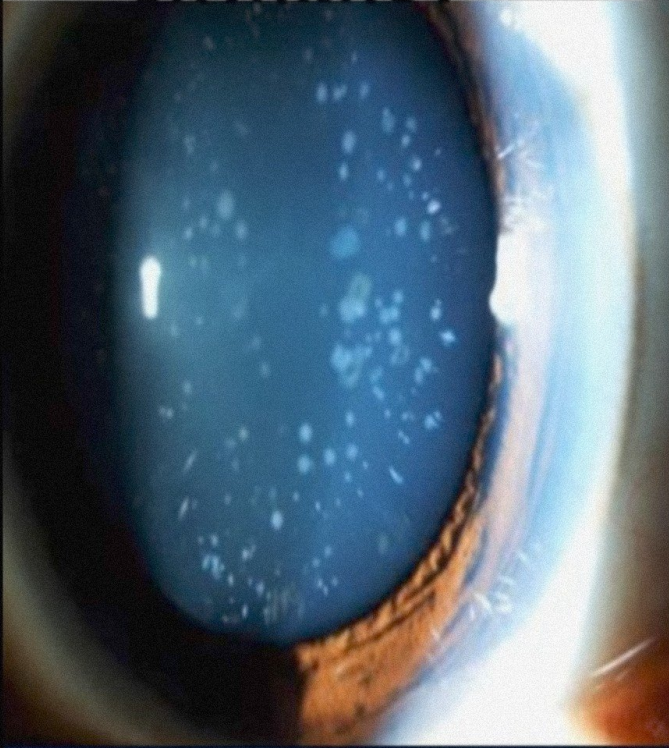
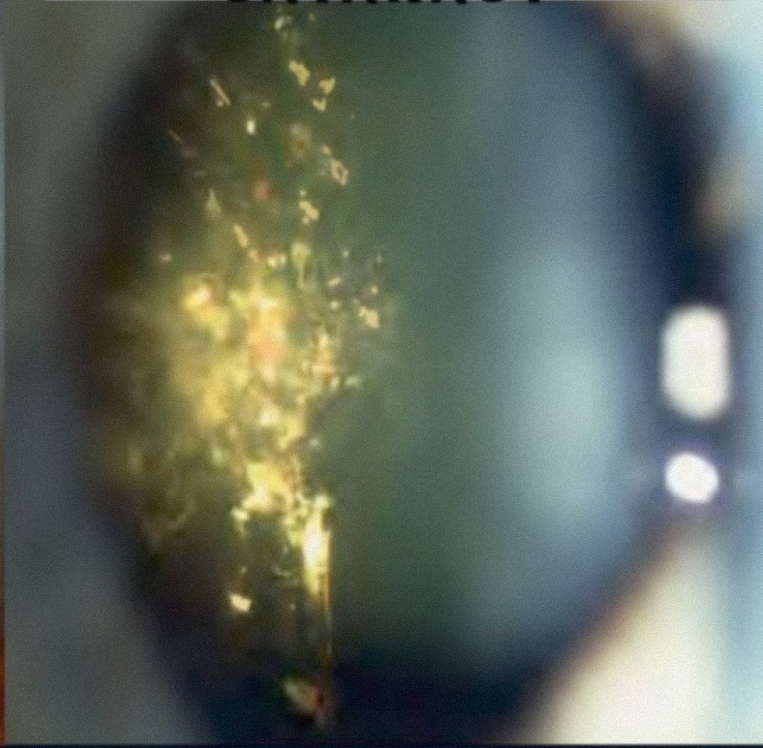


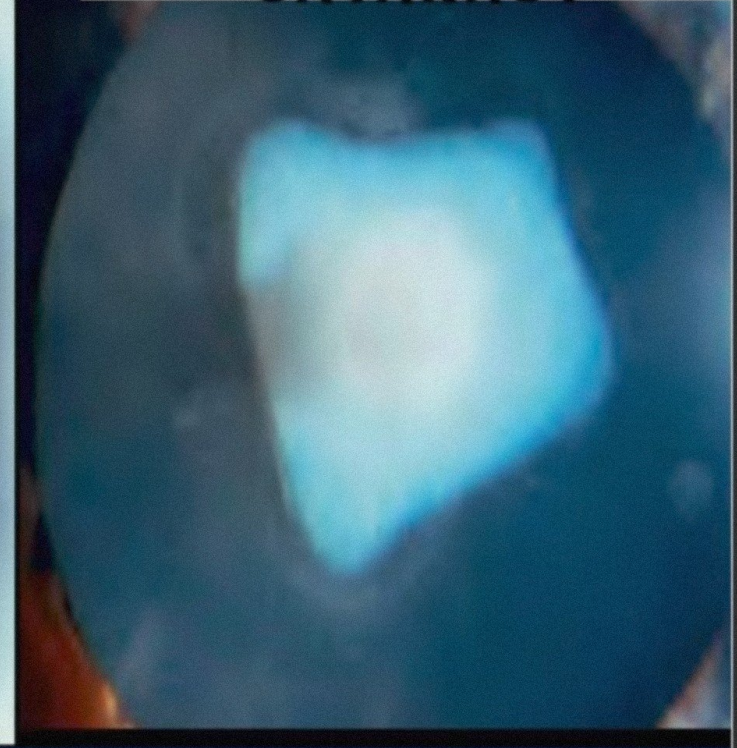
**BLUE DOT
CATARACT**



**CHRISTMAS
CATARACT**



**SHIELD/ATOPIIC
CATARACT**



SYNDROMIC CATARACTS



**MUSCULOSKELETAL
SYNDROMES**

**CHROMOSOMAL
DISORDERS**

RENAL SYNDROMES

**CRANIOFACIAL
ANOMALIES**

DENTAL DISORDERS

SKIN DISORDERS



MUSCULOSKELETAL SYNDROMES

**SMITH LEMIS OPTIZ
SYNDROME**

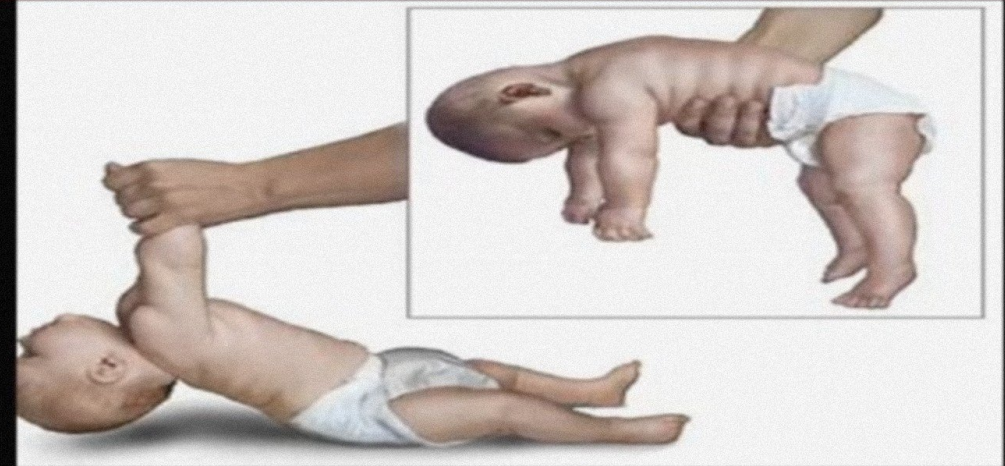
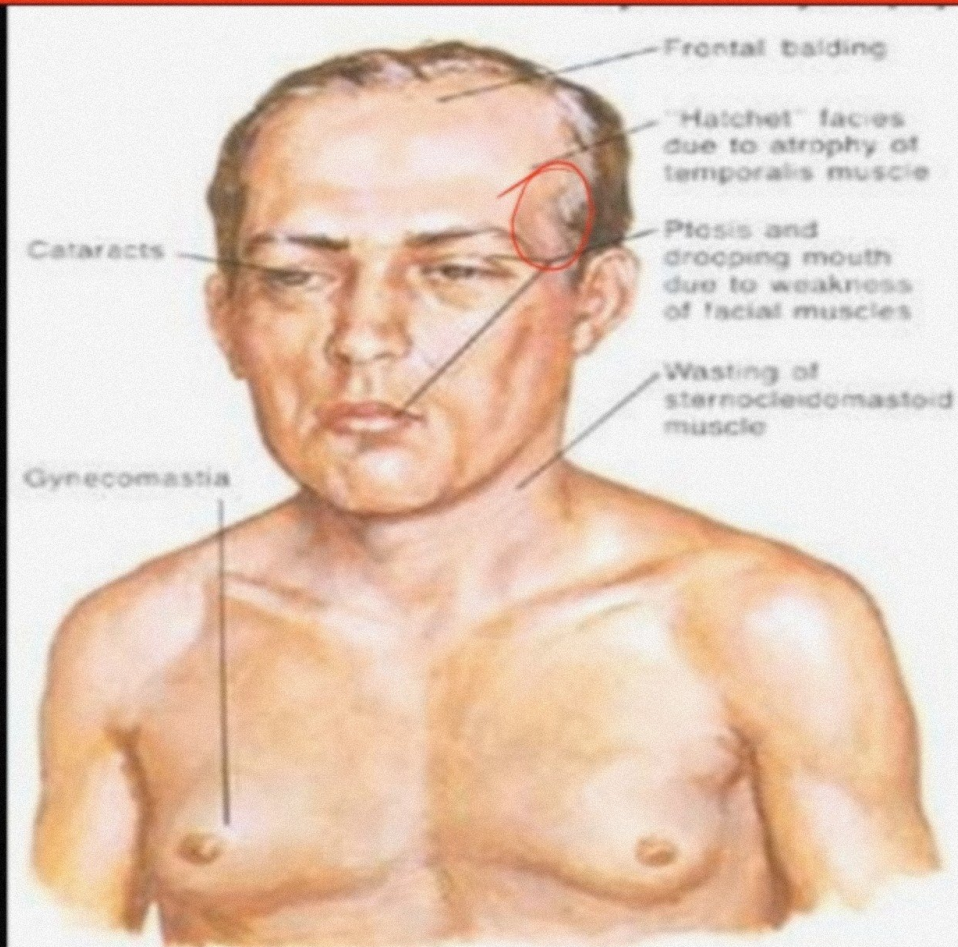
**CONRADI HUNERMANN
SYNDROME**

MYOTONIC DYSTROPHY

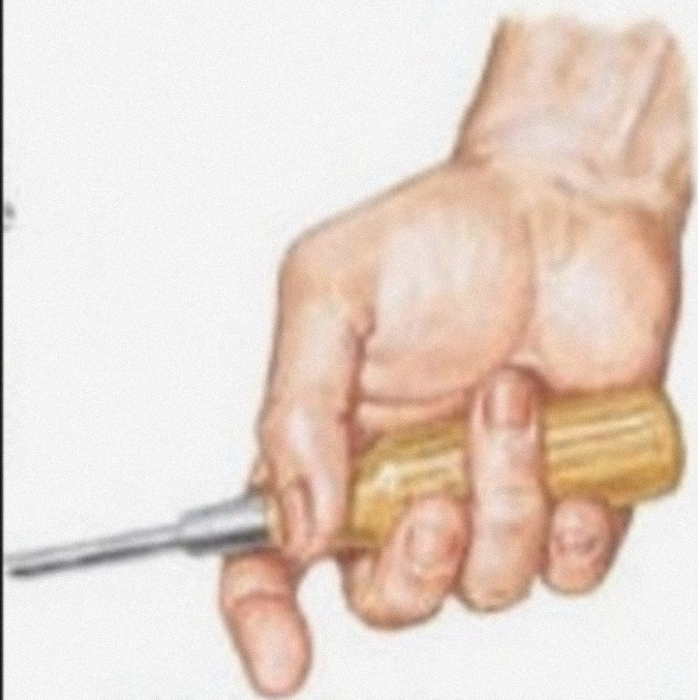
**WEIL MARCHESANI
SYNDROME**



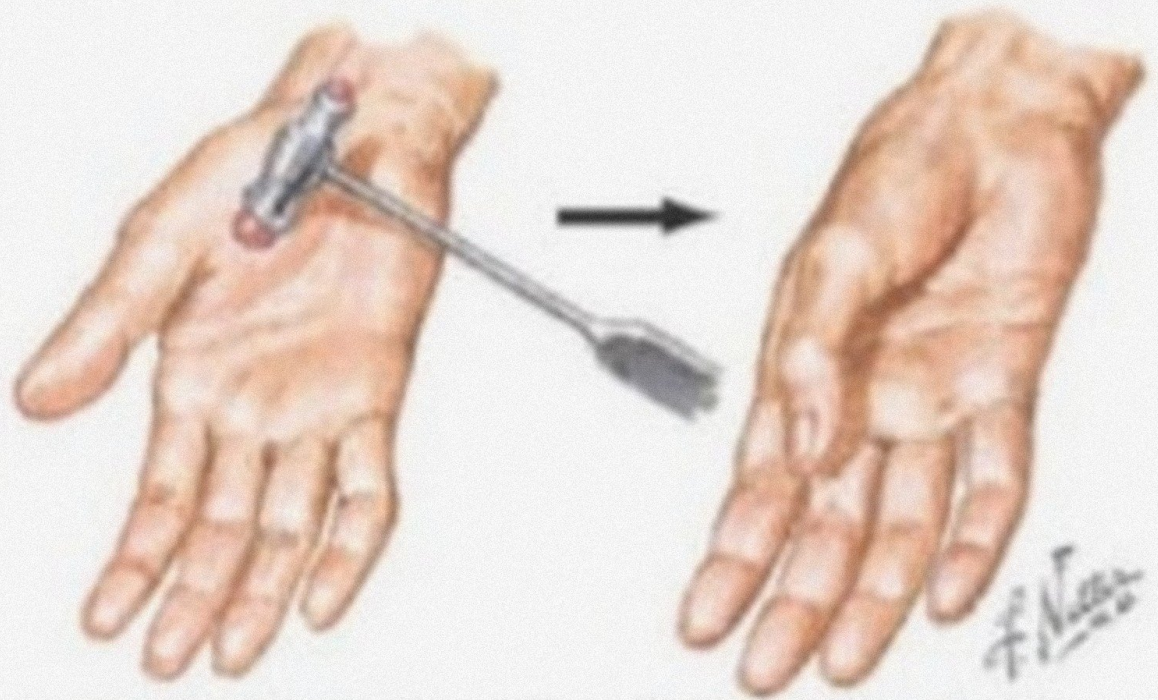
MYOTONIC DYSTROPHY



MYOTONIC DYSTROPHY



Difficulty in releasing grasp



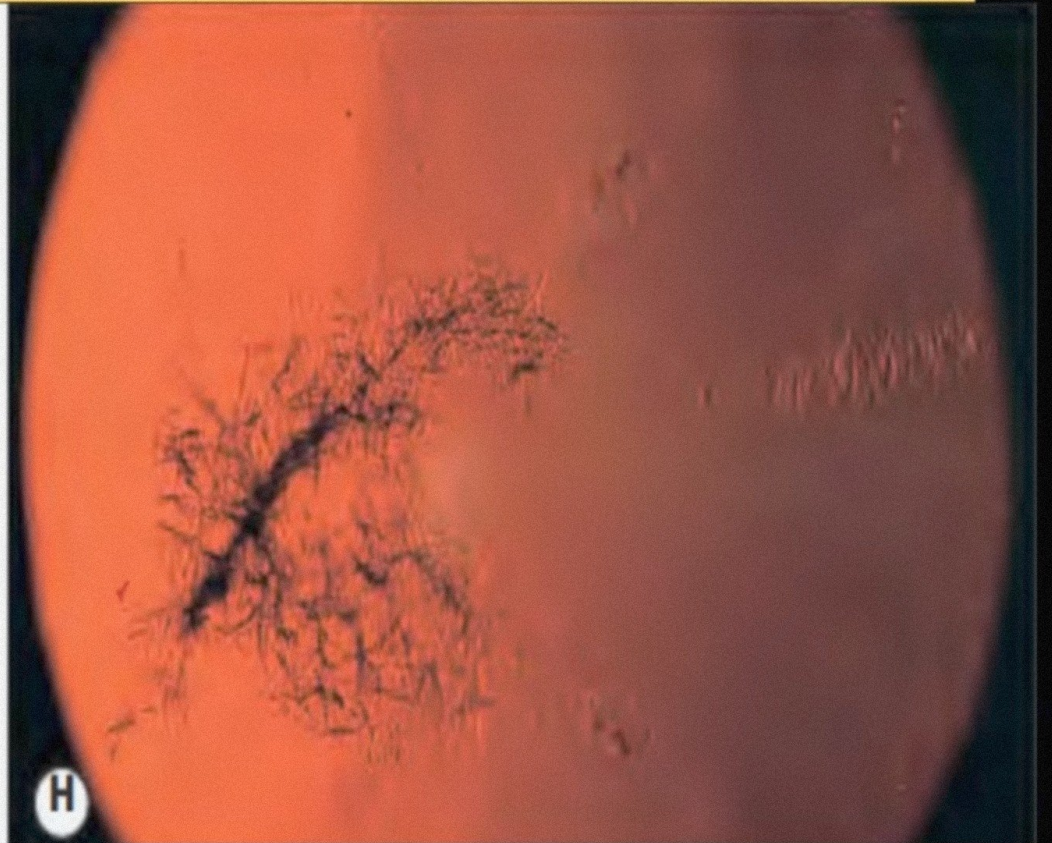
Percussion myotonic reaction: Thumb moves sharply into opposition and adduction on percussion of thenar muscles and returns to initial position slowly



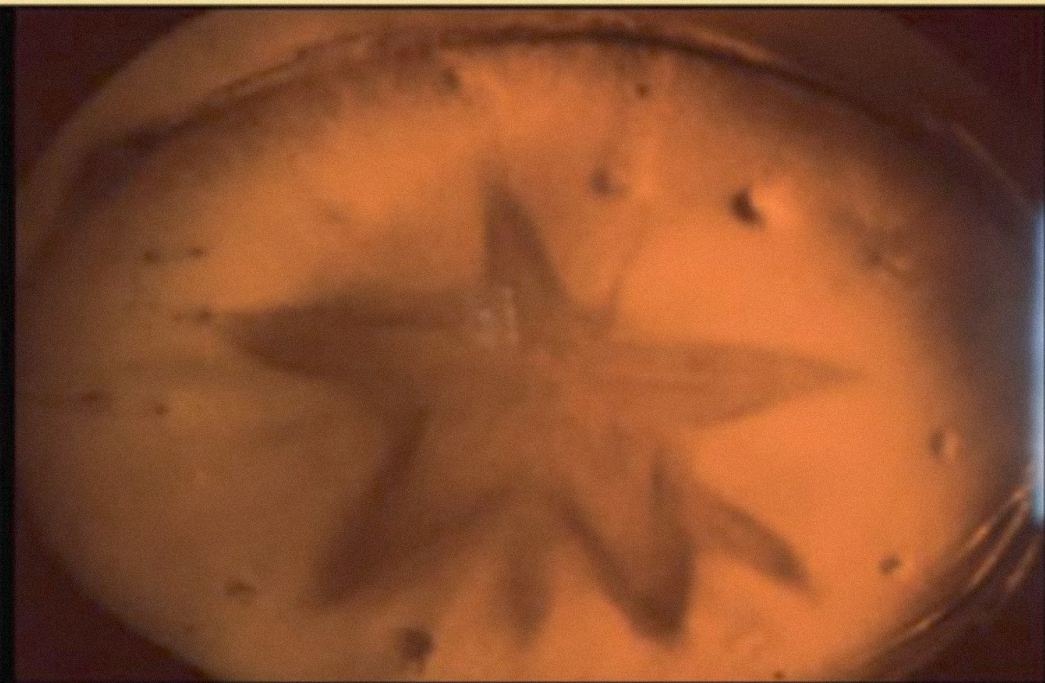
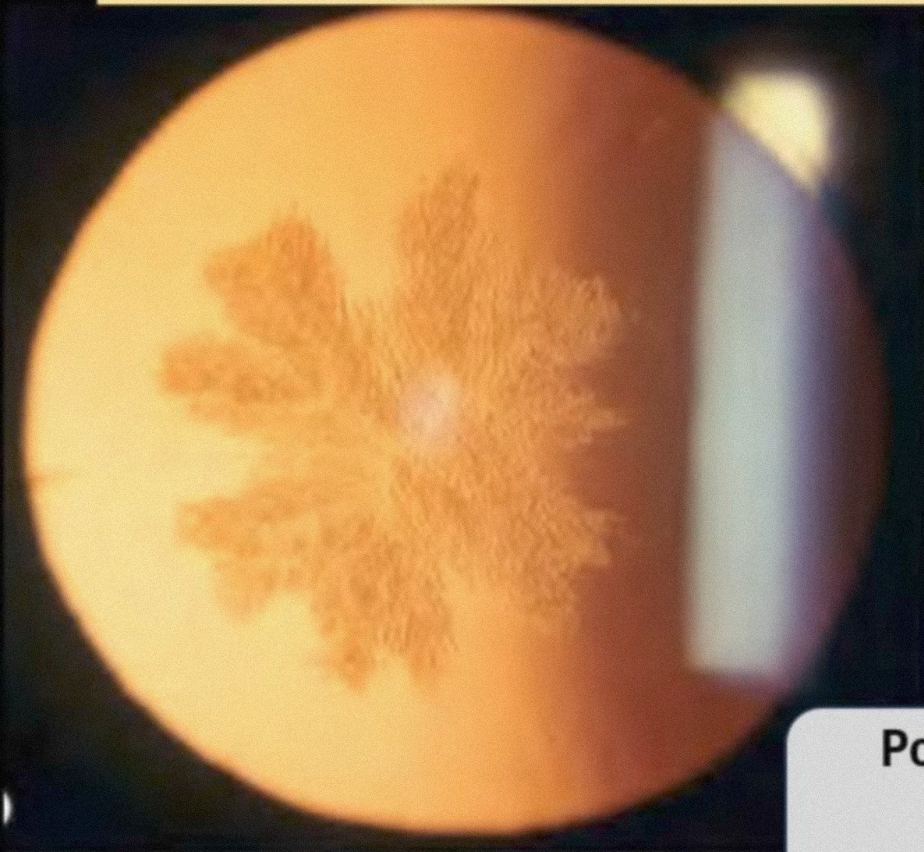
MYOTONIC DYSTROPHY



CHRISTMAS TREE CATARACT



MYOTONIC DYSTROPHY

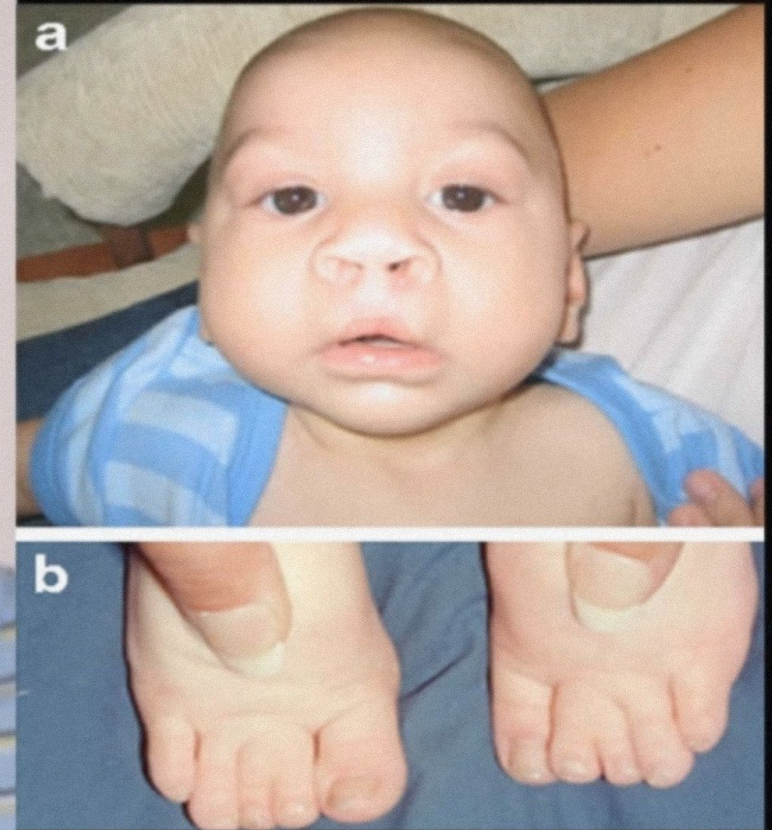


Posterior Subcapsular cataract
spokes assuming a stellate
morphology !



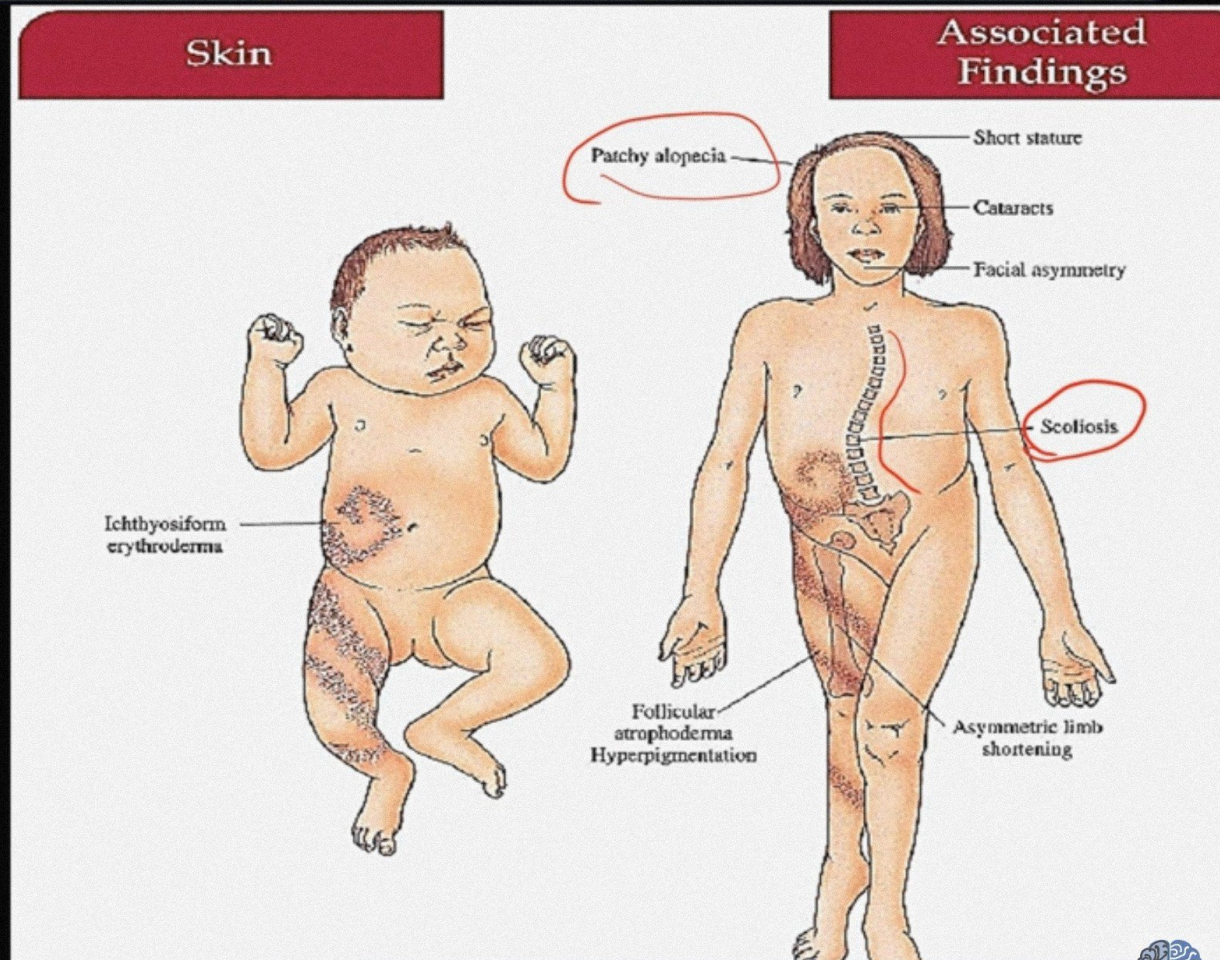
SMITH LEMLI OPITZ SYNDROME

- Microcephaly with bitemporal narrowing
- A short upturned nose with **ANTEVERTED NARES**
- **LONG PHILTRUM**
- Unilateral or bilateral ptosis, epicanthus.
- Retrognathia
- Polydactyly
- Syndactyly
- Short stature



CONRADI HUNERMANN SYNDROME

- Short stature
 - Patchy alopecia
 - **Scoliosis**
 - **Asymmetric limb shortening**
-
- **MICROPTHALMOS**
 - **MICROCORNEA**
 - **CATARACTS**



WEIL MARCHESANI SYNDROME

SPHEROPHAKIA- BRACHYMORPHIA SYNDROME

- Stocky build and have small, stubby fingers.
- Bradydactyly
- Microspherophakia
- Anterior dislocation of lens



**HALLERMAN STRIEF
FRANCOID
SYNDROME**



**GRANIOFACIAL
ANOMALIES
AND
CATARACT**

**RUBINSTEIN
TAYBI**



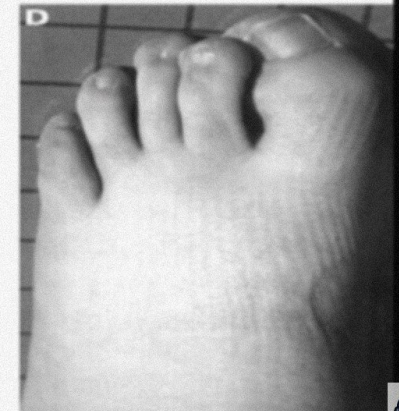
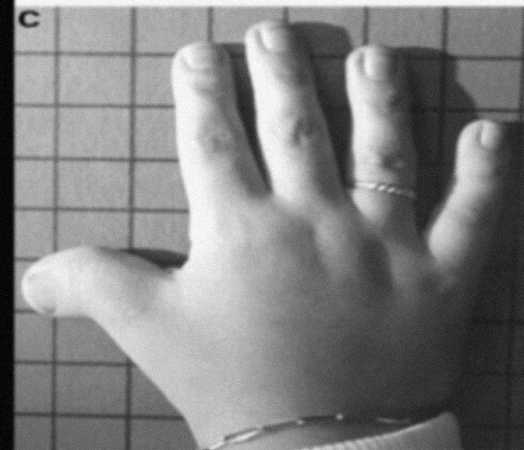
HALLERMAN STRIEF FRANCOID SYNDROME

- Abnormal facial appearance
- **Bird Like Facies**
- Dental abnormalities,
- Hypotrichosis
- Skin atrophy
- Proportionate short stature
- Ophthalmic features including **microphthalmia** and congenital bilateral cataracts.



RUBINSTEIN TAYBI SYNDROME

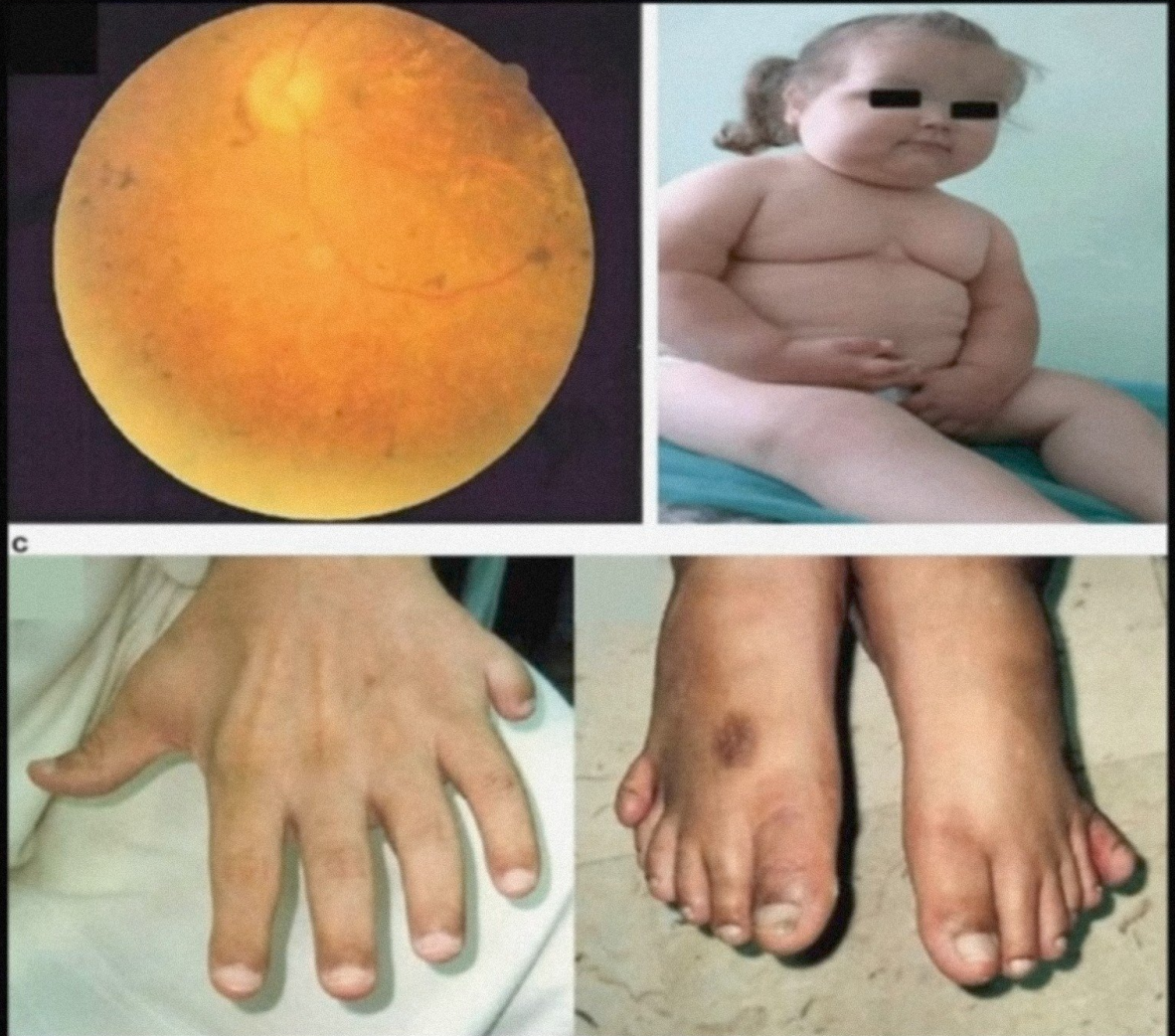
- Broad first toe
- Broad thumb
- Clinodactyly
- Microcephaly



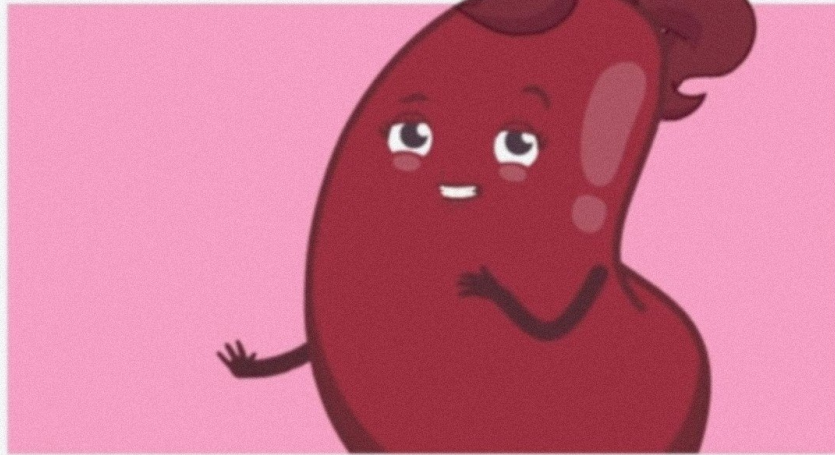


BARDET BEIDEL SYNDROME

- Retinal degeneration
- Truncal obesity
- Cognitive impairment
- **Postaxial polydactyly**
- Hypogonadism/genitourinary anomalies
- Renal abnormalities



KIDNEY

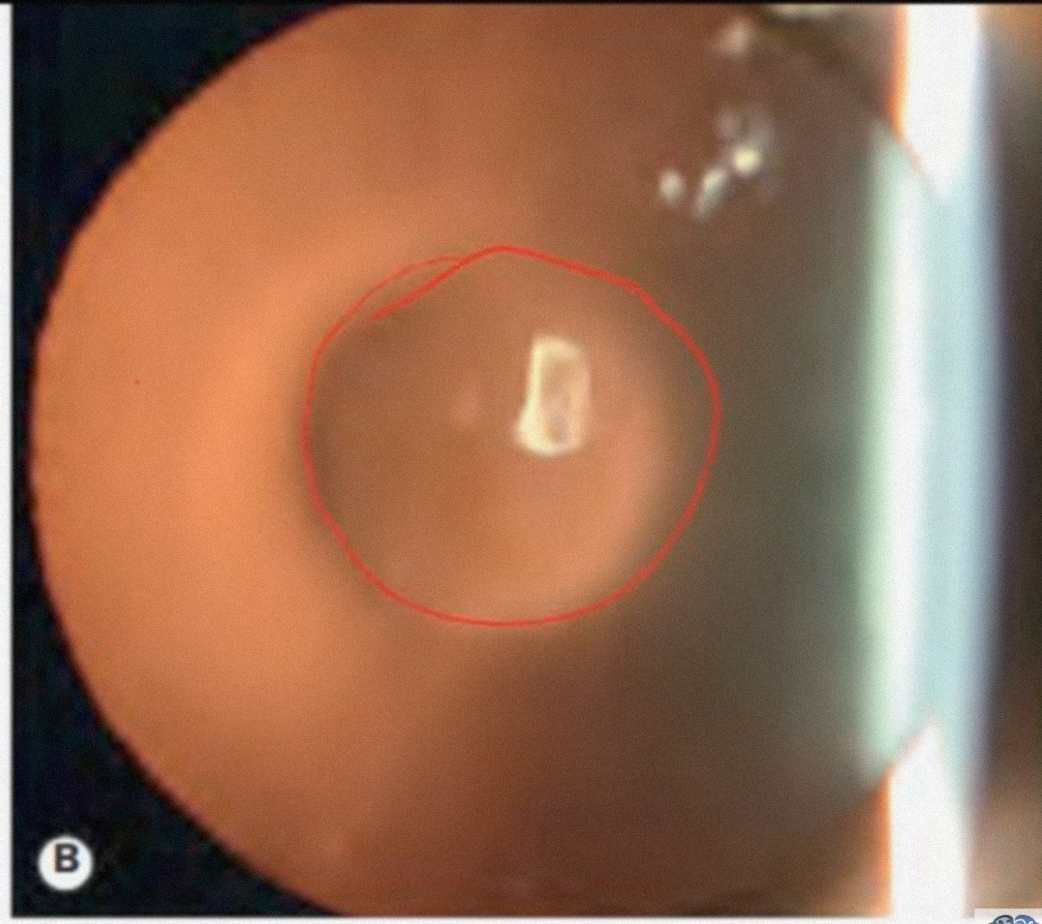
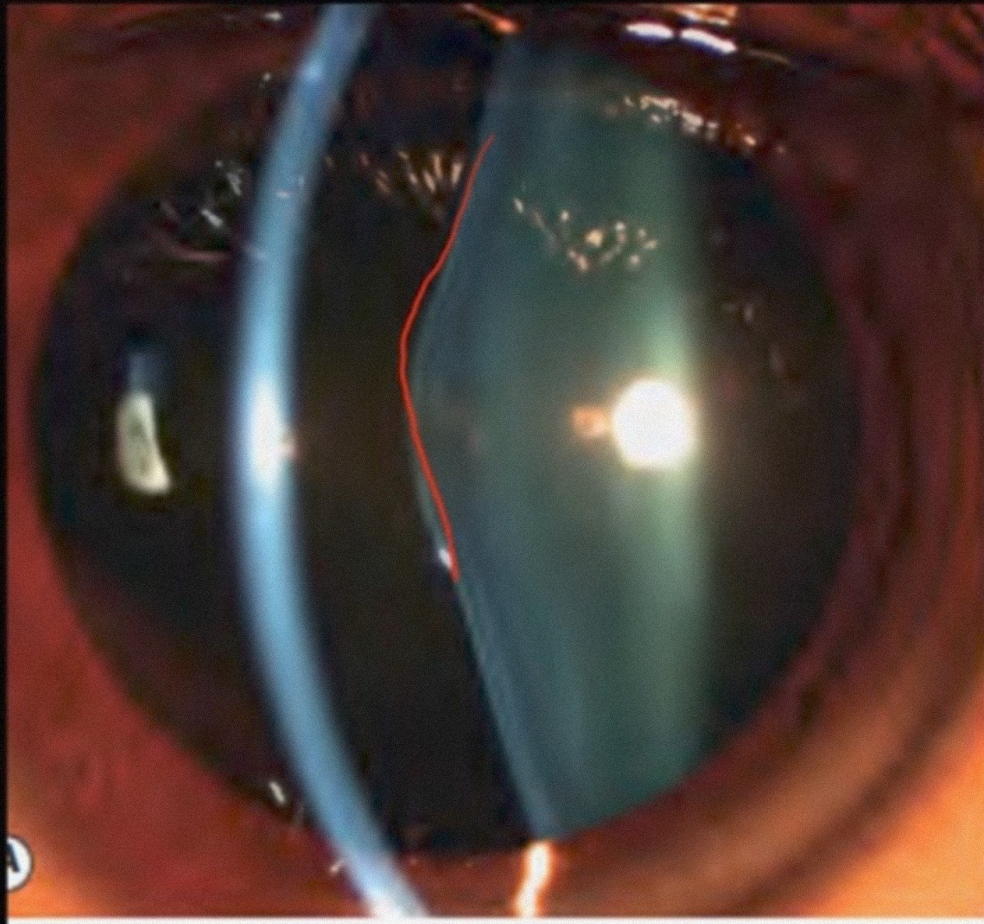


**ALPORT
SYNDROME**

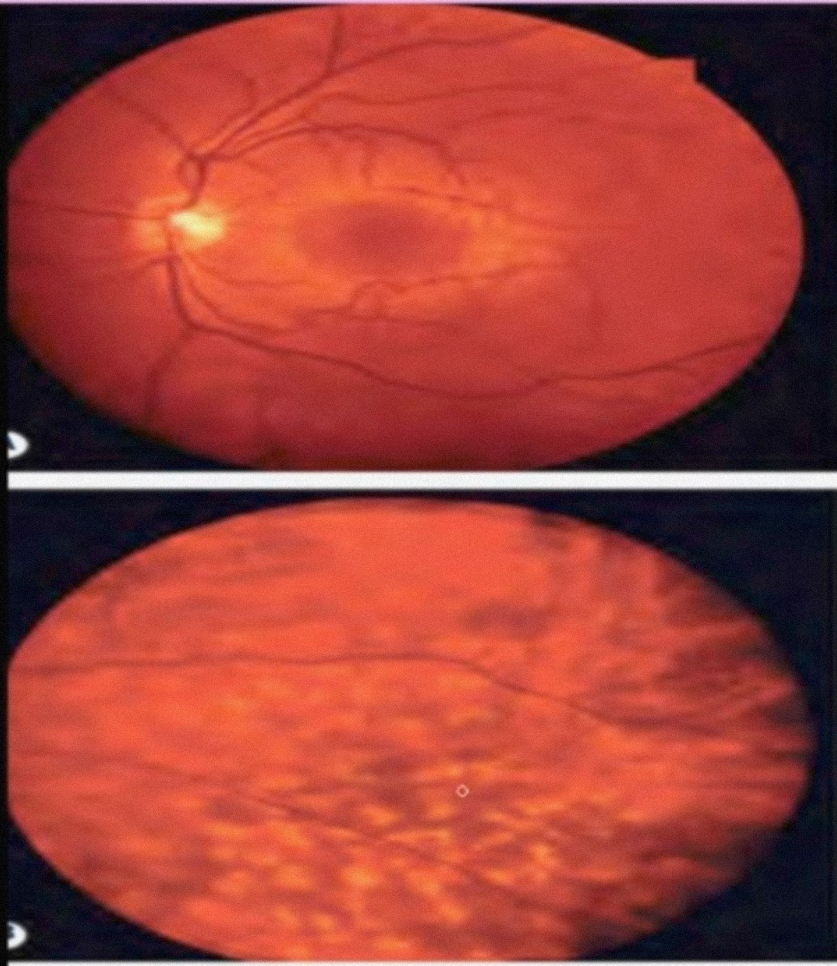
**LOWE
SYNDROME**



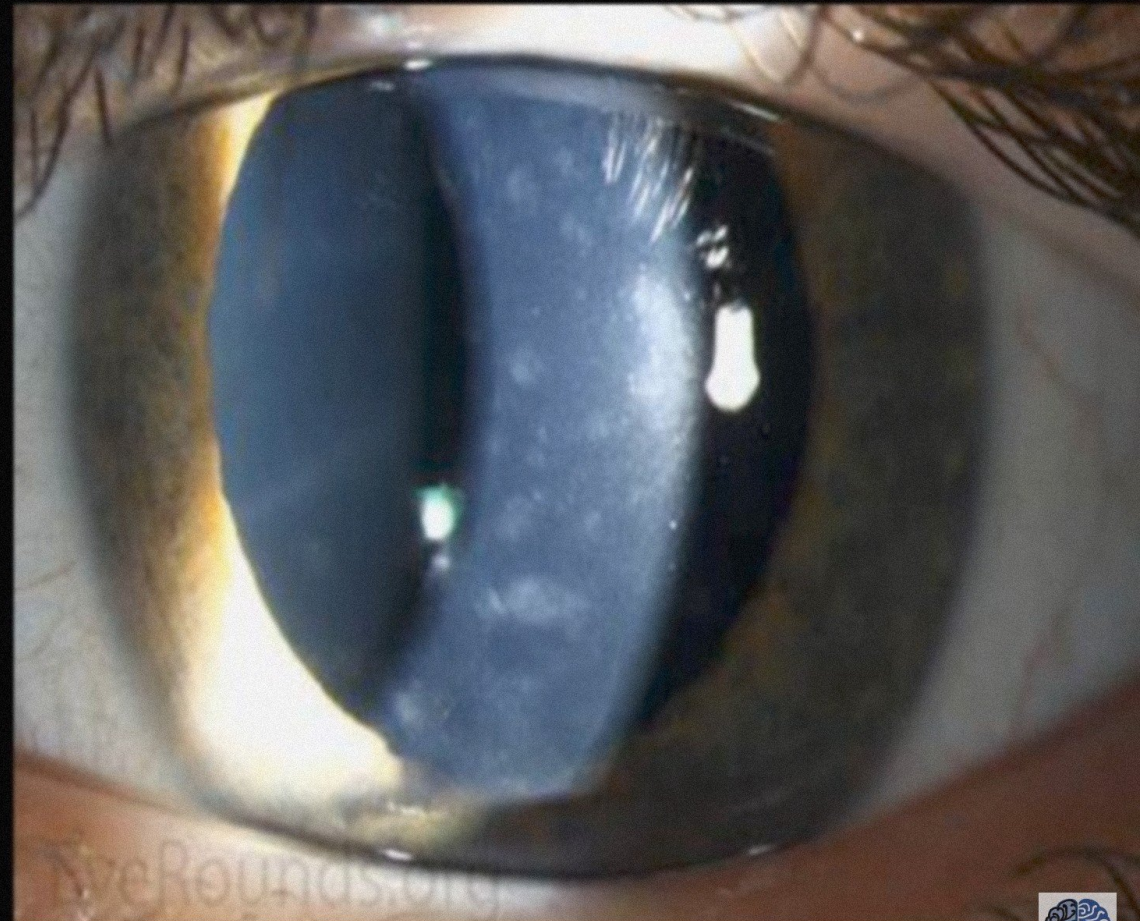
ALPORT SYNDROME



ALPORT SYNDROME



15.20 Alport syndrome. (A) Perimacular flecks; (B) peripheral flecks
(courtesy of J. Govan)



LOWE SYNDROME

- Oculocerebrorenal syndrome of Lowe (OCRL)
- Male children
- Bilateral congenital cataracts
- Associated with **LENTICONUS**
- Severe hypotonia
- Proteinuria may be the most sensitive marker for renal involvement of LS.
- Fanconi syndrome





T : TOXOPLASMA

O THER PATHOGENS (syphilis)

R UBELLA

C YTOME GALOVIRUS

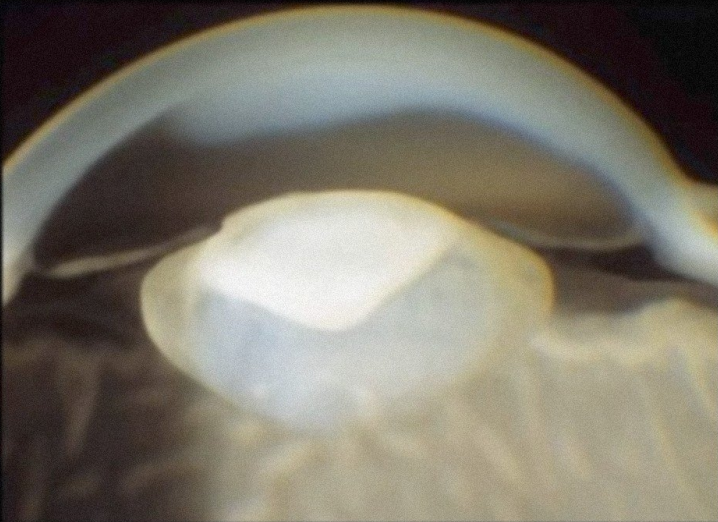
H ERPES SIMPLEX VIRUS

VARICELLA



RUBELLA CATARACT

- Pearly nuclear or more diffuse unilateral or bilateral cataract occurs in around 15%.



**SALT and
pepper
retinopathy**

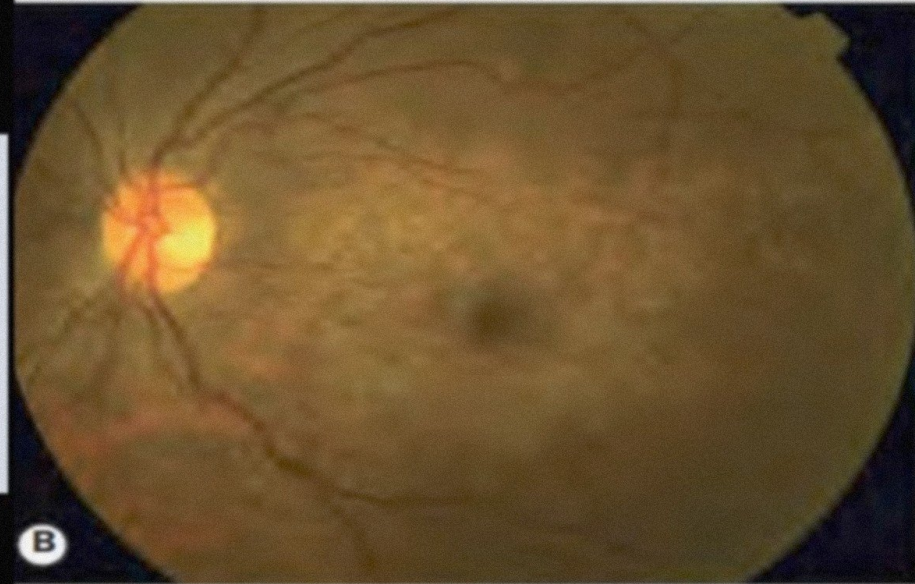
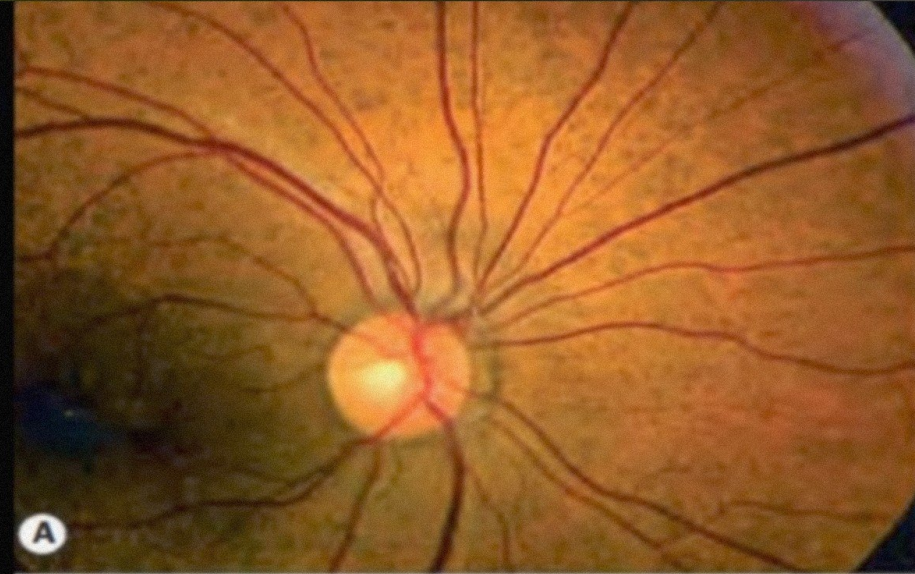
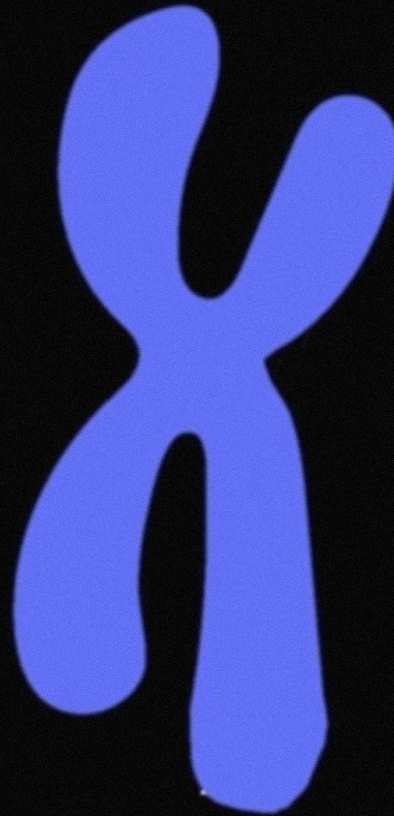


Fig. 12.56 Rubella retinopathy. (A) 'Salt and pepper' appearance; (B) predominantly manifesting in the macula.



**TRISOMY 21 / DOWNS
SYNDROME**

**TRISOMY 18 / EDWARDS
SYNDROME**



**TRISOMY 13 / PATAU
SYNDROME**

**CRI-DU-CHAT
SYNDROME**

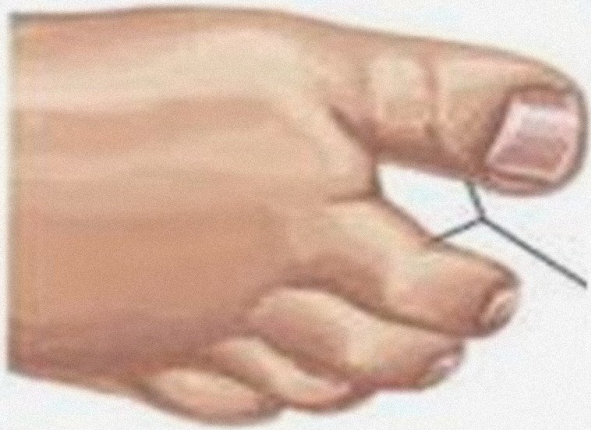


TRISOMY 21 / DOWNS SYNDROME

**WIDE GAP
BETWEEN FIRST
AND SECOND TOE**



**CLINODACTYLY , SINGLE
PALMAR GREASE**



**EPIGANTHUS,
UPWARD SLANT,
Flat nasal bridge**



TRISOMY 21 / DOWNS SYNDROME

Blue Dot Cataract

- Cataract of varied morphology (75%).
- Symmetrical opacities and often develop in late childhood.
- Other features include iris Brush field spots
- Keratoconus
- Glaucoma



B



TRISOMY 13 / PATAU SYNDROME

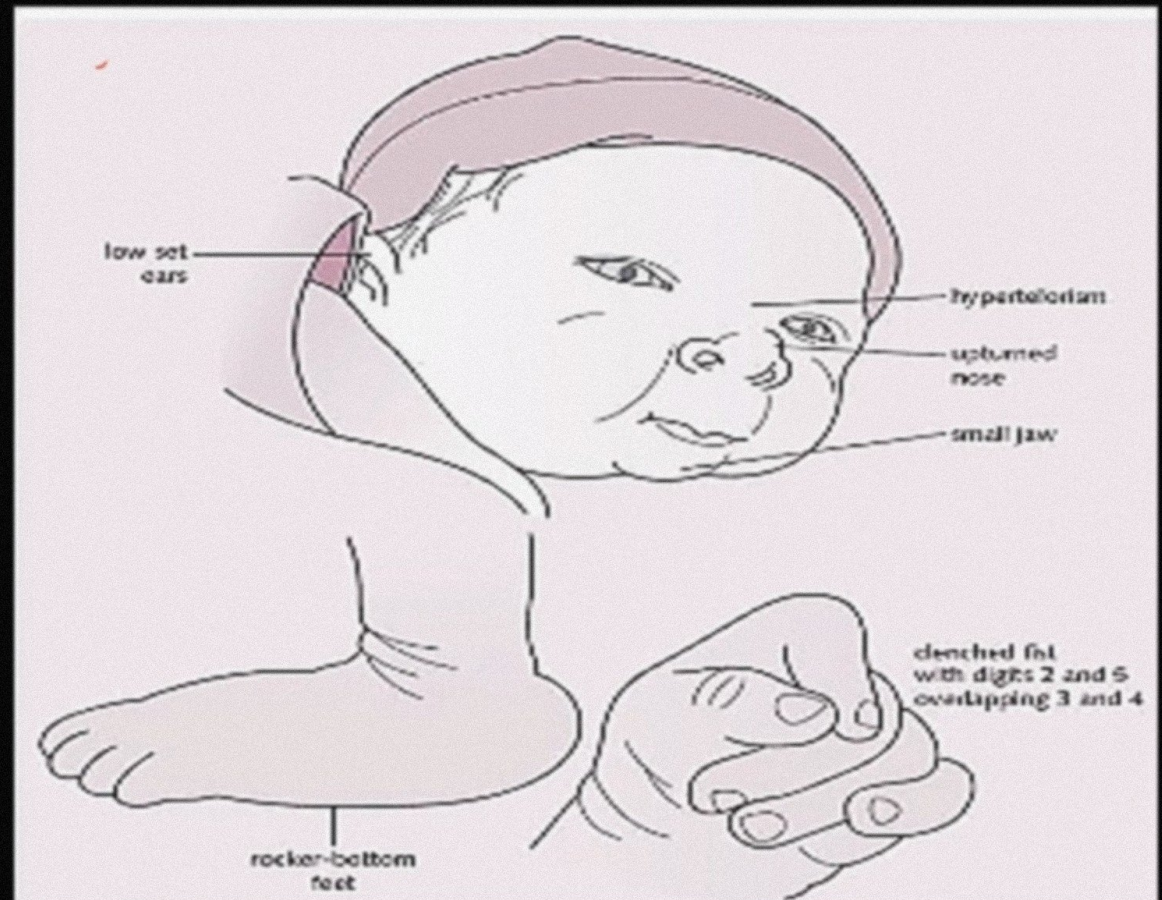
- Cleft lip
- Cleft palate
- Hypotelorism
- Low set ears
- Post axial polydactyly
- Microphthalmia
- Heart defects



TRISOMY 18 / EDWARDS SYNDROME

- Cataract include ptosis
- Microphthalmos
- Corneal opacity
- **Uveal and disc coloboma**
- Vitreoretinal dysplasia

- Rocker bottom feet
- Clenched fist with 2nd and 5th overlapping 3rd and 4th

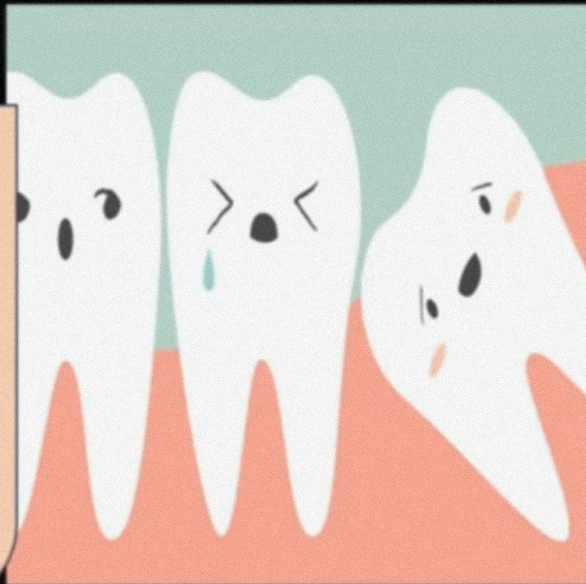


CRI-DU-CHAT SYNDROME

- Downward slant
- Widely set eyes (hypertelorism)
- Low-set ears,
- Small jaw, and a rounded face.



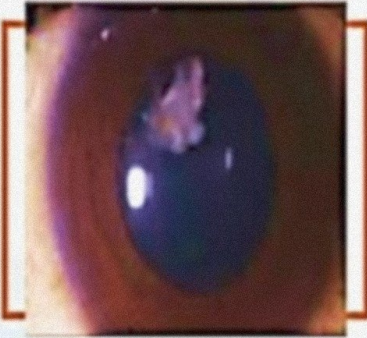
**NANS HORAN
SYNDROME**



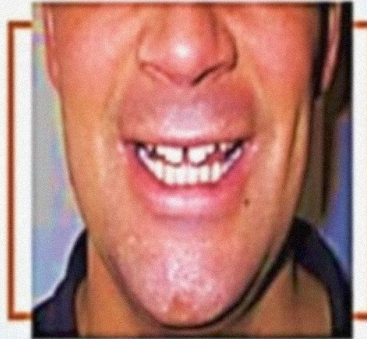
**LENS
MICROPHTHALMIA
SYNDROME**



NANS HORAN SYNDROME



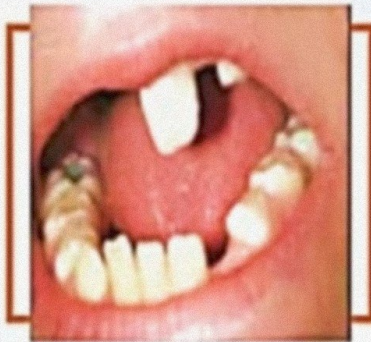
Microcornea, microphthalmia



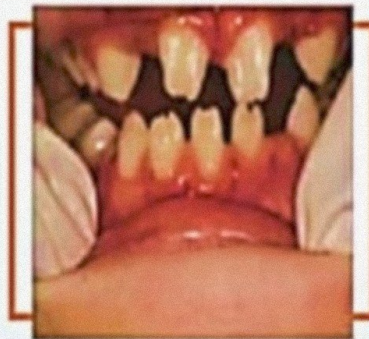
Small teeth in males



Canines: dome shaped with trilobed edge.



Premolars & molars: small, round, mulberry shaped.



Incisors: screwdriver shaped/conical, irregular incisal edge



Y SHAPED SUTURE CATARACT



NANS HORAN SYNDROME

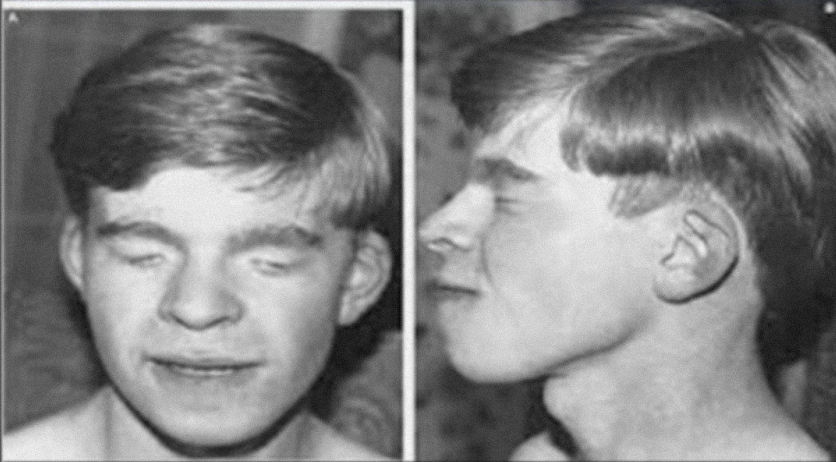
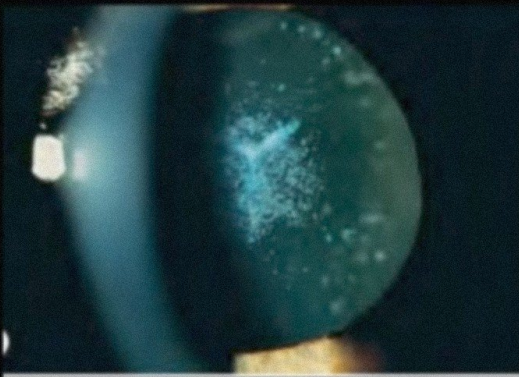
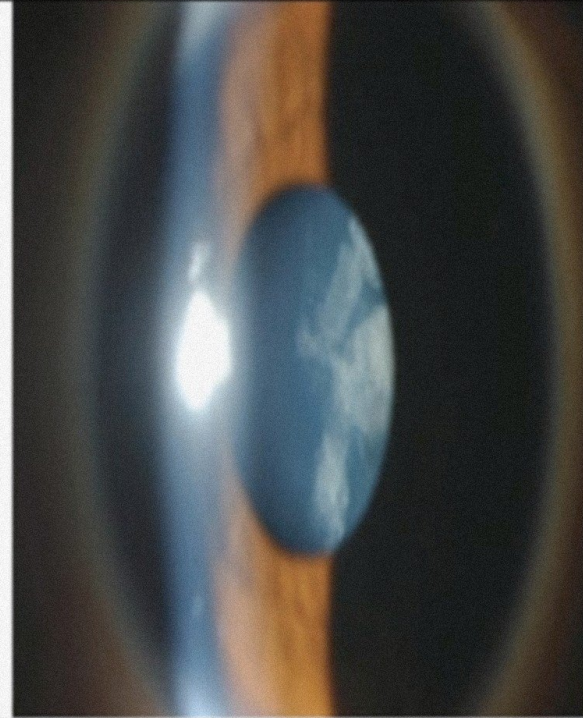


Figure 22-1 The asymptomatic sister of a boy with suspected Nance-Horan syndrome was examined for potential female carrier signs. Both of her eyes showed partial sutural lens opacity (left eye shown). Genetic testing confirmed the boy's diagnosis and his sister's carrier state. (Courtesy of Arif O. Khan, MD.)



SOURCE : AAO



**SKIN DISORDERS with
Cataracts**

- **Cockayne syndrome**
- **Rothmund-Thomson**
- **Atopic dermatitis**
- **Incontinentia pigmenti**
- **Progeria**
- **Ichthyosis**





ATOPIIC DERMATITIS CATARACT



- About 10%
- second to fourth decades.
- Bilateral and may mature quickly.

Shield-like dense anterior subcapsular plaque that wrinkles the anterior capsule is characteristic.

- Posterior subcapsular opacities may also occur



COCKAYNE SYNDROME

The skin of those with Cockayne syndrome is also frequently affected:
hyperpigmentation, varicose or spider veins (**telangiectasia**), and serious sensitivity to sunlight are common, even in individuals without XP-CS



POIKILODERMA-THOMSON



Poikiloderma is a skin condition that consists of areas of hypopigmentation, hyperpigmentation, telangiectasias and atrophy.



INCONTINENTIA PIGMENTI



1. BLISTERING (from birth to about four months of age),

2. A **WART-LIKE** rash (for several months),

3. SWIRLING

macular hyperpigmentation (from about six months of age into adulthood), followed by

4. Linear **HYPOPIGMENTATION.**

