Spinal cord schistosomiasis presenting as a spinal cord syndrome

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DESCRIPTION

Neurological manifestations of schistosomiasis are rare. Early treatment can prevent disability.¹

A 28-year-old Sudanese man, living in Ireland for 5 years, presented with severe lower back pain, flaccid paraplegia, sensory level (T8) and urinary retention.

An MRI of the spine showed increased signal/mass-effect in the spinal cord from the T6 level down to conus medullaris and mild patchy enhancement of the abnormality following intravenous contrast (figures 1 and 2).

Differential diagnosis included: astrocytoma, ependymoma, haemangioblastoma, schistosoma mass and metastases. In the patient from a highly endemic area, presenting with subacute myelodysplasia and MRI findings suggesting spinal cord schistosomiasis, cerebrospinal fluid (CSF) studies were performed prior to pursuing tissue diagnosis.

CSF schistosomal antibodies were strongly positive, protein elevated (117 mg/dL).

Extraspinal manifestations of schistosomiasis were absent.

Treatment was initiated by dexamethasone 4 mg four times a day with dramatic clinical improvement. Following CSF results praziquantel 25 mg/kg, three doses and prednisolone 1 mg/kg were given.

Four days after praziquantel initiation patient re-presented with increasing leg weakness and urinary retention. This resolved quickly with intravenous steroids and was felt to be a response to inflammatory mediators release following praziquantel.

MRI during 19 days showed marked interval decrease in the abnormal signal and swelling in the spinal cord.

Figure 2 Postcontrast image of spinal cord lesion.

Corticosteroids and antischistosome drugs should be administered as early as possible. Steroid therapy may be prolonged, relapse following praziquantel anticipated. MRI often shows abnormalities in lower thoracic cord/conus due to anastomosis between the pelvic veins and valveless vertebral venous plexi.²

Presence of the MRI abnormalities strengthens presumptive diagnosis in appropriate clinical setting to expedite treatment and avoid invasive procedures.

Learning points

- ▶ Spinal cord schistosomiasis may present as a spinal cord syndrome.
- ▶ High index of suspicion in MRI interpretation helps to avoid invasive investigations and to expedite treatment for disability-free survival.
- ▶ Relapse following praziquantel initiation could be anticipated.

Acknowledgements Dr Patrick Dineen, Medical SHO, and Dr Busi Mooka, Consultant in Infectious Disease, were directly involved in patient's care. Dr Conor Mehigan, Consultant Emergency Medicine, was involved in immediate patient's care.

Contributors All authors were responsible for MRI interpretation and editing of the manuscript.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

Figure 1 A sagittal plane MRI (T2-weighted).

To cite: Mikulich O, Chaila E, Crotty JM, *et al.* *BMJ Case Rep* Published online: [please include Day Month Year] doi:10.1136/bcr-2013-200229

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