TRANSVERSE MYELITIS, A CAUSE OF REFRACTORY NEUROGENIC BLADDER

Hypothesis / aims of study

Transverse myelitis (TM) can cause a variety of neurological symptoms for variable length of time. Almost all patients with TM have co-existing neuropathic bladder dysfunction (NBD). However, the course of NBD is variable and quite often does not follow the improvement in neurological changes in other organs of the body.

The aim of the study was to identify the course of bladder changes associated with TM and effects of management of NBD in patients with TM.

Study design, materials and methods

A prospective study on all patients diagnosed and followed up in our spinal rehabilitation centre was carried out since 2011. All relevant data were collected; age, gender, date of diagnosis, ASIA classification of the lesion, initial investigations, management and follow up investigations. All patients had a skeletal neurological insult in addition to their bladder dysfunction.

Results

In two years, 8 patient s were diagnosed were TM. They were mainly children and adolescents with average age of 9.37 (range 4 to 15 years). There were 4 males 4 females. Three of 8 patients (37.5%) had ASIA A spinal cord injury (complete). Two of 8 patients (25%) had cervical lesion causing tetraplegia, the remaining 6 patients (75%) had thoracic lesions causing paraplegia. All patients had an ultrasound scan and Urodynamics for evaluation of NBD. All had neurogenic detrusor over activity (NDO) on urodynamics with a mean maximum detrusor pressure of 44cmH2O (range 5-112).

The management involved clean intermittent catheterisation in 6 patients (75%) and spontaneous void in the remaining 2. Three patients have gained complete motor function and 2 regaining partial motor function whilst the remaining 3 are still wheelchair bound. However, the bladder remained neuropathic in all patients. Four patients (50%) rely on intradetrosur Botox injections and 6 out of 8 (75%) continue to take antimuscuranics for persistent bladder symptoms.

Interpretation of results

TM invariably leads to almost NBD. Importantly, this dysfunction appears to persist even with improvement of neurology

Concluding message

Patients with NBD secondary to TM require a long term neurourological follow up to optimise lower urinary tract function.

Disclosures

Funding: None Clinical Trial: No Subjects: HUMAN Ethics not Req'd: It is not a clinical trial, it doesn't involve the patients directly. Helsinki: Yes Informed Consent: No