Pediatric congenital deformities

Pelin Kuzucu
Birecik State Hospital, Turkey

The nervous system develops from the neural plate at the 3rd week. Neural folds close along the line, approaching each other along the middle line. As a result of these events, the neural tube is formed. Neural tube defects are formed in the first four weeks of life by factors affecting the embryo.The closure defects of the anterior neuropore lead to anencephaly and encephalocele, of the posterior neuropore, on the other hand, cause spina bifida, meningocele and meningomyelocele. Spinal cord is located at the level of the S1 vertebra in the 6-month-old fetus, at the level of L2-3 vertebrae in newborns and L1 terminates at the inferior border of the vertebra in adults.

Spina Bifida Occulta: It is the mildest form-it usually does not give symptoms. It is congenital that the spinous process and the arcus vertebrae are not formed in one or, rarely, in more than one vertebra, but the spinal cord and spinal nerves are normal. There is no herniation of the meninges. Chiari II or hydrocephalus is not observed. On the skin there may be: Hairy structure, Dermal sinus, Dimple, Hemangioma, Lipoma.

Myelomeningocele: The skin, vertebrae, nerve roots, spinal cord, meninges are affected. Incidence 2-3/1000 live births. Most have a lumbosacral or lumbar placement. MMS structure gets intruded.

Meningocele: ıt is a rare type. The closure of the vertebral arch is not complete. It often occurs in the lumbosacral region. There is usually no neurological deficit.

Tethered cord: The most common causes are diastemetamyelia, short and thick phylum terminale, intradural lipoma, lipomyelomeningocele and adhesions that develop after meningomyelocele surgery, and the fact that the subject's medullaris is located below the level of the L2 vertebra. progressive spinal deformities such as skin symptoms, motor deficits, Foot deformities, Urological symptoms, Kyphosis, Scoliosis are clinically encountered.

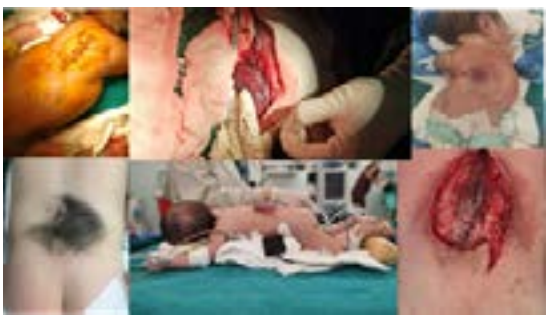

Fig1: Images of pediatric congenital deformities. (The photographs belong to our own patient.)

Recent Publications

1. Chu A, Chan J, Baxi O. Congenital Deformities of the Hands. Pediatr Clin North Am. Şubat 2020;67(1):85-99.
2. Kirschen GW, Wood LF, Semenyuk N. A Practical Approach to Congenital Urogenital Anomalies in Female Pediatric Patients. Pediatr Ann. 01 Nisan 2020;49(4):e188-95.
3. Polita NB, Ferrari RAP, de Moraes PS, Sant'Anna FL, Tacla MTGM. Congenital anomalies: hospitalization in a pediatric unit. Rev Paul Pediatr. Haziran 2013;31(2):205-10.
4. Thompson DNP. Chiari I-a "not so" congenital malformation? Childs Nerv Syst. Ekim 2019;35(10):1653-64.
5. North American Society for Pediatric Gastroenterology. Congenital anomalies. J Pediatr Gastroenterol Nutr. Ocak 2013;56 Suppl 1:S9-28.

Biography

Pelin Kuzucu was born in Ankara in 1990. She is married and has 1 child. In 2020 she received the title of Specialist in Neurosurgery and Neurosurgery. She is engaged in Pediatric Neurosurgery and Surgical Neuroanatomy. She has articles in international and national refereed journals, book chapters and translations, international journal refereeing, especially on these topics and has also taken part in various courses as an educator.