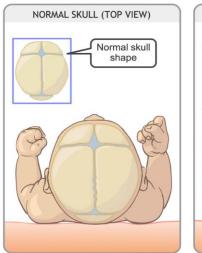
<u>Arabian Gulf University – Kingdom of Bahrain</u> <u>Year 5 – Pediatrics – 2nd Week</u>

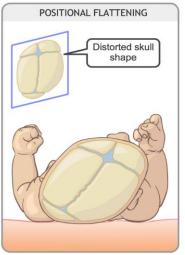
Dr. Zakariya Al-Akri – Common and Uncommon Conditions

<u>Case (1):</u> "sunset eye appearance" which occurs with increased intracranial pressure in hydrocephalus.



- Case (2): the head is asymmetric with an occipital bulge (wither on the right or left sides) because the baby is usually kept on his back on one side → skull bones are still soft with no closed sutures → therefore, this will produce what is known as "positional plagiocephaly". This condition is managed by keeping the baby on the other side.





- <u>Case (3):</u> a bulge in the right side above the parietal bone is noticed. This bleeding is subperiosteal and not crossing the sutures of the skull and known as cephalohematoma. Edema is differentiated from cephalohematoma in that it is subcutaneous and crosses the sutures of the skull.



- <u>Case (4)</u>: pectus carinatum (pigeon chest) is a chest deformity which can be caused by chronic respiratory diseases, masses in the chest, cardiomegaly or fractures.



- <u>Case (5)</u>: pectus excavatum is a chest deformity caused by increased thoracic negative pressure and associated with chronic respiratory diseases.





- Case (6): Eye features of Down's syndrome (trisomy 21):
 - Epicanthal skin fold.
 - Brushfield spots.
 - Upslanting palpebral fissures



- <u>Case (7):</u> the image below shows a surgically repaired cleft lip which can be isolated or associated with other genetic disease (such as trisomies 13 and 18). Cleft lip can be associated with cleft palate. It can occur on one sides or two sides (bilateral).



Case (8): adenoid facies is associated with chronic respiratory obstruction. The child will be snoring and opening his mouth while sleeping.





Case (9): the image on the left shows an infant with facial nerve palsy (right side) which affects half of the face while the image on the right shows absence of depressor anguli

oris muscle (only affecting the mouth).



Case (10): polydactyli (a condition in which the person has more than five fingers or toes on one, or on each, hand or foot). This extra finger or toe can be attached by skin (thus can be tied and cut-off) or a joint (more difficult to treat and sometimes kept without intervention).



- <u>Case (11):</u> rachitic rosary → enlargement of costochondral joint due to vitamin-D deficiency (rickets).



- <u>Case (12)</u>: the image below shows umbilical hernia which is more common in blacks. In 95% of the cases, it disappears spontaneously within 1 year of age without intervention. Large umbilical hernia might remain more than 4 years (in these cases, it will be surgically corrected).



- <u>Case (13)</u>: Dennie-Morgan folds (left image) and allergic shiners (right image) are both signs of atopy (allergic hypersensitivity reaction).



- <u>Case (14):</u> allergic salute is a transverse crease on the nose seen in patients with allergic rhinitis.



Case (15): chipmunks facies is seen in patient with β -thalassemia major in which there is total absence of β -globin chains or deficient β -globin chain production. Thalassemia facies is characterized by frontal bossing, maxillary hyperplasia, prominent cheekbones and skull deformities. These patients have absent HbA, elevated HbF and they are managed with lifelong blood transfusions.



- Case (16): myotonic dystrophy \rightarrow skin is smooth with no creases and the upper lip is tented.



- Case (17): the image blow shows congenital glaucoma in the left eye. There is an obstruction of eye drainage which is painful. The baby is always crying, the iris is large, and if the condition is kept for a long time without intervention → this will result in blindness.



- <u>Case (18):</u> a child with peri-orbital edema (occurring due to hypoalbuminemia) which is associated with nephritic syndrome.



- <u>Case (19):</u> anaphylaxis (type-I hypersensitivity reaction) which can be caused be food, medications of insect bites.



- <u>Case (20)</u>: heterochromia iridum (difference in coloration of the iris) which can affect the whole eye or part of it. It can be congenital (autosomal dominant) or acquired (e.g. injury, inflammation, use of certain eyedrops that damage the iris or tumors).



Case (21): koilonychia (spoon-shaped nails) is a characteristic sign of iron-deficiency anemia (microcytic hypochromic anemia; \pm Hb; \pm MCV below 80).



- Case (22): spina bifida occulta is the mildest form results in a small separation or gap in one or more of the bones (vertebrae) of the spine. Because the spinal nerves usually aren't involved, most children with this form of spina bifida have no signs or symptoms and experience no neurological problems. Visible indications of spina bifida occulta can sometimes be seen on the newborn's skin above the spinal defect, including:
 - An abnormal tuft of hair (seen in the image).
 - A collection of fat
 - A small dimple or birthmark



- <u>Case (23)</u>: colobomas of the eye (absence or defect of ocular tissue), usually of the retina. Impaired vision is very common. It is found with CHARGE association:
 - C: Colobomas.
 - H: Heart defect.
 - A: Atresia of nasal choanae.
 - R: Retardation.
 - G: Genital anomalies.
 - E: Ear anomalies.



- <u>Case (24)</u>: Erb's palsy is caused by injury to the upper trunk of brachial plexus and results in waiter's tip hand that is seen in the image below. Injury to brachial plexus most commonly arise from shoulder dystocia during a difficult birth.





- <u>Case (25):</u> Turner syndrome (monosomy X) is characterized by:
 - Shield chest with widely-spaced nipples.
 - Short stature.
 - Webbed neck.
 - Under-developed ovaries.
 - Coartication of the aorta.

