Transverse myelitis is an uncommon cause of progressive weakness, dysfunction in bowel and bladder habits, and sensory loss. The process is typically acquired and immune mediated.

**Clinical Presentation**
A 55-year-old man with a history of chronic osteomyelitis of the right foot with prior trans metatarsal amputation (TMA), uncontrolled type 2 diabetes mellitus and hyperlipidemia presented with 3 weeks of progressive thoracolumbar spinal pain, bilateral weakness in his lower extremities, and urinary incontinence.

**Physical examination:**
- Spinal tenderness at T4
- Bilateral symmetric upper extremity weakness 4/5
- Bilateral lower extremity weakness 0/5
- Reflexes in the upper extremities were 1+ bilaterally and absent in the lower extremities
- Sensation to fine touch was diminished below the knees bilaterally
- He had an open wound on the right foot that appeared infected

**Differential diagnosis:**
Epidural abscess, Transverse Myelitis

**Learning Objectives**
Transverse myelitis is an uncommon cause of progressive weakness, dysfunction in bowel and bladder habits, and sensory loss. The process is typically acquired and immune mediated.

**Case**

**Case Continued**

**Initial work-up and management on admission:**
- Plain radiograph of the right foot showed osteomyelitis involving the osteotomy margins of the residual third and fourth metatarsals
- MRI thoracic spine did not find evidence of abscess or osteomyelitis, but did show abnormal T2 hyperintense central cord signal from T1-T4 without enhancement
- MRI brain revealed mild to moderate sequela of chronic small vessel ischemia

**Further work-up during admission:**
- Cerebrospinal fluid revealed albumin-cytologic dissociation with 2 c/mm WBC, and 652.8 mg/dL protein

**Management during admission:**
- After infection source control was obtained by incision and drainage of the right foot TMA stump and debridement of the left third and fifth metatarsal,
- Patient was treated with intravenous methylprednisolone 1 g daily for total of 5 days. During and after the steroid course, the patient had significant improvement in his lower extremity weakness, able to move his legs out of bed and stand on his own.
- A PICC line was placed and the patient was continued on cefazolin. Patient was discharged to acute inpatient rehab for ongoing recovery

**Discussion**
This case highlights the clinical conflict of two disease processes occurring at the same time. Without adequate imaging, it may be easy to suspect an epidural abscess in a patient with Staphylococcus aureus positive blood cultures, back pain, and neurologic symptoms. However, it is important to maintain a broad differential as there can be wide variety of etiologies. Transverse myelitis is a progressive immune-mediated disorder characterized by sensory, motor, or autonomic spinal cord dysfunction associated with a sensory level on physical exam, bilateral symptoms, and spinal MRI showing a T2 hyperintense signal with absence of a compressing spinal cord lesion. In our case, a multidisciplinary evaluation aided in the work up and ultimate diagnosis, leading to rapid improvement and progressive recovery of our patient’s symptoms.

**Figure 1. MRI of the thoracic spinal cord with area of demyelination.**