

INEFFECTIVENESS OF TREATMENT OF URETHRAL SYNDROME IN WOMEN

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ABSTRACT — Four hundred ninety-eight episodes of 150 women with female urethral syndrome (lower urinary tract symptoms without definite objective findings) were evaluated. Internal urethrotomy appeared less effective than cystoscopy and dilation. Office dilation with larger sounds appeared less effective than a 16 F sound. Antibacterials and anticholinergics showed no clear evidence of effectiveness.

Vast numbers of women are afflicted with urinary frequency, urgency, dysuria, suprapubic and low back pain, and feelings of pressure and difficult voiding persisting or recurring, sometimes despite all therapeutic efforts. These women have normal findings on pyelograms, urinalysis and culture, and residual urine. Cystoscopic findings of hyperemia or exudate on the trigone, inflammatory polyps at the bladder neck, tightness of the meatus or distal urethra, or inflamed periurethral glands appear to occur as often as in women without lower urinary tract symptoms,¹ and their significance is controversial.

This has been called the urethral syndrome,² and it has been presumed to be due to some pathologic condition in or around the urethra. Farrar *et al.*³ discussed the possible roles of detrusor instability and outlet obstruction in its pathogenesis. Raz and Smith⁴ have considered spasticity, and Gallagher, Montgomerie, and North² have studied the relation to infection. Bruce *et al.*⁵ did not find that results of introital cultures related well to the urethral syndrome.

Numerous forms of treatment have been proposed for recurrent urinary symptoms in

women. Results are reported as 53 to 100 per cent successful, but it is not always possible to tell how many cases were recurrent cystitis or organic obstruction and how many were urethral syndrome.

Davis⁶ and Keitzer *et al.*⁷ have opened the bladder neck. Hirschhorn,⁸ Reed,⁹ and Alexander, Morrissette, and Leadbetter¹⁰ have done hymenoplasties. Internal urethrotomy has been studied by Kerr, Leadbetter, and Donahue,^{11,12} McLean and Emmett,¹³ and Keitzer and Allen.¹⁴ Meatotomy and external urethroplasty have been done by McAninch¹⁵ and Richardson.¹⁶ Riba¹⁷ has done various procedures including Y-V-plasty. Paraurethral glands have been unroofed by Reiser¹⁸ and Leiter.¹⁹ Evans²⁰ advocated vigorous dilation. Medical management has spanned the range of antibacterial, autonomic, and analgesic medications.

Material

A consecutive series of 150 women with this syndrome has been evaluated in an attempt to determine whether or not any form of treatment was superior. The patients were divided into the following treatment groups: (1) cystoscopy under anesthesia with urethral dilation to 34 F; (2) internal urethrotomy to 38 F with meatotomy and unroofing of periurethral glands; (3) passage of 20 to 28 F sound; (4) passage of 20 to 28 F sound plus antibacterial and anticholinergic medication;

EDITOR'S NOTE. The author writes "this paper probably belongs in the 'Journal of Negative Results,' but I think it represents the truth about this common and frustrating condition."

TABLE I. *Results of treatment*

Treatment	No. Improved / Over 3 Mo. / Treatments	Per Cent Improved
No treatment	5/5	100
16 F sound	11/16	69
Anticholinergics	24/35	68
Cystoscopy and dilation to 34 F	42/63	67
16 F sound plus antibacterials plus anticholinergics	118/187	63
Antibacterials	47/79	59
Antibacterials plus anticholinergics	10/17	58
20-28 F sound plus antibacterials plus anticholinergics	28/57	49
Internal urethrotomy plus meatotomy plus unroofing of periurethral glands	12/26	46
20-28 F sound	3/13	23
TOTALS	300/498	60

(5) passage of 16 F sound; (6) passage of 16 F sound plus antibacterial and anticholinergic medication; (7) anticholinergic medication (belladonna, propantheline, oxybutynin, flavoxate, etc.); (8) antibacterial medication (trimethoprim-sulfamethoxazole, nitrofurantoin, nalidixic acid, methenamine salts, etc.); (9) anticholinergic and antibacterial medication; and (10) no therapy.

Patients were instructed to return if and when their symptoms recurred enough to be bothersome. Efficacy of treatment was judged on how soon the patient returned. A return in under three months was considered unimproved, return in three to six months moderate improvement, and return over six months greater improvement.

Results, ranked in order of per cent improved, are tabulated in Table I.

Comment and Conclusion

The criterion for improvement (no return visit for over three months) may be subject to other interpretations, but it seemed more objective than the patient's often vague answer to the question, "For how long did you feel better?"

This study is not truly random. Patients with less severe symptoms are less willing to be admitted to the hospital for cystoscopy and dilation. The figures for internal urethrotomy and for cystoscopy should be comparable, however, since urethrotomies were done consecutively on

patients who would ordinarily have had cystoscopy and dilation. The worse results after combination urethrotomy, meatotomy, and unroofing of periurethral glands suggest that these are not the answer.

The relative success of minimal treatment probably reflects patients with minimal symptoms. The fact that dilation to 20 or 28 F appeared less effective than passage of a 16 F sound argues against urethral narrowing as an etiologic factor.

Since antibacterials appeared less effective than anticholinergics or other treatments, infection would not appear to be a major consideration. On the other hand, since antibacterials plus anticholinergics were no better than antibacterials alone, the factor of bladder spasticity does not seem significant.

Detailed questioning revealed only an occasional relationship of symptoms to sexual feelings or sexual activity, diet, bathing habits, clothes, douches, vaginitis, or other illnesses or injuries. Although many patients appeared to have more than their share of neurotic symptoms, this finding was by no means universal.

These women very seldom appeared on other occasions with pyuria or bacteriuria, and significant urinary or other pathology has not been observed to develop.

None of the recommended treatments for female urethral syndrome has been found to be clearly superior. An average of 60 per cent of patients will be able to go for over three months

without sufficient symptoms to warrant a repeat office visit. It would appear that treatment should be supportive and harmless.

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