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CASE 2005-6

Submitted by:

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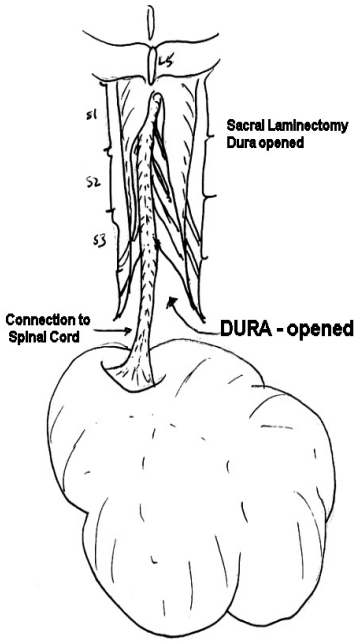
Clinical History:

A one year old girl presented for investigation of an enlarging sacral mass noted since the age of two weeks and associated with the symptoms of chronic constipation and pain upon bowel movements. Although the neurological examination was normal, anal stenosis was found on rectal examination. Pertinent clinical laboratory studies included an alpha fetoprotein of 12 and 13 kU/L (normal <7) and beta HCG of <5 U/L (normal <5). A MRI scan disclosed a malformed sacrum and coccyx associated with a 6.5 x 4 x 2 cm, multicystic sacral mass that anteriorally displaced the rectum, bladder and uterus. These findings were confirmed at surgery, which revealed the mass to be in continuity with the dura of the spinal canal and attached to the spinal cord by a tethered filum, as illustrated in the diagram.



Pathologic examination of the 28.4 gm pseudoencapsulated mass showed an opened 4 x 2.5 cm glio-ependymal lined cyst that had been connected to the filum terminale and extended to the opposite polar margin of an asymmetrically placed solid component. Included among the heterologous tissue elements of this component were rare niduses of cartilage and occasional cysts lined with squamous epithelium, simple cuboidal to columnar epithelium, or ependyma.

Material Submitted:

- Transparency of rostral surface of the mass with opened cystic attachment to the filum terminale
- H&E stained section of solid component of mass

Points for Discussion:

1. Diagnosis
2. Pathogenesis of the mass and sacral defect