Intramedullary epidermoid cyst

Past reports have described congenital intramedullary epidermoid cyst onset in children, adolescents and relatively young people. There are only a few reports of elderly onset intramedullary epidermoid cysts [1].

Congenital epidermoid cysts grow slowly and therefore often present after early childhood. Acquired epidermoids may occur secondary to lumbar puncture, surgery, or trauma. Presentation may range from back pain, radiculopathy, myelopathy, infection, or symptoms of chemical meningitis from rupture.

Diagnosis

MRI can be useful in diagnosis, by identifying the size of the cyst component, multiplicity, the compartment in which they lie, and involvement into adjacent compartments. Perhaps most importantly, MRI in conjunction with CT may characterize the tissue type of the intracystic contents.

MR imaging demonstrates a mass hypointense or isointense on T1-W and hyperintense on T2-W images, often similar to CSF. Diffusion restriction provides a definitive diagnosis of an epidermoid cyst, distinguishing the cystic structure from arachnoid cysts which show no restriction of diffusion. On CT, epidermoids have low density very similar to CSF [2].

Differential diagnosis

Spinal inclusion cysts are aetiologically diverse lesions, though in paediatric practice, most occur in association with a dysraphic anomaly. There are no consistent clinical or radiological features that will reliably distinguish between dermoid and epidermoid, and both may result in symptoms from mass effect or infection [3].

Treatment

Definitive management of epidermoid and dermoid cysts is complete removal of the cyst capsule.

Despite aggressive surgical management, in many cases the cystic structures recur, in which case reexploration is performed.

The evacuation of the cyst contents is preferable, especially in cases with elderly onset and congenital origin [4].

Outcome

There is only one reported case of malignant transformation in the literature [5].

1)
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