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CASE REPORT

Ruptured thoracic intraspinal dermoid cyst in a patient with skeletal abnormalities of thoracic spine – A case report

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KEYWORDS

Spinal dermoid;
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Magnetic resonance imaging;
Hemi vertebrae

Abstract Spinal dermoids are congenital multi- or unilocular benign cystic tumors lined by squamous epithelium containing skin appendages. The tumours become acutely symptomatic following infection or rupture. We present a very rare case of ruptured thoracic spinal dermoid cyst in a 12 year old girl with congenital vertebral abnormalities, who presented with back ache of recent onset and a 5 year history of unnoticed slipping of footwear while walking. Magnetic resonance imaging reveals a lesion in the thoracic spine with fat droplets in bilateral frontal horns of lateral ventricle and cisterns of brain. Other additional findings were also noted.

1. Introduction

Dermoid cysts are rare benign lesions within the central nervous system that were first described by Verratus in 1745 and further popularized as the "pearly tumor" by Cruveilhier in 1829 (1,2). The etiology of dermoid cysts is not completely understood, and theories for both congenital and acquired etiologies exist (2–4). The lumbosacral region is the most common site to be affected (60%) (5). They are benign slow growing lesions which become clinically apparent during the second or third decade of life (6) and males are more commonly affected. We present a very rare case of a ruptured thoracic spinal dermoid cyst with fat droplets in both lateral ventricles and cisternal spaces of brain in a 12 year old girl with congenital vertebral abnormalities.

2. Case report

A 12 year old female presented with a 4 day history of back pain. Pain was mild dull aching without any radiation. Patient had a chronic 5 year complain of unnoticed slipping of footwear. Developmental mile stones were properly achieved without any delay. On neurological examination no abnormality was detected. Gait was normal.

X-ray thoracic spine anteroposterior view and lateral view was done. X-ray showed an exaggerated kyphosis of thoracic spine with butterfly and hemivertebrae from D6–D9 levels.

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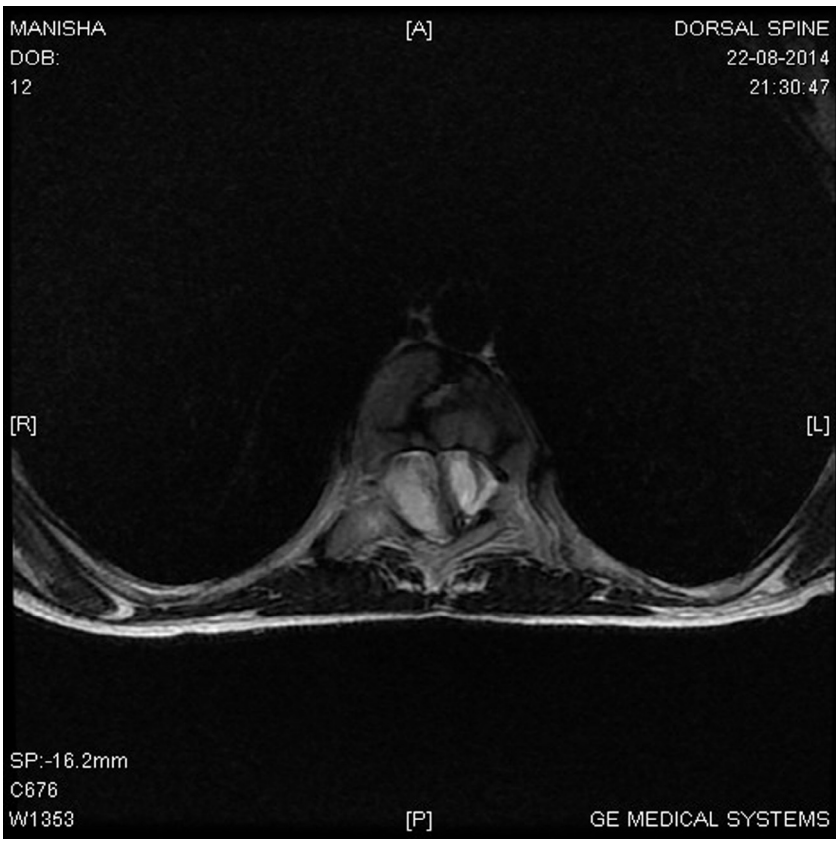

Fig. 1 T2w axial sections at D8–9 level showing a bony spur dividing the cord into two hemicords.

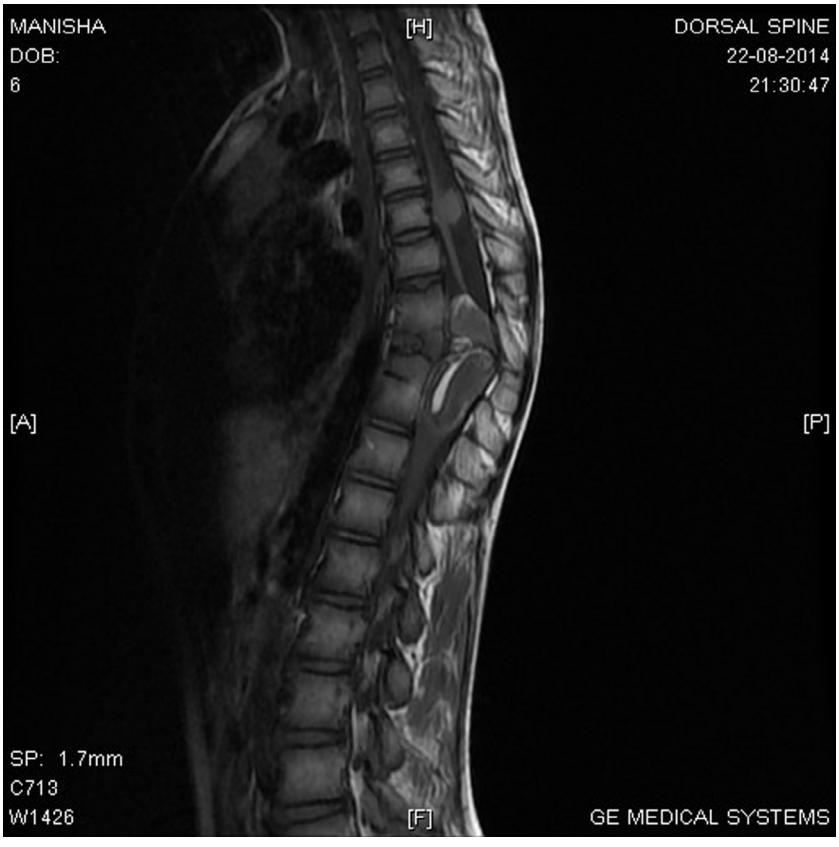

Fig. 2 Sagittal T1w section of brain reveals scattered hyperintensities in ventricles and cisterns which suppressed on fat saturation technique suggestive of fat droplets from ruptured dermoid.