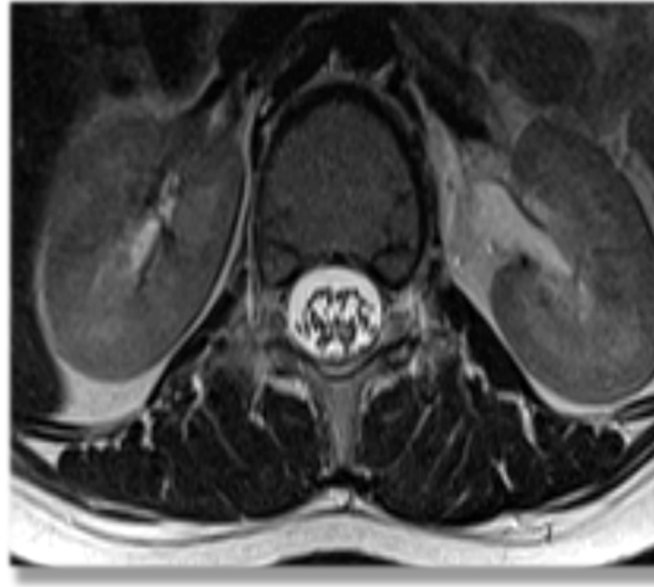




Case Description

- 8 year-old boy presented with 6 months of difficulty walking. He recently moved from Mexico and has a history of tuberculous peritonitis leading to colostomy/ileostomy, hydrocephalus requiring ventriculoperitoneal shunt complicated by tuberculous meningitis/shunt infection requiring revisions with subsequent cranial nerve 3 palsy, and navicular osteomyelitis with subsequent treatment with RIPE therapy.
- Outpatient MRI revealed clumping of the cauda equina nerve roots suggestive of arachnoiditis, intradural extra medullary lesions throughout the cervical and thoracic spine suggestive of tuberculomas, and hyperintensities in the brain (bilateral pontomedullary, bilateral thalamic, anterior left sylvian fissure).
- Interestingly, the only symptom reported was leg weakness (right greater than left). He denied bowel/bladder incontinence, numbness, tingling, or pain.
- PM&R was consulted for chronic gait instability; our service recommended continuing a glucocorticoid taper, comprehensive bedside therapy, and follow up in pediatric rehab clinic.

Imaging



Axial T2 image of the MRI demonstrating clumping of the cauda equina nerve roots suggestive of arachnoiditis.

Discussion

- Spinal tuberculous arachnoiditis develops in the context of the breakdown of granulomatous foci within the spinal cord or meninges, and in such cases, the spinal cord and spinal nerve roots are encased in tuberculous exudates.
- Patients present with subacute onset of nerve root and cord compression signs. Symptoms commonly include radicular pain, hyperesthesia/paresthesia, upper/lower motor neuron paralysis, and bladder/rectal sphincter incontinence.
- Treatment consists of antituberculous therapy for up to 18 months. There's an unclear role for adjunctive glucocorticoids as there have been no trials to demonstrate the efficacy of steroids.
- This report demonstrates an unusual presentation of a chronic sequela of a disseminated disease in a pediatric patient. It also demonstrates a possible role for glucocorticoids in acute symptom management in a patient with tuberculous arachnoiditis.

References

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Conclusion

- Tuberculous arachnoiditis is a rare and unfortunate consequence of disseminated tuberculosis.
- Improvements in functional outcomes and prevention of worsening symptoms may be seen with a course of glucocorticoids.