

# The irritable urethral syndrome: discussion

T. C. O'DOWD, MD, MRCP

Lecturer in General Practice, University of Wales College of Medicine, Cardiff

THE symptoms of lower urinary tract disorder are so widespread that the lay term 'cystitis' is deemed to be self-explanatory by both patient and doctor. The urethral syndrome is a symptom complex of frequency, dysuria and a feeling of incomplete bladder emptying in women in the absence of demonstrable infection. The syndrome has become so controversial that not only is there dispute about the causes but also about what it should be called. To understand some of the difficulties clinicians and researchers have found, it is necessary to trace the origins of the urethral syndrome.

The year 1956 was a landmark in the diagnosis of urinary tract infections. Edward Kass developed a reproducible quantitative method for separating contaminants from true bacteriuria: working on asymptomatic females in a hospital outpatients department, he arbitrarily designated a count of  $10^5$  bacteria or more per millilitre of urine as the dividing line between true bacilluria and contamination.<sup>1</sup> Large populations were screened for asymptomatic bacteriuria using Kass' criterion to distinguish between true bacteriuria and contamination in the process of collection. The same criterion has gradually become applied to symptomatic patients — those with  $10^5$  or more conventional organisms per ml being interpreted as significant infection and those with less than  $10^5$  organisms per ml being regarded as having insignificant infection.

When Kass' criterion was applied to women presenting to their general practitioner with lower urinary tract symptoms, significant bacteriuria was found in only half the patients.<sup>2</sup> The remaining 50 per cent have either sterile urines or insignificant bacteriuria, and it is to these women that the label 'urethral syndrome' has been applied. In a prevalence study in the Rhondda Valley Waters found that one woman in five had experienced urinary symptoms in the previous year, yet only 10 per cent of these women consulted their doctor about the symptoms.<sup>3</sup> Thus it would seem that most of the women were not sufficiently troubled by the symptoms to seek medical attention.

The prevailing philosophy on research into the urethral syndrome over the last decade seems to be that if a conventional organism is not found, then a closer

microbiological search for other organisms is needed. Indeed, research into the urethral syndrome has moved from the community to the specialist and the laboratory. Such investigations have employed microbiological skills and techniques not normally available in the community. The population base for these studies has been either the referred patient, the symptomatic student, or genitourinary clinic patients many of whom have really been suffering from urethritis or lower urinary tract infections (UTI) and not the urethral syndrome. There is great risk of scientific and therapeutic error in extrapolating from such selected populations onto a more general population.

Of all the unconventional organisms currently associated with the urethral syndrome, *Chlamydia trachomatis* is the one most often mentioned. Until recently most of our knowledge about the incidence of genital *Chlamydia* came from genitourinary and campus clinics. It would seem that the more sexually active and promiscuous a population is, the more likely it is to have *Chlamydia*. There is a higher isolation rate in symptomatic women who already have gonorrhoea, *Trichomonas vaginale* or who have been in contact with a male who has non-specific urethritis. A low incidence of genital *Chlamydia* was reported in asymptomatic patients attending routine family planning clinics, and in hospital staff volunteers.<sup>4</sup>

Two recent studies of patients presenting to general practitioners have not yielded any *Chlamydia* in association with urinary symptoms.<sup>5,6</sup> However, one study in which the women attending an inner city practice were screened revealed an incidence of *Chlamydia* of 8 per cent but most of these women had co-existing vaginal discharge and genitourinary symptoms.<sup>7</sup> While promiscuity is often a value judgement, it would seem appropriate to look for *Chlamydia* in promiscuous women with persistent genitourinary or vaginal symptoms in general practice. However, women suspecting a venereal cause for their symptoms are likely to refer themselves to the more anonymous genitourinary clinic.

In another search for a bacteriological explanation for the urethral syndrome, Maskell has implicated organisms which require carbon dioxide for their survival.<sup>8</sup> These fastidious microaerophilic organisms, notably lactobacilli, are commensals in the vagina. Maskell's hypothesis has

been controversial, as caution needs to be applied before attributing a pathogenic cause to these organisms. Furthermore, applying Kass' criterion to such organisms is an unproven assumption that such a cut-off point of  $10^5$  organisms per ml is valid for microaerophilic bacteria. Indeed, having such a cut-off figure may be unhelpful in these infections, which may well need to be assessed on clinical as well as bacteriological grounds.

It would therefore seem that a traditional microbiological approach to the urethral syndrome has at best led to controversy. A change in approach to the problem was first suggested in 1956 by Gray and Pingleton, who reviewed 20 years of clinical practice dealing with urethral syndrome patients: they advanced the opinion that 'the syndrome occurs in those with great nervous tension and severe anxieties'.<sup>9</sup> There was a slight air of disrespectability about this opinion over the next 20 years, as researchers followed a microbiological path. However, it has been demonstrated that there is much anxiety, obsessiveness and psychogenic illness among these patients.<sup>10,11</sup> In a recent general practice study urethral syndrome sufferers were shown to have had much more psychosomatic illness than age- and sex-matched patients with UTI and were also more likely to have received anxiolytic medication than UTI patients.<sup>12</sup>

Allowing urethral syndrome patients to monitor their own symptoms with diaries demonstrated that each episode was short and self-limiting.<sup>6</sup> Surprisingly, the symptom 'dysuria' was absent in many of the women with the urethral syndrome. Many clinicians have assumed that patients complaining of 'cystitis', 'waterworks troubles', or whatever the local terminology is, have frequency and dysuria. Indeed, general practitioners in the study<sup>12</sup> accurately predicted, in advance of the laboratory report on the mid-stream urine (MSU) test, which patients had UTI and which had urethral syndrome. They seemed to do this by balancing patient and illness factors, in other words by balancing the psychological make-up of the patient with the presence or absence of dysuria. This challenges the assumption that UTI and urethral syndrome can only be distinguished by laboratory examination of the urine. It also challenges the need to do MSU tests in patients with urinary symptoms in general practice if a simple enquiry about the symptom dysuria helps to discriminate between UTI and urethral syndrome.

Management of the urethral syndrome has been chaotic. Drastic methods have been used to treat the syndrome: urethrotomy, urethral dilatation and steroid injections of the urethra have all been tried and largely abandoned. These methods have been employed perhaps out of frustration with the patient rather than on any therapeutic rationale. Management of the urethral syndrome has been angrily indicted by a sufferer, Angela Kilmartin, founder of the now disbanded U and I Club. In her book, which is not complimentary to doctors, she

advocates self-help:<sup>13</sup> her aims are prevention and management and the recognition that a permanent cure may never be possible; indeed, a knowledge of Ms Kilmartin's self-help regimen might be of more assistance to the patient than antibiotics or referral.

There are strong similarities between the type of patient affected by the urethral syndrome, the irritable bowel syndrome, the irritable bladder syndrome and a host of other conditions which have a psychosomatic component. It is difficult to say if such people are anxious because of their symptoms or that their symptoms are merely a manifestation of anxiety. Such patients are well recognized in general practice as being a drain in terms of time, investigations and human emotion. There is little doubt that it is easier in the short term to see a solution to the urethral syndrome sufferer in physical terms. Certainly a more composite view of the syndrome is warranted and it may be that there is a need for both patient and doctor to negotiate the recognition of a psychosomatic aspect to the problem. Perhaps, as a first step towards this recognition, we should see the syndrome as the 'irritable urethral syndrome'. While clinicians and microbiologists continue to see the syndrome in entirely physical terms there is little doubt that the patient's urine will be analysed for a solution to her problems.

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## Address for correspondence

Dr T. C. O'Dowd, Department of General Practice, Health Centre, Llanedeyrn, Cardiff CF3 7PN.