

## Case Report

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# Meningomyelocele - A classical clinical and radiological image

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### Clinical image description

Neural tube defects (NTD) are one of the most common congenital malformations, second only to congenital heart disease (CHD). The most common types of NTDs are anencephaly and spina bifida. NTDs can be open or closed. Unlike some other congenital defects, NTDs can usually be prevented. When women take the recommended amounts of folic acid (FA) during the periconceptional period and the first trimester, they can significantly lower the risk of NTDs. The incidence of NTDs is higher in India as compared to developed countries. NTDs are associated with various severe complications, like cognitive delay, seizures, paraparesis, neurogenic bladder, etc. The clinical image is of a 2-year-old male born with swelling over the mid-back and no movement or power in bilateral lower limbs (Figure 1A). The patient was brought in at the age of 2 years for further management. The patient had a gross developmental delay with macrocephaly. The MRI done was suggestive of a meningocele seen at the levels of L5, S1, and S2 with herniation of the meninges and neural tissue/nerve roots (Figures 1B and 1C). The spinal cord was tethered and lying low (up to L4-5). A subse-



Figure 1:

quent MRI of the brain was suggestive of aqueductal stenosis with ventricular dilatation with no other significant anomaly. Other systemic anomalies known to be associated were ruled out. NTDs are known as one of the few birth defects for which primary preventive strategies are available and effective. Periconceptional folate intake can prevent about 70% of NTDs. A dose of 400 mcg/day is routinely prescribed to all pregnant ladies, starting when the couple is ready to conceive and is continued throughout the first trimester. If a mother has a previous history of NTD in a child is given 10 times the dose (5 mg/day). This image gives a diagnosis of myelomeningocele with a differential diagnosis of meningocele, encephalocele, or spina bifida.