

URINARY INCONTINENCE IN GYNAECOLOGIC UROLOGY

by

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Introduction

The key anatomic defect involved in stress incontinence is the loss of the posterior urethro-vesical angle. Jeffecoate and Roberts (1952) were among the first to call attention to the importance of the anatomic configuration of the urethro-vesical junction and proximal urethra to the continence mechanism. Hodgkinson (1953) employing the metallic bead-chain urethro-cystography on continent and incontinent women, reached essentially the same conclusion.

The emphasis of stress incontinence of urine which has characterized western gynaecological conferences and literature during the last 40 years has tended to distract attention from the equally important female complaint of painless urgency incontinence which is purely a psychosomatic disorder in which emotional factors play a predominant role. Associated with these are marked disturbances of autonomic function producing a hyperactive and hyperirritable bladder muscle with resultant loss of its normal physiological function. Although stress and urge incontinence may well be clinically indistinguishable, the etiology is completely different. One is the result of an anatomic defect whereas the other is a psychosomatic disorder. The treatment of the

former is surgical while approach should be conservative in the latter. The situation is further complicated by the fact that some women suffer from both stress and urge incontinence.

Material and Methods

A total of 107 cases with isolated urinary tract problems attended the gynaecologic urology clinic—from Nov., 1977 to Dec., 1978, out of which only 38 cases complained of urinary incontinence.

An attempt was made to find out the true incidence of urinary incontinence, both stress and urge and their various treatment modalities.

Diagnostic Procedures

Following detailed history and clinical examination patients were subjected to the following investigation:

- Routine urine examination.
- Routine culture and sensitivity, where required
- Routine biochemical analysis
- I/V pyelography and cystoscopy wherever indicated
- Cystometry (water manometry)
- Policy of psychiatric consultation was made if patient failed to respond to recognised therapy.

Out of a total of 107 cases with lower urinary tract problems, there were 38 cases (35.5%) of incontinence of which 25 cases (23.8%) were of stress incontinence. In 14 cases (13%) S.U.I. was as-

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sociated with varying degrees of genital prolapse. There were 10 cases (9.3%) of urge incontinence, due to detrusor instability and in 3 cases (2.2%) both stress and urge incontinence were present simultaneously.

Table I shows the nature of surgical

TABLE I
Treatment Modalities in Cases of S.U.I.
(25 cases)

Type of treatment	Cases	%
1. Kelly's Plication of bladder neck with or without hysterectomy	18	72%
2. M. M. K. repair	2	8%
3. Treatment awaited	5	20%

treatment undertaken in cases of stress incontinence. The type of treatment depended on the finding of metallic bead chain cysto-urethrogram. Type I cases were tackled by the vaginal approach in contrast to type II where abdominal approach was undertaken. Out of 25 cases of stress incontinence, 18 (72%) had Kelly's plication of bladder neck with or without concomitant hysterectomy. Only 2 cases (8%) required M.M.K. repair. In 5 cases (20%) treatment is still awaited.

Discussion

By far the most common cause of leakage of urine in women is true stress incontinence which accounts for about three-fourths of all female urinary incontinence. (Green 1975), whereas painless urge incontinence is one of the most frequent psychosomatic disorder in gynaecology and represents nearly one-third of all cases of urinary incontinence (Frewen 1972). In general the medical profession has been slow to appreciate its significance or to understand its implication. Detrusor dyssynergia is a special variety of urgency incontinence which is fundamentally a

chronic, painless, urgency-frequency type of incontinence. It is psychosomatic and functional in origin in at least 50-80% of cases which results in indiscipline and in voluntary detrusor activity (Green 1975). This is the second most common cause of urinary incontinence in women (Arnold *et al* 1973 and Bates *et al* 1973).

The present study shows the overall incidence of urinary incontinence to be 35.5%. Twenty-five out of 38 cases (23.3%) had pure or true stress incontinence, whereas 10 cases (9.3%) suffered from detrusor dyssynergia. Three cases (2.8%) had both, stress and urge incontinence. In the present study 14 cases (13%) of true anatomic stress incontinence had associated genital prolapse of varying degrees.

All cases of S.U.I. were multiparous ranging from para 2 to para 6. No other obvious obstetrical reason could be found out for its development. There was no remarkable difference in the obstetrical behaviour between the two groups of patients with S.U.I. with or without associated genital prolapse. Patients with detrusor dyssynergia were all from the perimenopausal age group with various familial liabilities enough to label them as psychosomatic.

Treatment of S.U.I. is dependent on the findings of chain cysto-urethrogram. Most of the cases required only Kelley's repair with or without concomitant hysterectomy. Only 2 cases required abdominal cysto-urethropy. None required sling operations so far (Table I).

Cases of detrusor dyssynergia were treated with tranquilizers, timed voiding and probanthene. Initially, the treatment was given for 3 months and future treatment varied according to the response. All patients of this group showed satisfactory result with this regime. So far

none have required psychiatric consultation.

Cases with mixed incontinence were first treated for their detrusor instability after which they were subjected to surgery for their residual incontinence.

On follow up, all the patients treated so far were found to be continent.

References

1. Arnold, E. P., Webster, J. R., Loose,

A. and Brown, A. D. G.: *Am. J. Obstet. Gynec.* 117: 805, 1973.

2. Bates, C. P., Loose, H. and Stavton, S. L. R.: *Surg. Gynec. Obstet.* 136: 17, 1973.

3. Frewen, W. K.: *J. Obstet. Gynec. Brit. Emp.* 79: 77, 1972.

4. Green, T. H.: *Am. J. Obstet. Gynec.* 122: 368, 1975.

5. Hodgkinson, C. P.: *Am. J. Obstet. Gynec.* 65: 560, 1953.

6. Jeffcoate, T. N. A. and Roberts, H.: *Am. J. Obstet. Gynec.* 64: 721, 1952.