

Spinal dermoid presenting with equinovarus deformity of the foot: A Case Report

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Citation

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Abstract

Spinal dermoid tumors are relatively rare tumors especially in the adult age group. These slow growing benign tumors may become symptomatic at a later age leading to pain and neurological deficits due to involvement of the nerve roots and the cauda equina. We present here a case of a 36-year-old woman who presented with gradually progressive equinovarus deformity of the foot and scoliosis. Magnetic resonance imaging (MRI) revealed a large spinal dermoid tumor at the thoracolumbar junction.

CASE REPORT

A 36-year-old woman presented for evaluation of gradually progressive equinovarus deformity of the left foot and scoliosis (Fig 1).

Figure 1

Figure 1: Equinovarus deformity of the left foot.



She first noticed that her left foot was turning inwards about a year ago but at that time did not seek medical attention. There was no history of trauma to the back and she denied any back or leg pain. Neurological examination revealed an equinovarus deformity of left foot and a slightly broad based gait (Video). MRI lumbosacral spine revealed a large dermoid tumor in the spinal canal situated at the thoracolumbar junction (Fig 2).

Figure 2

Figure 2: T weighted MRI of the thoracolumbar spine showing a large spinal dermoid with fat content.



X-ray of the lumbar spine revealed scoliosis (Fig 3). Surgical excision of the tumor was deferred taking into account the absence of pain or difficulty walking and the possibility of bladder incontinence post surgery. As of this writing she remains in close follow up.

Figure 3

Figure 3: X-ray lumbar spine showing scoliosis.



Video: Patient video showing equinovarus deformity of foot while walking.

DISCUSSION

Dermoid tumors or cysts are not true neoplasms. They along with epidermoid tumors represent inclusion cysts consisting of ectodermal elements ¹. They can either be congenital where in during third to fifth week of embryonic

development the ectoderm might get entrapped in the neural tube giving rise to epidermoid and dermoid cysts. Trauma has been implicated in the generation of these benign tumors later in life. Rarely skin tissue may be forced into the vertebral canal during lumbar puncture or surgery giving rise to these cystic tumors. Spinal dermoid tumors are most commonly situated near the thoracolumbar junction and may be either intradural intramedullary or intradural extramedullary. Extradural location is the least common for these slow growing tumors. They may involve the conus medullaris and cauda equina leading to back and leg pain as well as weakness. Terai et al reported a case of adult onset tethered cord syndrome due to an intradural dermoid cyst ². Due to the pain and sensory deficits their patient underwent laminectomy with decompression of the canal and excision of the intradural cyst. We decided to withhold any active neurosurgical intervention in our patient due to the absence of pain or difficulty walking and also taking into consideration the possibility of bladder incontinence post surgery.

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