Paper

Urol. int. 1974;29:221

Intermittent Electrical Stimulation

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Key Words

Urine
Incontinence
Urethra
Stimulation

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Measurement of squeeze in either the urethral or anal sphincter during stimulation reveals that the response is almost always of short duration when external electrodes are used. When stimulation is given in short intermittent bursts, however, a powerful squeeze results each time the stimulus is applied.

A method of intermittent stimulation (units constructed by Lucas Medical Equipment Ltd.) has therefore been developed to treat selected patients with incontinence of urine. Of 14 patients treated, 5 were symp-tomatically cured, 6 greatly improved, and 3 were failures. Symptomatic improvement was associated with a significant improvement in the urethral pressure profile. As a simpler and quicker method of giving intermittent stimulation, maximal perineal stimulation was used in 54 patients. It was of symptomatic benefit only in patients with incontinence secondary to pelvic floor weakness. Of 26 such patients, 9 were cured 6 months after treatment. There was no associated improvement in the urethral pressure profile in these patients.

Neither maximal perineal stimulation nor intermittent stimulation through external electrodes are of any curative value in incontinence secondary to bladder dysfunction. it is suggested that if stress incontinence is to be treated by electrical means then intermittent and not continuous stimulation should be used.