

SCHISTOSOMIASIS OF THE SPINAL CORD. CLINICAL AND URODYNAMIC PRESENTATION.

Hypothesis / aims of study

Schistosomiasis mansoni is an endemic fluke infection in South America, the Caribbean, and Africa. Spinal cord involvement is a rare manifestation of systemic schistosomiasis but a high index of suspicion should be maintained in all patients from endemic areas (1). Spinal schistosomiasis can take one three different forms: an intrathecal granuloma surrounding the ova, an anterior spinal artery occlusion, or myeloradiculopathy. The myelopathy is an acute reaction to the eggs in the cord (2). This study describes the clinical and urodynamics features of 9 patients with voiding dysfunction secondary to schistosomal myelopathy.

Study design, materials and methods

Were evaluated 9 patients (6 men and 3 women) with age ranging from 29 to 56 years. All patients had a history of exposure to *S. mansoni* infection and all they had chronic neurologic and urinary symptoms with a previously established diagnosis of schistosomal myelopathy. The patients were referred for neurourology evaluation. All patients underwent a urological evaluation and physical examination. Complementary assessment included blood urea nitrogen, urine culture, cystogram, and urinary tract sonography. The urodynamic evaluation was performed using multichannel equipment according to the standardized terminology of the International Continence Society, 2002 (3).

Results

The mean age of the patients was 40,7 years (range 29 to 56) at the time of the urologic evaluation. The mean duration of symptoms was 5,6 years (range 1 to 12). Lower limbs neurologic deficits were present in all patients. The urologic symptoms included urinary incontinence in 7 patients, difficult emptying bladder in 5 patients, and erectile sexual dysfunction in 2 male patients. The radiographic evaluation revealed bladder wall thickening and diverticula in 6 patients, bilateral hydronephrosis in 2 patients, vesicoureteral reflux in 2 patients and bladder calculi in 3 patients. Three patients underwent an open cystolithotripsy to treat large bladder calculi. Urodynamic studies revealed abnormal findings in all patients, including bladder areflexia (2 patients), neurogenic detrusor overactivity without detrusor-external sphincter dyssynergia (3 patients), and neurogenic detrusor overactivity with detrusor-external sphincter dyssynergia (4 patients). All patients started self-intermittent catheterization and anticholinergic drugs were added in 7 patients. After 9 months of follow-up 1 patient underwent a transurethral sphincterotomy for severe neurogenic detrusor overactivity with detrusor-external sphincter dyssynergia characterized by a high leak point pressure, poor bladder compliance and Grade III bilateral vesicoureteral reflux. Two patients who complained of erectile sexual dysfunction were treated with Sildenafil Citrate (dosage of 100 mg) with an excellent clinical response.

Interpretation of results

The main urodynamic finding was neurogenic detrusor overactivity which was presented in 77, 7% of patients. Eighty five per cent of these patients had a good response to clinical treatment. One patient needed a surgical management to relief the symptoms. Thirty three per cent of male patients complained of erectile sexual dysfunction and showed an excellent result to oral drugs.

Concluding message

Schistosomiasis mansoni is a rare cause of neurogenic bladder, but not infrequent in patients from endemic areas.

References

1 – Schistosomal myelopathy: Urologic manifestations and urodynamic findings. Urology, 59:195-200, 2002.

2 – Schistosomal myelopathy as a cause of neurogenic bladder dysfunction. Urology, 49:777-780, 1997.

3 – The Standardisation of Terminology of Lower Urinary Tract Function: Report from the Standardisation Sub-committee of the International Continence Society. Neurourol Urodyn 21:167-178, 2002.