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EFFECT OF THE SCHISTOSOMAL MIELOPATY TREATMENT WITH PRAZIQUANTEL ON THE NEUROGENIC BLADDER-SPHINCTER DYSFUNCTION: A PROSPECTIVE STUDY OF 65 PATIENTS

Hypothesis / aims of study

We described previously the situation of northeast Brazil and more specifically the State of Pernambuco as an endemic area for Schistosoma mansoni **(1).** The Word Health Organization estimates a total of 3 millions Brazilians habitants with this disease **(2).** The frequency of medullar involvement (0.3 to 30% of total cases of the disease) **(3)** prompted us to report previously a prospective study in 47 consecutive patients during the first month of clinical manifestations of the disease **(1**). There is nothing previously described on the possible changes of bladder-sphincter behavior after schistosoma mansoni treatment, bringing doubt in the timing of more aggressive therapeutic procedures**.** The objective of this study is to determine the effect of pharmacological treatment of the schistosomal mielopathy with praziquantel on the anatomic level of the neurological lesion and on the bladder-sphincter dysfunction.

Study design, materials and methods

Herein we present a prospective analysis of 65 patients with diagnosis of neurogenic bladder due to schistosomal mielopathy made by the clinical symptoms, liquor analysis, MRI, rectal biopsies and serum imunological tests. All patients were submitted to cystoscopy and to multichannel urodynamic tests in the first 30 days of the disease. after 3 months and again after 9 months of pharmacological treatment of schistosomosis with praziquantel. The MRI and clinical examination determined the neurological level of lesions.

Results

The locations of neurological involvement before treatment, in the first 30 days of the disease were: 5 cervical, 16 thoracic T7 and above, 35 thoracic T8 to T12, 3 at the lumbar segment and 6 at the conus medullaris. The evolution of this situation is presented in Table 1.

Table 1 – Anatomical levels of the neurological lesions before and after treatment of schistosomal mielopaty with praziquantel

Kruskal-Wallis 2 tailed test

The urodynamic changes on bladder-sphincter dysfunction are summarized on Table 2.

Table 2- Urodynamic findings before and after treatment of schistosomal mielopaty with praziquantel

Anatomic Level	**Pre treatment**	**3 months after**	**9 months after**	p
Cervical	5	5	5	1.00
Thoracic T7 or >	16	14	15	0.917
Thoracic T8 to T12	35	39	39	0.715
Lumbar	3	3	4	0.900
Conus medullaris	6	4	3	0.563
Total	**65**	**65**	**65**	

Urodynamic classification	**Pre treatment**	**3 months after**	**9 months after**	**p**
Normal	6	9	13	0.141
Detrusor	13	8	8	0.272

Hyperactivity without dissynergia				
Detrusor Hyperactivity with dissynergia	15	17	17	0.824
Detrusor arreflexia	9	5	5	0.341
Mixed	22	26	26	0.707

Kruskal-Wallis 2 tailed test

Interpretation of results

The treatment of the mielopaty caused by schistosoma mansoni, did not altered significantly the anatomical sequelae of the disease nor the bladder-sphincter dysfunction, in a 9 months follow up after the administration of praziquantel.

Concluding message

Therapeutic procedures can be introduced to the patients with neurogenic bladder due to schistosomal mielopaty independently of the administration of the specific pharmacological treatment of the parasite (praziquantel), since no significant changes are expected.

References

1- Schistosomal myelopaty: urodynamic findings in 47 patients during the sub acute presentation of this disease. Presented at International Continence Society 33th Annual Meeting, Florence, 5-9 October 2003

2- OMS- Rapport de la consultation informalle de l´OMS sur la lutte contre la schistosomiase. Geneve: 2-4 décembre 1998.

3- Arq Bras Neurocirurg 4:133-130, 1985.