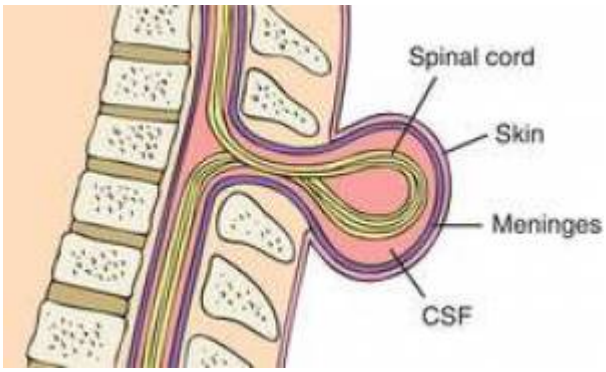
Myelomeningocele (MMC)



Myelomeningocele, also known as open spina bifida, is the most severe form of spina bifida.

Epidemiology

Myelomeningocele (MMC) is the most common neural tube defect.

Diagnosis

Myelomeningocele Diagnosis.

Treatment

see Myelomeningocele treatment.

Complications

see Myelomeningocele complications.

Outcome

It is a common birth defect that is associated with significant lifelong morbidity.

In myelomeningocele, the bones of the spine (vertebrae) don't form properly. This lets a small sac extend through an opening in the spine. The sac is covered with a membrane. It holds cerebrospinal fluid (CSF) and tissues that protect the spinal cord (meninges). The sac may also contain portions of the spinal cord and nerves. The sac itself may be opened up either before birth or during the birth.

Myelomeningocele results in significant life-long disabilities, impaired quality of life, and difficult medical management. The pathological progression of MMC involves failure in neural tube and vertebral arch closure at early gestational ages, followed by subsequent impairment in spinal cord and vertebral growth during fetal development. MMC is irreversible at term.

Patients with myelomeningocele have significantly lower health-related quality of life (HRQOL) scores than those with other spinal dysraphisms. History of shunt treatment and Chiari decompression correlate with lower health-related quality of life (HRQOL) scores [1)].

Case series

see Myelomeningocele case series.

1)
Rocque BG, Bishop ER, Scogin MA, Hopson BD, Arynchyna AA, Boddiford CJ, Shannon CN, Blount JP. Assessing health-related quality of life in children with spina bifida. J Neurosurg Pediatr. 2015 Feb;15(2):144-9. doi: 10.3171/2014.10.PEDS1441. Epub 2014 Nov 21. PubMed PMID: 25415252.