Sex and the bladder

In the female both the lower urinary and the lower genital tracts derive from the primitive urogenital sinus, and in adult women the urethra and the bladder base are next to the vagina. It is not therefore surprising that sexual activity may cause urinary symptoms and that lower urinary tract dysfunction may cause sexual problems.

Many women have an urge to void urine during or immediately after sexual intercourse.^{1,3} This has been associated with a rigid perineum and nulliparity causing the posterior wall of the bladder to be irritated with repeated penile thrusting.⁴ The resultant postcoital dysuria is known as "honeymoon cystitis," and is often followed by a urinary tract infection. Organisms are massaged into the bladder during intercourse, and if they are not voided soon after they multiply and cause infection.⁵ Some women are particularly susceptible to such urinary tract infections. They find voiding after intercourse difficult, possibly because of a high intraurethral pressure.⁶

Contraceptive diaphragms may reduce urine flow rate,⁷ and in a recent epidemiological study the risk of referral to hospital for urinary tract infection was two to three times higher among diaphragm users than among well matched controls.⁸ Postmenopausal women are also at risk of dysuria, urgency, and urinary tract infection after coitus because of the atrophic changes that occur after oestrogen withdrawal and the failure of adequate lubrication during intercourse.⁴

Urinary tract infection in women is so common that self help guides have been published.⁹ For most women acute attacks are associated with sexual activity, and simple measures such as perineal hygiene, change of coital technique, and voiding after intercourse may solve the problem. Diaphragms should be avoided in women with recurrent urinary problems, and postmenopausal women should be given vaginal lubricants and oestrogen replacement therapy. A high fluid intake combined with bicarbonate to alter the pH of the urine and a short course of antibiotics such as trimethoprim or nitrofurantoin are recommended for acute attacks. Chlamydia is difficult to identify as a causative organism but responds to 14-21 days of doxycycline.¹⁰

Urinary incontinence is common among women and appears to have a profound effect on sexual function. Sutherst studied 103 women attending an incontinence clinic; 46% said that their urinary disorder had adversely affected sexual relations.¹¹ Women with unstable bladders (detrusor instability) had a significantly higher incidence of sexual dysfunction than women with genuine stress

incontinence.¹¹ Urological symptoms may sometimes be the apparent rather than the direct cause of sexual difficulties: an organically based bladder problem may be conveniently used, consciously or unconsciously, to avoid sexual contact.¹² After treatable organic disease has been excluded referral to an expert in psychosexual problems may be helpful.

Many women find incontinence during sexual intercourse difficult to talk about. Hilton studied 324 sexually active women referred to a gynaecological urology clinic and discovered that 24% experienced incontinence during intercourse, two thirds on penetration, and one third at orgasm.¹³ Urodynamic studies showed that 70% of those who became incontinent on penetration had genuine stress incontinence and 4% detrusor instability, whereas 42% of those who became incontinent at orgasm had genuine stress incontinence and 35% detrusor instability.¹³

No formal studies have been undertaken of treating this distressing condition. In my experience those women who leak during penetration and who have urodynamically proved genuine stress incontinence benefit from bladder neck surgery. But a few women with genuine stress incontinence who are continent during intercourse pre-operatively notice leakage after the operation despite their stress incontinence being cured. This complication may be caused by incomplete bladder emptying leading to a chronic urinary residual after the operation. Women who lose urine at orgasm are difficult to treat whether or not they have organic disease. I have found that imipramine 50 mg taken during the evening helps some,¹⁴ and those women who have detrusor instability may respond to oxybutynin chloride 5 mg three times a day or terodiline 25 mg three times a day.

There are several published references to female ejaculation. Nearly 40 years ago Grafenberg described the expulsion of "large quantities of clear transparent fluid from the urethra at the height of orgasm."¹⁵ He thought that this was more likely to be secretions from the intraurethral glands than urine and since then a whole book, *The G Spot*, has been written about the sexual significance of the anterior vaginal wall and urethra.¹⁶ The authors describe in great detail the loss of fluid from the female urethra during sexual activity, but they have no scientific evidence that this fluid is anything other than urine. Could it be that female ejaculation is a far more socially acceptable concept than urinary incontinence during intercourse? If so, we must try to help our patients to accept their disabilities and enjoy their sex lives despite their bladder problems; but this will occur only when our sexually

liberated society finds it is as easy to talk about urinary incontinence as about sexual behaviour.

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Prescribing psychotropic drugs in general practice

It is a paradox that most psychotropic drugs are prescribed in general practice yet most of the studies showing their value have been carried out in patients seen by psychiatrists. Generalising from one population to the other is legitimate only if the specialist sample is representative of the general population, but this is rarely established. Antidepressants and benzodiazepine hypnotics and tranquillisers are the most commonly prescribed psychotropic drugs, accounting for about one in six of all prescriptions.¹ It is difficult to know whether these drugs are being inappropriately prescribed; published evidence merely tells us that antidepressants are effective in moderate and severe depressive illness² and that benzodiazepines are extremely effective in promoting sleep and relieving anxiety in the short term.^{3,4} The clinical trials that have been published give little indication of which patients should receive the drugs and for how long.

Excessive growth in prescriptions for benzodiazepines in the 1970s led to concern over their use.⁵ The concern was reinforced by evidence that they were being prescribed for excessively long periods.⁶ Subsequent studies have shown that about two fifths of regular users of benzodiazepines develop pharmacological dependence and have withdrawal symptoms when the dosage of their drugs is reduced or treatment is stopped.⁷⁻⁹ Potential consumers now distrust all psychotropic drugs, and prescribing is more cautious.

Some indications of whether psychotropic drugs are being used correctly in general practice have come from four recent papers, two published in this issue (p 601 and p 603). Paykel and others have shown unequivocally in a placebo controlled trial that amitriptyline is effective in the depressed patients seen in general practice and that such patients can tolerate doses normally recommended for clinical efficacy (up to 175 mg of amitriptyline daily).¹⁰ They also show, however, that patients with mild depression (scores of 12 or less on the Hamilton rating scale¹¹) are not helped by this dose of

amitriptyline. There was a significant improvement with amitriptyline compared with placebo after only two weeks of treatment, a shorter period than that reported from psychiatric practice.² The magnitude of drug placebo differences was also greater than in most psychiatric studies, which is not surprising. Patients referred to psychiatrists by general practitioners are more resistant cases and are also more likely to have personality disorders¹²⁻¹⁴; these differences might account for the lesser response to antidepressants seen in psychotropic patients.

Tricyclic antidepressants thus do improve depressive illness seen in general practice. They are not placebos with unpleasant side effects. There has been doubt over their efficacy in general practice patients ever since Porter's influential study published 18 years ago,¹⁵ although the reasons for the disparity between his results and those of Paykel and others are not clear. What is less certain is the value of the common practice of prescribing antidepressants such as amitriptyline over a long period in low dosage. Mant and others¹⁶ confirmed the findings^{6,17} that long term prescribing of antidepressants is common and that the mean dose given (under 50 mg daily) is less than that recommended. Although studies in psychiatric patients suggests that 75 mg daily is inadequate, there may still be benefit in milder depression; and many general practitioners would deny strongly that 50 mg daily is merely a placebo dose.

The prescribing dose of benzodiazepines is better defined. We have long known that long term prescription of these compounds is wrong¹⁸ and that dependence becomes more likely as the treatment period gets longer.^{19,20} This is reinforced by Mant and others showing that when benzodiazepines had been prescribed for six months in regular dosage the prescription was likely to become semipermanent. Because even the short term prescription of benzodiazepines may lead to withdrawal problems some practitioners recommend avoiding them altogether.^{21,22} Short term reassurance and counselling are equally effective and do not carry the same risk of adverse effects.²³

The elderly are, however, regarded differently. Not only are they the group most likely to be prescribed benzodiazepines long term,^{1,24} but, as Rodrigo and others have shown, they have a high incidence of physical illness associated with their psychiatric disturbance (p 603). Although the conclusions of Morgan and others that many of these long term users are likely to be dependent is almost certainly correct (p 601), there are more apologists for long term treatment in the elderly than in the young. Benzodiazepines are muscle relaxants and anticonvulsants as well as sedatives and, despite their risks, have fewer side effects than other sedative drugs. The feeling has also developed that dependence is not so important in the elderly as in the young. These assumptions may be wrong, but it would be interesting to know whether counselling and psychotherapy would be as effective as benzodiazepines in the elderly.

Despite some reservations, the prescribing of psychotropic drugs in general practice appears to be improving and is much more carefully monitored than it was ten years ago. A large deficiency in our knowledge is the best way of managing those who take psychotropic drugs long term, usually in combination. It is unconstructive to criticise the doctor for regular prescribing if there are no feasible alternatives.

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