   - Ultrasonography of the thyroid gland and neck.
   - Thyroid function tests: TSH, T_3 and T_4.
   - FNAC of the thyroid swelling.
   - Baseline investigations for surgery.
4. Treatment:
   - Mainstay of treatment is surgery either sub-total or total thyroidectomy if the patient is euthyroid.
   - Medical treatment in the form of antithyroid drugs if the patient is hyperthyroid and then surgery when the patient becomes euthyroid.
   - Replacement therapy with thyroxine in cases of total thyroidectomy.

OSCE Station No 132



Observe the above photograph of the neck of a 16-year-old girl who presented with low grade fever and the neck swelling as shown above for the last eight months. Answer the following questions:

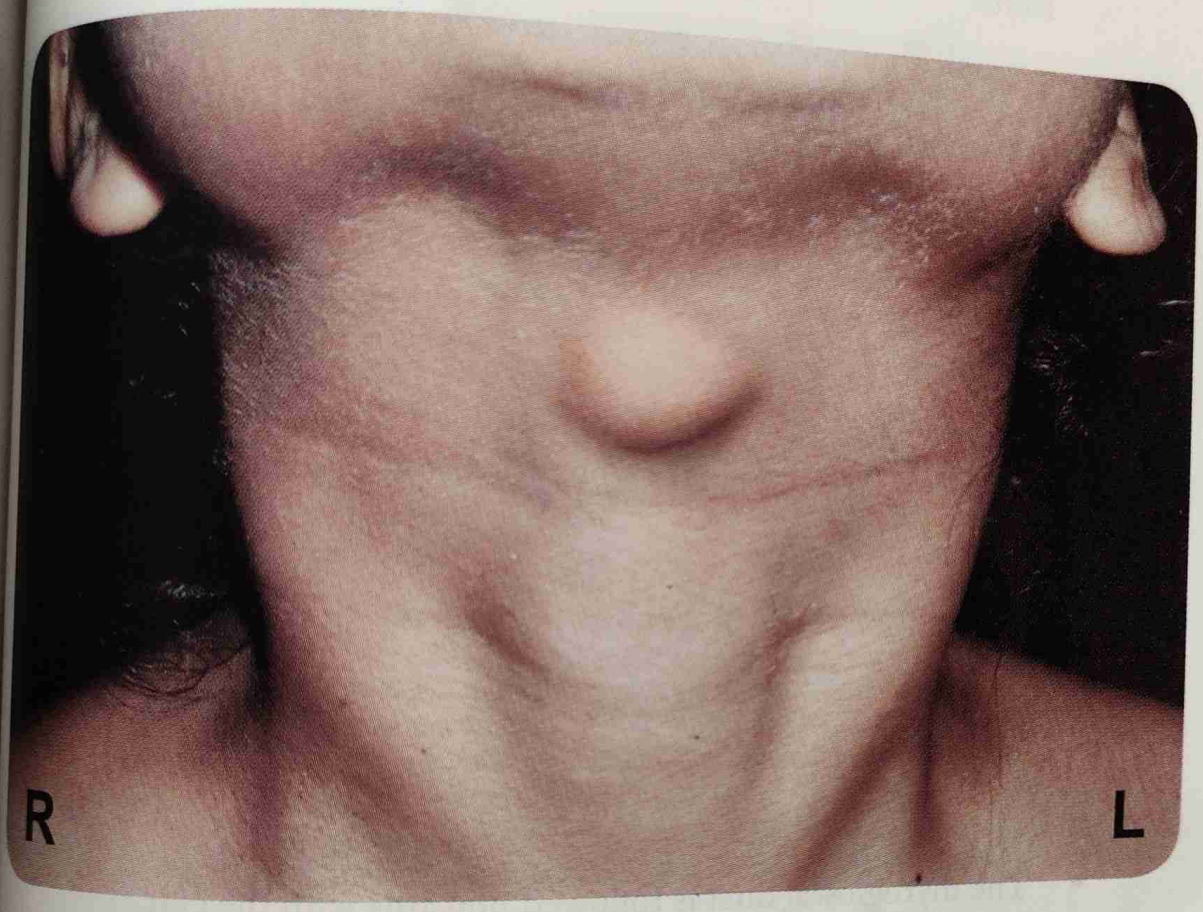
Questions

1. Describe the findings visible in this photograph.
2. Enlist three most relevant differential diagnosis in this patient.
3. Enlist the relevant investigations required in this patient.

Answers

1. Visible findings:
   - The photograph is showing the neck of a 16-year-old girl.
   - There are two swelling present on the left side of the neck in posterior triangle. The upper swelling is bigger than the lower one. The margins of both swellings are diffuse and surfaces are almost smooth.
   - There is no obvious sign of inflammation.
2. Three differential diagnosis:
   - Tuberculous cervical lymphadenopathy.
   - Lymphoma.
   - Nodal metastasis from a primary in head and neck region.
3. Relevant investigations:
   - Blood CP.
   - ESR.
   - Ultrasonography of the neck.
   - FNAC of the swelling.
   - Panendoscopy of the upper aerodigestive tract for primary.
   - For pulmonary tuberculosis: X-ray chest, sputum for AFB and Monteux test.
   - Open biopsy if FNAC shows lymphoma for its architecture and staging.
   - CT scan with contrast of head and neck region in case of occult primary.

OSCE Station No 133



Observe the above photograph of the neck of a 20-year-old girl. Answer the following questions:

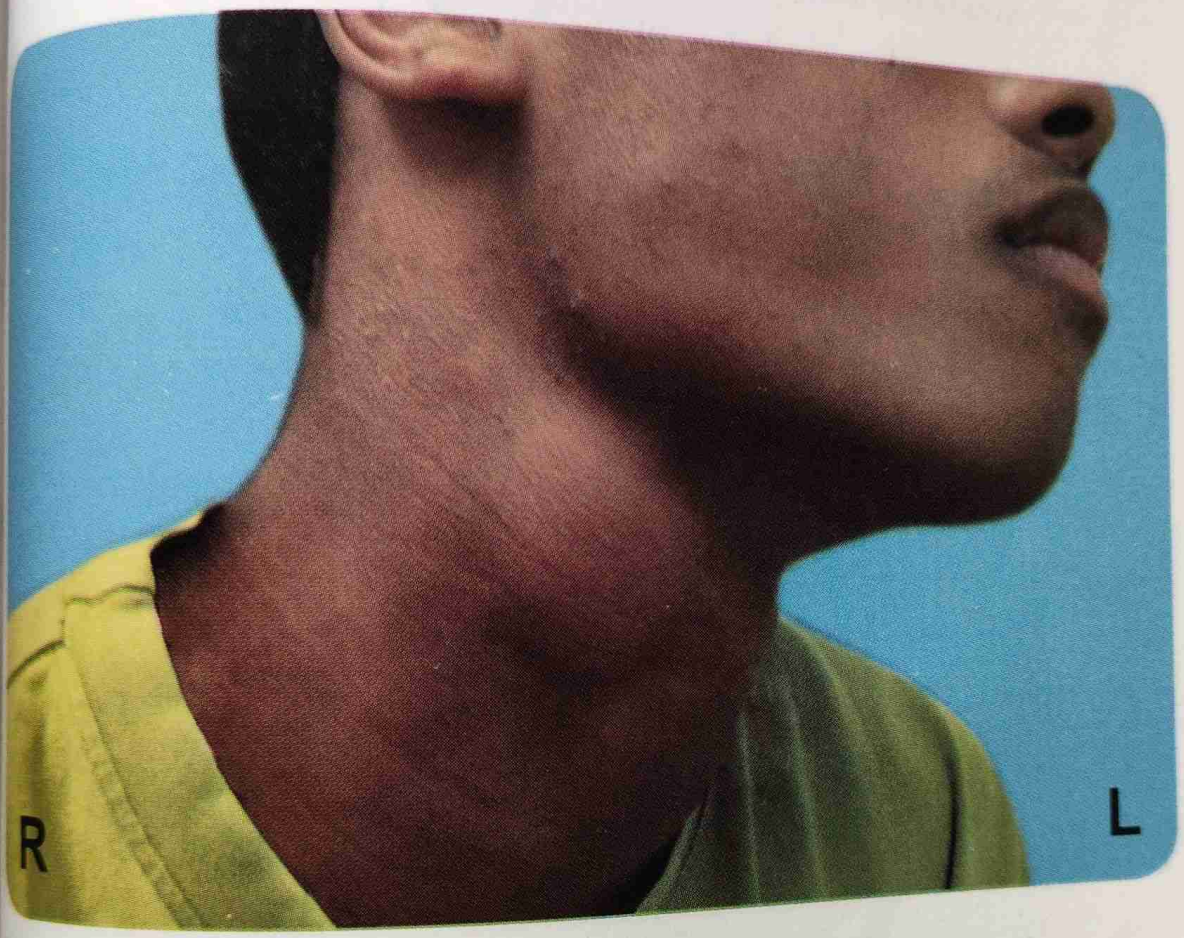
Questions

1. Describe the findings visible in this photograph with most likely diagnosis.
2. What are the specific test on clinical examination to confirm your diagnosis?
3. Name the surgical operation for its treatment and outline its steps.

Answers

1. Visible findings with most likely diagnosis:
   - This is a photograph of the neck of a 20-year-old girl from the front.
   - A single, somewhat rounded, smooth swelling is seen in the midline of the neck just at the level of hyoid bone.
   - The most likely diagnosis is thyroglossal cyst.
2. Specific tests on clinical examination:
   - Ask the patient to swallow. Thyroglossal cyst will move on swallowing.
   - Ask the patient to open the mouth and protrude the tongue. Thyroglossal cyst will move by protrusion of the tongue.
3. Surgical operation:
   - The name of surgical operation is Sistrunk's operation.
   - A horizontal collar incision is given in the neck.
   - Sub-platysmal flap is raised above and below.
   - The cyst is dissected free from the strap muscles.
   - The thyroglossal duct is followed upwards with the cyst.
   - Cuts are made on either side of midline in the body of the hyoid bone. Midline portion of the body of the hyoid bone is removed with the duct and cyst.
   - A wedge of muscles is also removed from the tongue base in continuity.
   - Wound is closed in layers.

OSCE Station No 134



Observe the above photograph of the neck of a young boy who presented with a painless swelling as shown above for the last one year. Answer the following questions:

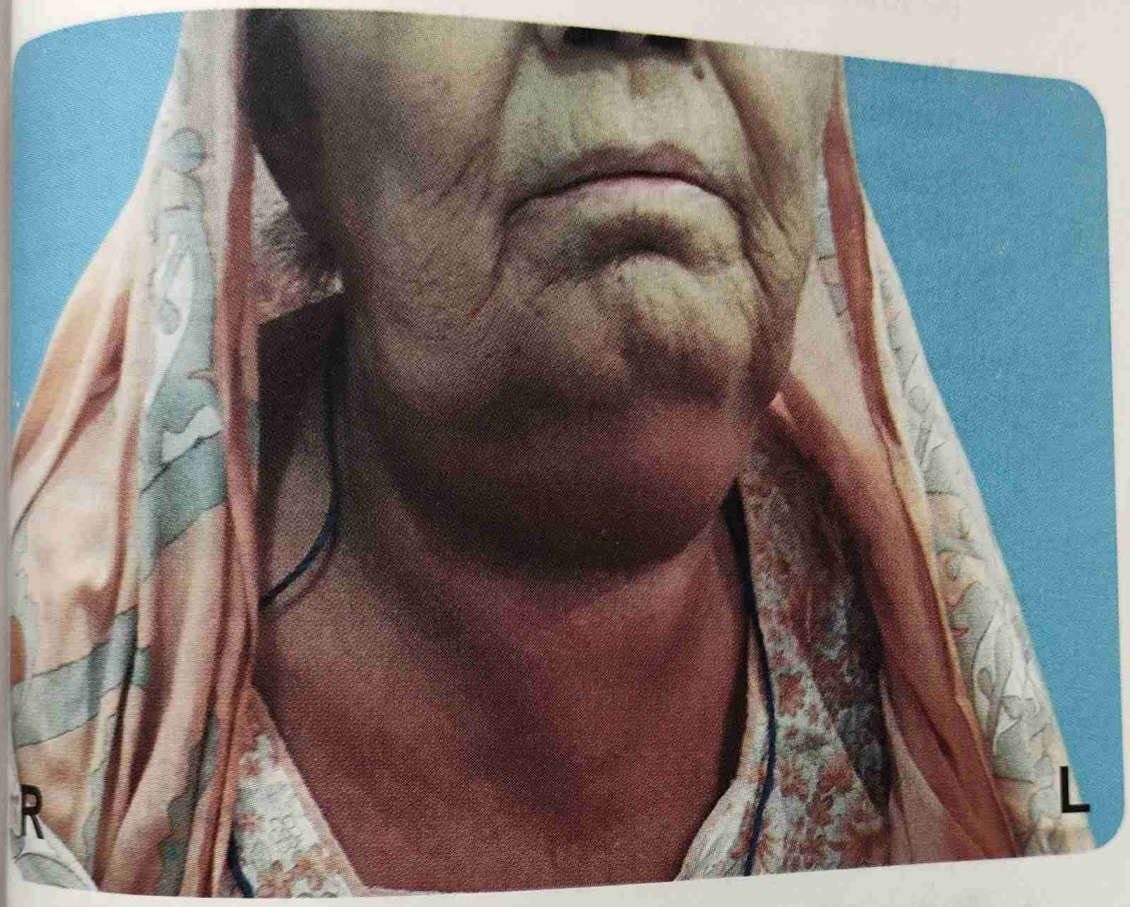
Questions

1. Describe the findings visible in this photograph with most likely diagnosis.
2. What is the aetiology of this condition?
3. How will you treat this patient?

Answers

1. Visible findings with diagnosis:
   - This photograph is showing the lateral aspect of the neck of a young boy from the right side.
   - A smooth, rounded, well circumscribed swelling is seen in the upper part of the neck on right side, anterior to the sterno-cleido-mastoid muscle.
   - The most likely diagnosis is branchial cyst or lateral cervical cyst.
2. Aetiology of this condition:
   - The exact origin of branchial cyst is debatable but a number of theories have been proposed for its origin.
   - The second pharyngeal arch grows over the third and fourth arch, thus burying the second, third and fourth branchial clefts. The remnant of these cleft forms the cervical sinus. The brachial cyst is derived from this cervical sinus.
3. Treatment:
   - The treatment of branchial cyst is complete surgical excision of the cyst through the neck incision.

OSCE Station No 135



Observe the above photograph of the neck of a 56-year-old lady who presented with severe pain and swelling as shown above for last three days. Answer the following questions:

Questions

1. Describe the findings visible in this photograph with most likely diagnosis.
2. What is the aetiology of this condition?
3. How will you treat this patient?

Answers

1. Visible findings with diagnosis:
   - This photograph is showing the neck of a 56-year-old lady from the front side.
   - There is a diffuse swelling involving the sub-mental and sub-mandibular region with extension in the neck.
   - There is marked redness (sign of inflammation) in the swelling and surrounding region.
   - The most likely diagnosis is Ludwig's angina.
2. Aetiology of this condition:
   - Ludwig's angina is the infection of the sub-mandibular space.
   - In 80% of the cases, infection reaches to this space by extension of dental root infection/abscess.
   - The other cause are sub-mandibular sialoadenitis, penetrating injury of the floor of mouth and mandibular fractures.
3. Treatment:
   - Appropriate oral or parenteral broad spectrum antibiotic.
   - Anti-inflammatory and antipyretic drugs.
   - Tracheostomy may be needed if there is respiratory obstruction/distress.
   - Incision and drainage is rarely required if there is abscess formation.