Imaging Sciences Interesting Cases

CASE 299

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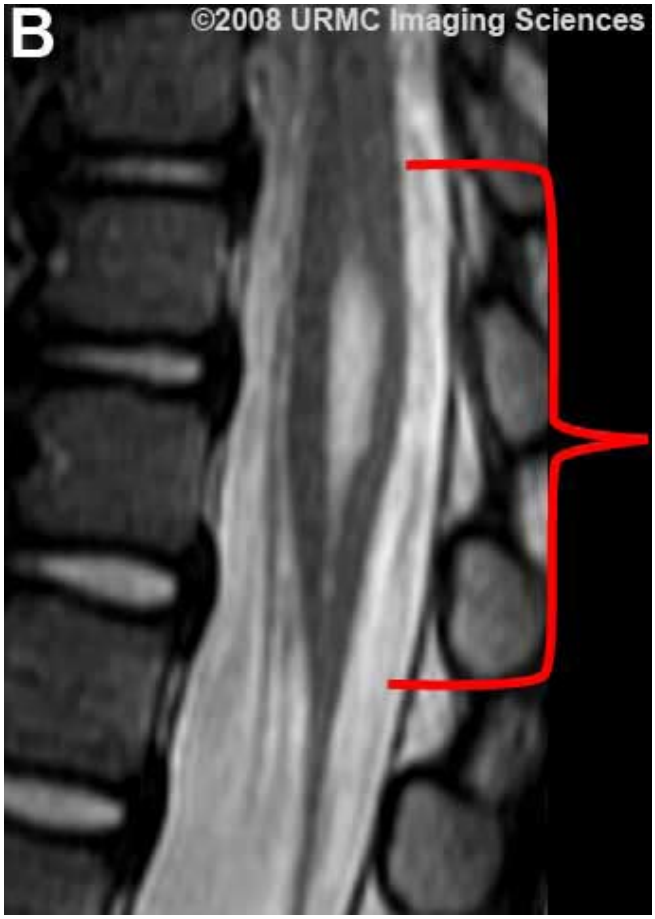
CLINICAL PRESENTATION: Patient is a 12-month-old male with right leg weakness and sacral dimple on physical exam.

IMAGING FINDINGS: Ovoid cystic dilatation of the distal central spinal cord between the conus medullaris tip and filum terminale origin.



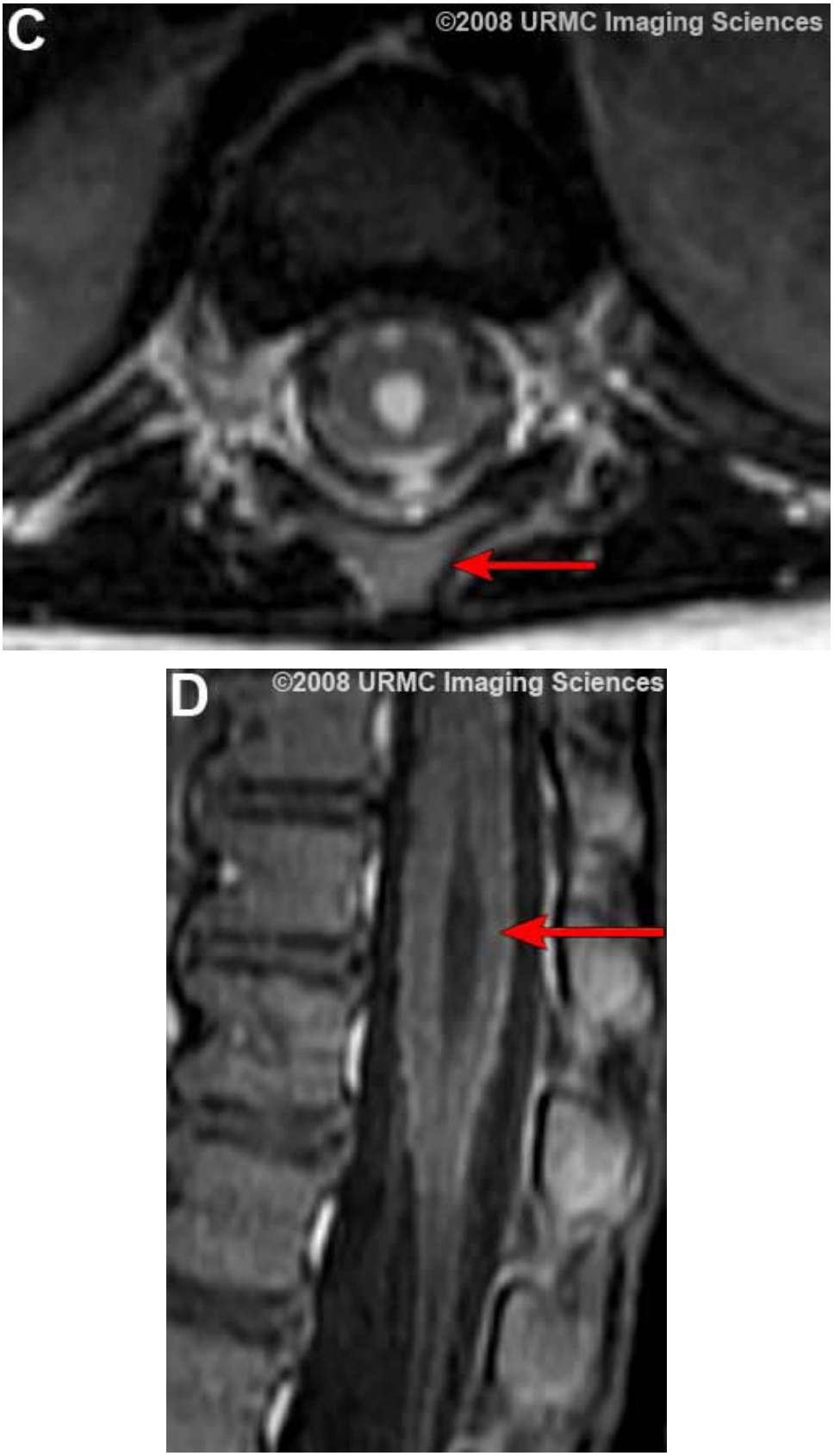


Figure 1A-D.

DIAGNOSIS: Ventriculus terminalis

DISCUSSION:

Pathology (microanatomy):

* Mild ovoid cystic (ependymal lined) dilatation of distal central spinal cord canal

* Represents point of union between the portion of the central canal may by neuralation and portion made by canalization of the caudal cell mass

* Usually disappears during 1st six months after birth

Location: between conus medullaris tip and filum terminale origin

* Size: 2-4mm transverse, usually

* < 2cm in length

Imaging Findings (macroanatomy):

* CECT: cord expansion, non-enhancing IM cavity between CMT and FTO

* MR: (between CMT and FTO; CSF intensity signal characteristics)

* T1W: hypointense IM cavity

* T2W: hyperintense IM cavity

* T1+C: non-enhancing IM cavity

Clinical symptoms:

* Usually asymptomatic (likely to be identified in 2.6% of children without spinal disease)

Associated abnormalities:

Occasionally identified with:

* caudal regression

* tethered cord

REFERENCES:

1. Bowen B , Rivera A , Saraf-Lavi E. Spine Imaging: Case Review Series. 2nd ed., Mosby, 2008.
2. Ross JS, Brant-Zawadski M, Moore K, et al. Diagnostic Imaging: Spine. Amirsys, 2004.