

while a successful graft might have served as an expiation of these feelings, a failure might have produced unconscious feelings that the donor had murdered his brother.

These workers have also discussed³ the psychological and socio-economic problems of five patients who underwent renal transplantation and their donors. The reaction of a man who received a kidney from a female donor was such that they suggest that this represented a threat to the patient's sexual identity. Hence they recommend that if possible the donor and patient should be of the same sex. Four of the five patients showed evidence of ambivalence towards the donor. Patients had difficulty in dealing with their sense of obligation to their donors. At first they were grateful, but later they tended to develop resentment with feelings of guilt. Some donors also developed resentful feelings towards the recipient, and sometimes criticized him severely for not behaving as the donor felt he should. These papers make out a good case for psychological assessment of both potential recipients and donors. Ambivalence of feeling is present in all close relationships. There may even be occasions when not becoming a donor could have as profound a psychological effect as becoming one.

Urethral Syndrome

Half of all women who have frequency and dysuria do not have significant numbers of bacteria or pus cells in the urine.^{1,2} It is easy to call these women neurotic, but their symptoms are distressing and usually have an organic basis, though elaborate investigation may be needed to make a diagnosis.

The absence of organisms and of pus does not necessarily exclude disease in the upper urinary tract, especially since pus cells may disappear rapidly from urine stored even in the cold.³ Whatever the urine report states, if the history is convincing trouble in the upper urinary tract must be ruled out. Patients with "urethral" symptoms may have stones, hydronephrosis, duplex reflux, and even tumours. If the pyelogram shows scarring it may be necessary to culture urine from each ureter before ruling out renal infection,⁴ and repeated culture of early morning urine specimens should be done to exclude tuberculosis. These investigations are conventional urological practice, and disease of the upper tract is not often missed. Urethral disease is another matter.

Pathogens from the paraurethral glands may be washed away in the first few millilitres of urine so that they do not register in a colony count on urine passed later on. To detect them the two-glass test⁵ may be used, or, better, the urine got from the bladder by suprapubic puncture may be compared with that passed through the urethra.⁶ More direct examination of urethral secretions is difficult and hitherto has largely been the province of the venereologist working on an unusually selected population. About three-quarters of the female contacts of promiscuous men with non-gonococcal urethritis harbour T-strain pleuropneumonia organisms in the urethra⁷⁻¹⁰; a small number grow the TRIC agent¹¹; those taking oral contraceptives especially may grow candida¹² and others the trichomonas. All these agents may cause urethritis but will not be detected by conventional bacteriological studies of the urine. Yet there remain women with urethral symptoms who have none of them.

Endoscopy is necessary. It may be difficult to pass even a narrow (22 Ch) cystoscope, because of urethral resistance.

Cystoscopy may show trabeculation and injection of the trigone—but these signs are seen in patients with none of the symptoms of urethritis, and neither can be measured objectively. To see the urethra it is necessary to use the panendoscope or urethroscope, which may show the hillocks and polypoid dear to an earlier generation of urologists who had no doubts about their significance or their treatment.¹³ Histologically these oedematous blebs of mucosa may show some inflammation in paraurethral glands and metaplasia of the urethral mucosa, but both changes can occur in normal controls. More convincing is the sight of pus issuing like toothpaste from paraurethral glands, or the uncommon view of a diverticulum showing like a golf-hole in the floor of the urethra.

Among these women with "sterile cystitis" are a few victims of overuse of antibiotics with a sore "abacterial vaginitis."¹⁴ There are some whose urethritis is chemical in origin, from contraceptive foam, bubble baths,¹⁵ douches, aerosol deodorants, and obsessive washing with soap and water. Some are allergic to antioxidants in the rubber of their contraceptive devices, or can relate the syndrome to intercourse, the menstrual cycle, or to the direction in which they wipe themselves after defaecation.

The real question is whether this urethritis, a safe condition, goes on to develop into upper urinary tract infection, which is a dangerous one. In some series patients presenting initially with sterile cystitis went on to develop pyelonephritis^{1,2,4} but in others they did not.⁵ As some patients with infection of the upper urinary tract excrete organisms only intermittently in the urine, adequate prospective studies are the only way of settling this question, and until then patients with this syndrome should be followed with care.

In the meantime it is a miserable condition and the patient would like to be rid of it. When disease in the upper urinary tract and outflow obstruction in the bladder have been excluded the next step is to attempt to identify causative organisms in the urethra, and to treat these appropriately with antibiotics. If the urethra is narrow and even if there is no residual urine there may be a place for the traditional ritual urethral dilatation of the urologist, though benefit from this procedure may well be the result of therapeutic suggestion.

Despite treatment along these lines some patients scarcely improve year after year, and we still need to know more about the pathology of the condition. Until we do, it is wrong to dismiss the patient out of hand as yet another neurotic with a tiresome symptom for which there is no cause and no treatment.

The Queen has appointed Sir Solly Zuckerman, F.R.S., a member of the Order of Merit.

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