1. Type 1. Subarachnoid Hemorrhage (SAH)

Causes:

Traumatic: Head injury
Non-traumatic (Spontaneous):
Ruptured berry aneurysm (most common)
Arteriovenous malformation (AVM)
Hypertensive crisis
Bleeding disorders or anticoagulant use

Investigations:

CT Scan (Non-contrast): First-line investigation (shows hyperdensity in basal cisterns)
Lumbar Puncture (LP): If CT is negative but SAH is suspected (detects xanthochromia)
CT Angiography/MRI Angiography: Identifies aneurysms or vascular abnormalities
Digital Subtraction Angiography (DSA): Gold standard for aneurysm detection

Treatment:

Immediate stabilization: ABCs, blood pressure control (nimodipine to prevent vasospasm)
Definitive management:
Endovascular coiling (preferred for ruptured aneurysms)
Surgical clipping (if coiling is not feasible)
Complication prevention:
Nimodipine (to prevent vasospasm)
IV fluids and analgesia
Seizure prophylaxis (if indicated)

Type 2. Appendectomy

2. X

Type 2. Appendectomy

Indications:

Acute appendicitis
Appendicular abscess (with drainage first)
Appendicular mass (interval appendectomy)
Steps of Procedure:

Open Appendectomy:

McBurney's incision (gridiron incision)
Identification and ligation of mesoappendix
Appendix removal and stump closure
Laparoscopic Appendectomy (preferred method):
Three-port technique
Dissection and stapling of appendix

Complications:

Infection (wound infection, intra-abdominal abscess)
Bowel injury
Post-op ileus
Adhesions leading to bowel obstruction text

3.

Type your text

3. Schizophrenia

Definition:

A chronic psychiatric disorder characterized by disorganized thinking, hallucinations, and delusions.

Signs and Symptoms:

Positive Symptoms (Excess of normal function):

Hallucinations (auditory most common)
Delusions (paranoid, grandiose)
Disorganized speech and behavior

Negative Symptoms (Loss of normal function):

Avolition (lack of motivation)
Anhedonia (lack of pleasure)
Alogia (poverty of speech)
Affective flattening

Treatment:

First-line: Atypical antipsychotics (Risperidone, Olanzapine, Quetiapine)
For resistant cases: Clozapine
Psychotherapy and Rehabilitation: CBT, social support

4.

4. OCD History Taking and Treatment

History Taking:

Onset, duration, and progression of symptoms
Types of obsessions (contamination, symmetry, harm)
Compulsions (washing, checking, counting)
Impact on daily life and distress level

Diagnosis:

DSM-5 Criteria: Presence of obsessions and/or compulsions, causing distress, taking up >1 hour/day, and interfering with functioning

Pharmacological Treatment:

First-line: SSRIs (Fluoxetine, Sertraline, Fluvoxamine)
Second-line: Clomipramine (TCA)
Augmentation: Antipsychotics (Risperidone) in resistant cases
CBT (Exposure and Response Prevention): Most effective psychotherapy

5.

5. Case of Ectopic Pregnancy Mimicking Appendicitis

Differential Diagnoses:

Ectopic Pregnancy (most specific differential)
Acute Appendicitis
Ovarian Torsion/Ruptured Ovarian Cyst

Most Specific Differential:

Ruptured ectopic pregnancy (due to hypotension and tachycardia)

Management:

Immediate resuscitation (IV fluids, blood transfusion if needed)

Confirm Diagnosis:
β-hCG levels
Pelvic ultrasound (absence of intrauterine pregnancy, adnexal mass)
Surgical Management:
Unstable patient: Laparoscopic/laparotomy salpingectomy
Stable patient: Methotrexate (if criteria met)

6. HCV Counseling in a Pregnant Woman

6.

6. HCV Counseling in a Pregnant Woman

Medical Management:

Direct-acting antivirals (DAAs) are not recommended during pregnancy due to limited safety data.

Treatment is usually deferred until after delivery unless necessary.

Breastfeeding:

Breastfeeding is allowed unless the mother has cracked or bleeding nipples, which can increase the risk of transmission.

Safe Drugs:

Interferon-based therapies and Ribavirin are teratogenic and contraindicated in pregnancy.

Acetaminophen (paracetamol) is safe for symptom relief.

Vaccination:

No vaccine is available for HCV, but Hepatitis A and B vaccines should be given if the mother is not immune.

Mode of Delivery:

Vaginal delivery is preferred unless obstetric indications require a C-section.

Elective C-section is not routinely recommended to prevent transmission

7i

7. Abdominal Examination

Steps:

Inspection:

Contour, scars, distension, visible peristalsis, hernias, or pulsations.

Auscultation:

Bowel sounds (normal, hyperactive, absent).

Percussion:

Liver span, shifting dullness (ascites).

Palpation:

Superficial and deep palpation for tenderness, masses, organomegaly.

Rebound tenderness (peritonitis).

Special Tests:

Murphy's sign (cholecystitis), McBurney's point (appendicitis).

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Murphy's sign (cholecystitis), McBurney's

8. Mastectomy Counseling

Key Points:

Explain the reason for mastectomy (cancer, prophylaxis, large benign tumors).
Types: Radical, Modified Radical, Simple, or Skin-Sparing.
Discuss reconstruction options (implants, autologous flap).
Post-op care: Drain management, physiotherapy to prevent lymphedema.
Emotional support: Address body image concerns and refer to counseling.

9. Motor Examination of Upper and Lower Limbs

Upper Limb Examination:

Muscle wasting, fasciculations.

Discuss reconstruction options (implants, autologous flap).
Post-op care: Drain management, physiotherapy to prevent lymphedema.
Emotional support: Address body image concerns and refer to counseling.

9. Motor Examination of Upper and Lower Limbs

Upper Limb Examination:

Inspection: Muscle wasting, fasciculations.
Tone: Hypertonia (spasticity/rigidity) or hypotonia.
Power (MRC grading 0-5):
Shoulder abduction, elbow flexion/extension, wrist flexion/extension, grip strength.
Reflexes: Biceps, triceps, brachioradialis.
Coordination: Finger-nose test.
Lower Limb Examination:

Tone: Spasticity in upper motor neuron (UMN) lesions, flaccidity in lower motor neuron (LMN) lesions.
Power: Hip flexion/extension, knee flexion/extension, ankle dorsiflexion/plantarflexion.
Reflexes: Knee jerk, ankle jerk, plantar reflex (Babinski's sign).
Coordination: Heel-to-shin test.

10. Febrile Seizures (Pediatric Viva)

Definition:

Tone: Spasticity in upper motor neuron (UMN) lesions, flaccidity in lower motor neuron (LMN) lesions.
Power: Hip flexion/extension, knee flexion/extension, ankle dorsiflexion/plantarflexion.
Reflexes: Knee jerk, ankle jerk, plantar reflex (Babinski's sign).
Coordination: Heel-to-shin test.

10. Febrile Seizures (Pediatric Viva)

Definition:

A convulsion triggered by fever (≥38°C) in a child aged 6 months to 5 years, without intracranial infection or epilepsy.

Types:

Simple febrile seizures (most common): Generalized tonic-clonic, lasts <15 mins, no recurrence in 24 hours.
Complex febrile seizures: Focal, prolonged (>15 mins), or recurrent within 24 hours.
Management:

Acute:
ABC support, place child in recovery position.
If seizure lasts >5 mins: IV/rectal diazepam or buccal midazolam.

Long-term:
No routine anticonvulsants.
Educate parents on fever management.

11. Abdominal Examination in a 7-Year-Old with Abdominal Distension

Possible Causes:

Educate parents on fever management.

11.

11. Abdominal Examination in a 7-Year-Old with Abdominal Distension

Possible Causes:

Constipation
Ascites (nephrotic syndrome, liver disease)
Malabsorption (Celiac disease, lactose intolerance)

Examination:

Inspection:
Shape of abdomen, visible veins (caput medusae in liver disease).
Auscultation:
Normal/hyperactive/hypoactive bowel sounds.
Percussion:
Shifting dullness (ascites).
Palpation:
Organomegaly (hepatomegaly, splenomegaly).
Tenderness (suggests peritonitis, infection).

12; .12. Celiac Disease (Scenario-Based)

Definition:

An autoimmune disorder triggered by gluten ingestion, leading to small intestine damage.

Symptoms:

Chronic diarrhea
Failure to thrive in children
Abdominal distension
Iron deficiency anemia
Dermatitis herpetiformis (skin rash)

Diagnosis:

Anti-TTG IgA antibodies
Duodenal biopsy (villous atrophy)

Management:

Strict gluten-free diet (avoid wheat, barley, rye).
Nutritional supplementation (iron, calcium, vitamin D).
Monitor for complications (osteoporosis, lymphoma).

13: Ulnar Nerve Injury

1) What's the pathology in the picture?

porosis, lymphoma).

1) What's the pathology in the picture?

Ulnar nerve injury, leading to ulnar claw hand and sensory loss in the little and ring fingers.

Wasting of the dorsal web space (first dorsal interosseous muscle) is a classic sign of chronic ulnar nerve compression.

2) What causes this pathology?

Trauma due to fall leading to nerve compression, traction, or injury.

Common causes:

Fracture of medial epicondyle of humerus (common in children).

Hook of hamate fracture (in wrist-level injury).

Compression at Guyon's canal (cyclist's palsy).

Prolonged elbow flexion or external pressure (e.g., leaning on elbows, sleeping with arm flexed).

3) At which anatomical level does this pathology occur?

The ulnar nerve can be injured at multiple levels:

Elbow (Cubital Tunnel Syndrome): Most common site of injury. Leads to both motor and sensory deficits.

Wrist (Guyon's Canal Syndrome): Affects intrinsic hand muscles but spares the dorsal hand sensation (since dorsal sensory branch arises before Guyon's canal).

Forearm Injury: Less common but can occur due to deep cuts.

4) What are the investigations to confirm the diagnosis?

Clinical Tests:

Froment's Sign: Patient compensates with thumb flexion (flexor pollicis longus) due to weak adductor pollicis.

Wartenberg's Sign: Inability to adduct little finger due to weak interossei muscles.

Claw Hand Test: Hyperextension of MCP and flexion of IP joints in 4th and 5th fingers (severe ulnar nerve palsy).

Electrophysiology Tests:

Nerve Conduction Study (NCS): Confirms the level of injury and degree of impairment.

Electromyography (EMG): Assesses muscle denervation and chronicity.

Imaging:

X-ray: To rule out fractures (medial epicondyle, hook of hamate).

MRI (if needed): To assess nerve compression or soft tissue pathology.

5) How will you treat it?

Conservative Management (if mild/moderate):

Rest and activity modification (avoid excessive elbow flexion or pressure).

Splinting (especially night splints to keep the elbow in extension).

Physical therapy to strengthen intrinsic hand muscles.

NSAIDs for pain relief.

Surgical Management (if severe or persistent >3 months):

Cubital Tunnel Release (if compression at the elbow).

Guyon's Canal Decompression (if compression at the wrist).

Nerve Grafting (if severe trauma or nerve laceration).

14. History of fever, weight loss and night sweats, takes unpasteurised milk (diagnosis is brucellosis)

Answer:

This statement is likely asking for confirmation or further information regarding the diagnosis of brucellosis.

Confirmation: Yes, the provided information strongly suggests brucellosis. The combination of fever, weight loss, night sweats, and consumption of unpasteurized milk is highly indicative of this infection.

Further Information:

Brucellosis is a bacterial infection caused by Brucella species.
Transmission: It's often contracted through consuming unpasteurized dairy products (milk, cheese, etc.) or through direct contact with infected animals or their products.
Symptoms: The classic triad is fever, weight loss, and night sweats, but other symptoms can include:
Fatigue
Arthralgia (joint pain)
Myalgia (muscle pain)
Headache
Anorexia (loss of appetite)
Lymphadenopathy (swollen lymph nodes)
Hepatosplenomegaly (enlarged liver and spleen
Diagnosis:

Gold Standard: Blood cultures to isolate Brucella bacteria.
Serology: Tests to detect antibodies against Brucella, such as the Brucella agglutination test, ELISA, and others.
PCR: Polymerase chain reaction to detect Brucella DNA in blood or other samples.
Treatment:

A combination of antibiotics is typically used for several weeks.
Prevention:

Pasteurization of milk and dairy products.
Vaccination of animals in endemic areas.
Proper handling of animals and animal products.

Dx, 3 causes of palmar erythema, 2 lab findings.

Vaccination of animals in endemic areas.
Proper handling of animals and animal products.

15;

15. Picture of palmar erythema, DDs, 3 causes of palmar erythema, 2 lab findings.

Answer:

(Assuming the picture shows palmar erythema, which is a common condition)

Palmar Erythema

Description: Palmar erythema is a condition characterized by a reddish discoloration of the palms of the hands. It can sometimes also affect the soles of the feet.

Differential Diagnoses (DDs):

Eczema/Dermatitis: Can cause redness and inflammation of the skin.
Psoriasis: May involve the palms and cause a similar appearance.
Hand-Foot Syndrome (HF): A side effect of certain chemotherapy drugs, causing redness, swelling, and pain in the palms and soles.
Systemic Conditions: As listed below, palmar erythema can be associated with various systemic illnesses.

Three Causes of Palmar Erythema:

Liver Disease: Especially chronic liver diseases like cirrhosis. The exact mechanism is not fully understood, but it's thought to be related to hormonal imbalances or increased levels of vasoactive substances in the blood.
Pregnancy: Hormonal changes during pregnancy can cause palmar erythema. It is usually benign and resolves after delivery.
Rheumatoid Arthritis: Palmar erythema can occur as an extra-articular manifestation of rheumatoid arthritis, possibly due to inflammatory processes.

Two Potential Lab Findings (depending on the underlying cause):

Elevated Liver Enzymes: In cases associated with liver disease, liver function tests (LFTs) may show elevated levels of liver enzymes (e.g., ALT, AST, bilirubin).
Rheumatoid Factor (RF) or Anti-CCP Antibodies: In cases associated with rheumatoid arthritis, serological tests may reveal the presence of rheumatoid factor or anti-cyclic citrullinated peptide (anti-CCP) antibodies.

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16. 1.Name 2 ligaments prone to injury during splenectomy

16;

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factor or anti-cyclic citrullinated peptide (anti-CCP) antibodies.

16;

16. 1. Name 2 ligaments prone to injury during splenectomy.

Answer:

Two ligaments prone to injury during splenectomy are:

Splenorenal Ligament: This ligament connects the spleen to the left kidney. It contains the splenic vessels, which can be injured during dissection if not carefully identified and ligated.

Gastrosplenic Ligament: This ligament connects the spleen to the stomach. It contains short gastric vessels, which can also be a source of bleeding if torn during splenectomy.

16. 2. Complications of splenectomy. What 3 vaccinations are done prior to splenectomy.

Answer:

Complications of Splenectomy:

Immediate:

Bleeding: Due to injury to splenic vessels or other surrounding structures.
Infection: The spleen plays a role in immunity, so there is an increased risk of infection post-splenectomy.
Pancreatitis: Inflammation of the pancreas, potentially due to surgical manipulation.
Injury to adjacent organs: Such as the stomach, colon, or tail of the pancreas.
Atelectasis or pneumonia: Due to reduced diaphragmatic movement or pain after surgery.
Thrombocytosis: An increase in platelets, which can lead to clotting complications.
Long-term:

Post-splenectomy sepsis (OPSS): Overwhelming infection, especially with encapsulated bacteria.
Increased risk of infections: Even without OPSS, individuals may be more susceptible to various infections.
Thrombosis: Due to chronic thrombocytosis.
Psychological effects: Anxiety or changes in body image.
Three Vaccinations Prior to Splenectomy:

Prior to an elective splenectomy, it is crucial to vaccinate the patient against encapsulated bacteria to reduce the risk of post-splenectomy sepsis (OPSS). The recommended vaccinations include:

Streptococcus pneumoniae (Pneumococcal vaccine): Protects against various strains of pneumococcal bacteria.
Haemophilus influenzae type b (Hib vaccine): Protects against Hib infections.
Neisseria meningitidis (Meningococcal vaccine): Protects against different serogroups of meningococcal bacteria.
These vaccinations are ideally administered at least two weeks before the splenectomy to allow the body to develop immunity. If the splenectomy is emergent and pre-operative vaccination is not possible, they should be given as soon as possible after the procedure.

17. Nasogastric tube. Identify, indications, and complications.

Answer:

Nasogastric Tube (NG Tube)

Identification: A nasogastric tube is a thin, flexible tube inserted through the nose, down the esophagus, and into the stomach.

Indications:

Gastric Decompression: To remove fluids and gas from the stomach in cases of bowel obstruction, ileus, or gastric atony.
Enteral Feeding: To provide nutrition directly into the stomach for patients who cannot eat orally.
Medication Administration: To administer certain medications directly into the stomach.
Gastric Lavage: To wash out the stomach in cases of poisoning or overdose.
Diagnostic Purposes: To collect gastric contents for analysis.
Complications:

Insertion Complications:
Nosebleeds (epistaxis)
Nasal mucosal damage
Placement in the trachea or lungs (especially in patients with altered mental status)
Coiling or kinking of the tube
During Use:
Discomfort or irritation of the nose and throat
Sinusitis
Otitis media (ear infection)
Aspiration pneumonia (if gastric contents are aspirated into the lungs)
Electrolyte imbalances (due to gastric suctioning)
Abdominal cramping or diarrhea (with enteral feeding)
Gastric erosion or ulceration (with long-term use)
Removal:
Rarely, bleeding or trauma can occur upon removal.
It's important to note that NG tube insertion and management should be performed by trained healthcare professionals to minimize the risk of complications. Confirmation of proper placement (usually via x-ray) is essential before use, especially for feeding.

18. Child with history of diarrhea and weight loss for 1 year, reduced Hb, was on ATT but not responding. Diagnosis was

18. Child with history of diarrhea and weight loss for 1 year, reduced Hb, was on ATT but not responding. Diagnosis was Celiac Disease.

Answer:

This sounds like a classic presentation of Celiac Disease. Let's break down why the provided information points to this diagnosis:

Chronic Diarrhea: Celiac disease damages the small intestine, leading to malabsorption and causing chronic diarrhea, often described as bulky, foul-smelling stools.

Weight Loss: Malabsorption of nutrients results in weight loss or failure to thrive in children.

Reduced Hb (Hemoglobin): Iron deficiency anemia is common in celiac disease due to impaired iron absorption in the damaged small intestine. This leads to reduced hemoglobin levels.

No Response to ATT (Anti-Tuberculosis Therapy): This is a crucial point. While some gastrointestinal symptoms can overlap with other conditions, the lack of response to ATT makes other diagnoses less likely. This raises suspicion for celiac disease, as it's not related to tuberculosis.

Celiac Disease Diagnosis:

Serology: Blood tests to look for specific antibodies, such as:
Tissue Transglutaminase IgA (tTG-IgA) - highly sensitive and specific
Endomysial IgA (EMA) - also very specific
Deamidated Gliadin Peptide (DGP) IgA and IgG
Small Intestinal Biopsy (Gold Standard): An upper endoscopy is performed, and biopsies are taken from the small intestine to look for characteristic changes, such as villous atrophy (flattening of the intestinal villi).
Genetic Testing: While not diagnostic on its own, testing for HLA DQ2 and DQ8 can help support the diagnosis, as these genes are present in most individuals with celiac disease.
Important Considerations:

Other Differentials: It's important to consider other causes of chronic diarrhea and weight loss in children, such as:

Infections (e.g., giardiasis, parasitic infections)
Inflammatory bowel disease (Crohn's disease, ulcerative colitis)
Cystic fibrosis
Food intolerances (e.g., lactose intolerance)
Other malabsorption syndromes

Management: The primary treatment for celiac disease is a strict gluten-free diet for life. This allows the small intestine to heal and symptoms to resolve.

Management: The primary treatment for [illegible]
symptoms to resolve.

19. CT scan. Identify (hemorrhagic stroke). Causes, single most important step in management, most common systemic problem associated with this?

Answer:

(Assuming the CT scan shows a hemorrhagic stroke)

Identification of Hemorrhagic Stroke on CT:

A hemorrhagic stroke appears as a bright white area on a CT scan of the brain. This hyperdensity represents the blood that has extravasated into the brain tissue. The location and size of the hemorrhage can be determined.
Causes of Hemorrhagic Stroke:

Hypertension: The most common cause. Chronic high blood pressure weakens blood vessel walls, making them prone to rupture.
Aneurysm: A bulge in a blood vessel wall that can rupture and bleed.
Arteriovenous Malformation (AVM): An abnormal tangle of blood vessels that can rupture.
Trauma: Head injury can cause bleeding in the brain.
Blood Clotting Disorders: Conditions that interfere with blood clotting can increase the risk of hemorrhagic stroke.
Medications: Some medications, such as anticoagulants, can increase the risk.
Cerebral Amyloid Angiopathy: A condition where amyloid protein deposits in blood vessel walls, making them weak.
Tumors: Brain tumors can sometimes bleed.
Single Most Important Step in Management:

Rapid Blood Pressure Control: While it seems counterintuitive, carefully lowering blood pressure is often the single most critical step in managing hemorrhagic stroke after active bleeding is stopped. This helps to limit further bleeding and reduce the size of the hematoma. However, this must be done cautiously and under strict medical supervision, as overly rapid or aggressive lowering of BP can also be harmful.
Most Common Systemic Problem Associated with Hemorrhagic Stroke:

Hypertension: As mentioned above, high blood pressure is the most significant risk factor and the most common systemic problem associated with hemorrhagic stroke. Managing hypertension is essential for both preventing and treating hemorrhagic strokes.
Important Considerations:

Other Management Aspects: Management of hemorrhagic stroke also includes:

Identifying and addressing the underlying cause (e.g., aneurysm clipping or coiling for aneurysmal bleeds).
Managing increased intracranial pressure (ICP).
Supportive care (e.g., maintaining airway, controlling blood sugar, preventing seizures).
Rehabilitation.
Time is Critical: Like ischemic strokes, prompt diagnosis and treatment are crucial in hemorrhagic strokes to improve outcomes.

treatment are crucial in hemorrhagic

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