GENERAL PHYSICAL EXAMINATION
POSITION FOR EXAMINATION

- 0 to 3 months – examination table
- 3 months to 1 year – mother’s lap
- 1 to 3 year – standing or mother’s lap
- After 3 years – examination table
- Adolescent girl – Female attendee or nurse should be present at the time of examination
HEAD TO FOOT EXAMINATION
SIZE

• Microcephaly: HC < 3 SD below normal
  
  Primary asymptomatic
  
  1. Primary
  
  2. Secondary
  
  • Intra uterine infections
    —CMV, rubella, toxoplasmosis
  
  • Intra uterine toxin
    —Fetal alcohol syndrome
    —Fetal Hydantoin syndrome
  
  • Perinatal / post natal insult
    —Meningitis, encephalitis, ICH
MACROCEPHALY

- HC > 2 SD
  - Familial
  - Hydrocephalus
  - Achondroplasia
  - Cerebral gigantism
  - Fragile X syndrome
  - Mucopolysaccharidosis
  - Rickets
  - Thalassemia
SHAPE

• Craniosynostosis is responsible for abnormal shape
• Dolichocephaly
• Brachycephaly
• Plagiocephaly
• Trigonocephaly
BOSSING / PROMINENCE

- Frontal bone is involved it is called frontal bossing or both central parts of frontal and parietal bone is involved
  - Rickets
  - Hydrocephalus
  - Congenital syphilis
  - Thalassemia
  - Achondroplasia
ANTERIOR FONTANEL

- 2.5 x 2.5 cm, closes between 9 – 18 months
- **Delayed closure / large fontanel**
  - Rickets
  - Hydrocephalus
  - Cong. Hypothyroidism
  - Achondroplasia
  - Osteogenesis imperfecta
  - Down syndrome
- **Small AF**
  - Craniosynostosis
  - Variation of normal
- **Sunken AF**
  - Dehydration
- **Bulging AF**
  - Increased intracranial tension /hydrocephalus
SCALP SWELLING

- Dermoid
- Traumatic
- Osteoma
- Histocytosis
HAIR

Check Colour, texture, pigmentation, luster

• **Malnutrition**
  – Sparse straight, thin, pluckable, lack luster with alternate areas of pigmented and depigmented hair (Flag sign)

• **Alopecia**
  – Congenital ectodermal dysplasia
  – Alopecia areata
  – Treatment for malignancy
HAIR (CONT..)

• **Hypertrichosis** (increased quantity of hair)
  – Cushing’s syndrome
  – Precocious puberty e.g.: congenital adrenal hyperplasia
  – Drugs like dilantin

• **Hair line**
  – Low hair line in back below C4 spine – Turner’s syndrome
  – Low hairline in front – Hypothyroidism
  – Excess projection of hair into cheek – Treacher Collins syndrome
FACE

- Myopathic facies
- Moon face – Cushings syndrome
- Puffy face - Nephrotic syndrome
- Coarse facies - Hypothyroidism, Hurlers syndrome, Soto syndrome
- Mask like facies - Wilsons disease, Mobius syndrome, Depression
- Mongoloid facies - Downs syndrome
- Triangular facies - Russel silver syndrome
EYES

• Eyelids
• Intercanthal distance
• Eyebrows
• Eyelashes
• Conjunctiva
• Cornea – lens
• Sclera
• Fundus
EYELID

• Lid edema:
  – Nephritis/Nephrotic Syndrome/Renal failure
  – Local causes – Conjunctivitis, Stye
  – Angioedema
  – Hypothyroidism

• Eyelid Coloboma:
  – Upper eyelid – Goldenhar’s Syndrome
  – Lower eyelid – Treacher Collin’s Syndrome

• Ptosis:
  – Cong. Ptosis
  – Oculo Motor Nerve Palsy
  – Horner’s Syndrome
  – Myasthenia Gravis
  – Noonan’s Syndrome
EYELID (CONT..)

- Mongoloid slant
  - Down Syndrome
  - Antimongoloid slant - Turner’s syndrome, Noonan’s syndrome
- Proptosis
  - Malignancy – Retinoblastoma
  - Apert’s Syndrome
  - Hyperthyroidism
- Epicanthal fold
  - Down Syndrome
  - Noonan’s Syndrome
  - Turner’s syndrome
EYELID (CONT..)

• Intercanthal distance

  Hypertelorism - The distance between the medial canthus of both eyes is more than one eye width.
  Seen in: Downs, Noonan, Turner

• Eyelashes

  Trichiasis – inward misdirection of cilia (Trachoma, Burns)
EYES (CONT..)

- **Conjunctiva**
  - Conjunctival Xerosis
  - Bitot spots
  - Conjunctivitis

- **Cornea**
  - Keratitis
  - Corneal Ulcer

- **Lens**
  - Congenital Cataract
    - Rubella, Galactosemia, Wilsons Disease
EYES (CONT..)

• **Sclera**
  – Blue Sclera – Marfans, Osteogenesis Imperfecta, Ehler Danlos Syndrome

• **Fundus**
  – Papilloedema – ICSOL, Meningitis, IC Bleed
EAR

• Low set ears – Downs, Turners, Noonans
• Large prominent ear – Marfans and Fragile X syndrome
• Pinna – Deformed Pinna: Treacher Collins, Fragile X syndrome
• Ear tag – Turners, Goldenhar syndrome
• External auditory canal
• Tympanic membrane
MOUTH

• Lip
• Philtrum
• Gums
• Teeth
• Palate
• Tonsil
• Uvula
• Posterior pharyngeal wall
MOUTH

• Lip
  – Rhagades – Congenital Syphilis
  – Angular Stomatitis (Riboflavin Def.)
  – Cheilosis (Iron Def.)

• Philthrum
  – Long Philthrum – Fetal Hydantoin/ Fetal Alcohol
  – Short Philthrum – Cohens Syndrome

• Gums
  – Swollen, Spongy Bleeding Gums – Scurvy
  – Gum Hyperplasia – Rx with Phenytoin, Scurvy, Leukemia
  – Gum Blue line – Lead poisoning
MOUTH – CONT..

• Teeth
  – Delayed dentition: Hypothyroidism, Hypopituitrism, PEM, Rickets
  – Discolored teeth: Poor Oral Hygiene, Fluorosis, Porphyria
• Palate: High Arch Palate, Cleft Palate
• Tonsil: Membrane on Tonsil – Diphtheria, Vincent’s Angina
• Uvula: Bifid Uvula – Treacher Collin, Apert’s
TONGUE

• Macroglossia:
  – Cong Hypothyroidism
  – Down Syndrome
  – Hurlers Syndrome
  – Duchenne Muscular Dystrophy

• Coating of Tongue:
  – Poor Oral Hygiene, Typhoid fever, Uremia
  – Oral Thrush – Candidiasis

• Glossitis
  – Fe Def Anemia – Bald tongue without papillae
  – Niacin Def – Raw Beefy tongue with atrophic papillae
  – Strawberry Tongue - Kawasaki Disease
NECK

- Swelling
- Webbing
- Lymphadenopathy
- Position of trachea
- Short neck
- Neck stiffness
SKIN

- Colour and pigmentation
- Turgor and Texture
- Haemorrhagic spots
- Rashes
- Pyoderma
- Mongoloid blue spot
- Palmar erythema
- Erythema toxicum
HAND

• Congenital malformation
• Single Palmar crease - Down Syndrome
• Finger clubbing
• Nails
  – Koilonychia – Fe\textsuperscript{2+} deficiency anemia, Lichen Planus
  – White Nail – Anemia
  – Half and Half Nail – Chronic Renal Failure
HAND

Congenital Malformation Of Hand:

– Clinodactyly – shortening of middle phalanx of little finger associated with inward curving
– Bifid thumb – Holtoram Syndrome
– Arachanodactyly – Marfans syndrome
– Polydactyly – Lawrence-Moon-Biedl syndrome
– Syndactyly – fusion of two fingers – Down syndrome
– Absent thumb - Holtoram syndrome
CHEST

• Type of chest:
  – Barrel shaped – Emphysema
  – Pectus Carinatum, Pectus Excavatum

• Congenital malformation:
  – Absent clavicle, Hypoplastic nipple, Wide spaced nipple

• Dilated veins

• Scars and sinuses

• Masses
ABDOMEN

• Shape of abdomen
• Engorged veins
• Scars and sinuses
• Umbilicus
• Mass
EXTERNAL GENITALIA

- Ambiguous Genitalia
- Males
  - Hernia
  - Hydrocele
  - Tumour of testis
  - Torsion testis
  - Phimosis / hypospadiasis
- Females
  - Clitoris enlargement
  - Vaginal discharge
BONE AND JOINTS

- Deformity
- Localized swelling
- Sternal tenderness
- Joint tenderness
- Size & symmetry of limbs
LOWER LIMBS

- Congenital dislocation of hip
- Bowleg
- Knock knee
- Foot
SPINE AND BACK

- Spinal deformity
- Swelling
- Tenderness
- Curvatures
- Sinus
- Tuft of hair
THANK YOU