

## **BIOFEEDBACK RELAXATION FOR ADULT PATIENTS WITH DYSFUNCTIONAL VOIDING**

### **Aims of Study**

Dysfunctional voiding is a condition of intermittent contractions in the pelvic floor during voiding leading to multiple lower urinary tract symptoms in neurologically normal patients. Biofeedback relaxation (BFR) had been reported as a treatment option for this voiding disturbance, but few articles discuss BFR in adult patients. We reported our preliminary experience of BFR in treating adult patients with dysfunctional voiding.

### **Methods**

Between Oct. 2000 and Nov. 2001, 39 neurologically normal patients (21 female and 18 male, median age 39 years, range 15-70) with dysfunctional voiding were treated by biofeedback relaxation. Dysfunctional voiding was diagnosed according to the results of videourodynamic study (VUDS). Average follow-up since finishing therapy has been 3.3 months (1-10 months)

### **Results**

There was a significant improvement of average maximum flow rate ( $Q_{max}$ ) after BFR (13.6 vs 18.6 ml/sec,  $P < 0.05$ ). The flow pattern was normalized in 20 patients (51%) and nearly normalized in 10 patients (26%). A pronounced reduction in symptoms was found in 30 patients (77%) and 20 patients (51%) were free from drug. Recurrence of symptoms was noted in 2 cases and improved after another course of biofeedback. There was no significant difference in demographic data and VUDS findings between responders and non-responders. These two groups had a significant difference in previous skeletal muscle relaxant responsiveness ( $P = 0.04$ ).

### **Conclusions**

According to our preliminary experience, it can thus be concluded that BFR is an effective choice for treating dysfunctional voiding in adult patients. Patients who had good previous response to skeletal muscle relaxant have better results and recurrence of symptoms can be subsided with another course of BFR. Long term follow-up is still needed for these patients.