Incontinence of Urine — is the general practitioner equipped to deal with it?

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Curriculum vitae

Prof Brocklehurst is Professor of Geriatric Medicine at the University of Manchester. He obtained his MBChB at the University of Glasgow in 1947, his MD with Honours in 1950 and has been awarded FRCP Edinburgh and Glasgow and an Honorary MSc from the University of Manchester in 1974. He has been very involved in the geriatric field for the last two decades, and his present appointment (since 1970) is Professor of Geriatric Medicine of the University of Manchester and a Director of the Unit for Biological Ageing Research, University of Manchester, since 1974. In January 1988 he was knighted by Queen Elizabeth. He has published nine text books on Geriatrics and has contributed chapters to twenty text books written by others. He also has over 50 scientific papers, mainly in relation to the ageing bladder and incontinence, vitamins and nutrition in the elderly, the structure of geriatric care, stroke, and the geriatric day hospital.

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Summary

Urinary incontinence affects around 12% of the elderly population and many under-65s. It is gradually becoming recognised by sufferers as remediable. They are less likely to conceal it than in the past and now expect their general practitioner to diagnose and cure it. There is now a well developed rationale of investigation, and treatment modalities including that of precipitating factors such as urinary tract infection, constipation, the effect of drugs, senile vaginitis etc. A simple algorithm is helpful in general practice in arriving at a diagnosis and prescribing treatment.

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Urinary incontinence affects people of all ages and both sexes. It is a symptom which not only causes misery and disability but which is also often concealed because of the stigma and shame which has been attached to it in the past. Nowadays a more enlightened attitude is developing due to the effect of a number of pressure groups which are succeeding in convincing the public that incontinence is a symptom like any other and not a reflection of moral weakness, laziness or degeneracy. More incontinent patients are now prepared to reveal their condition and to accept that treatment is possible. Are general practitioners equipped to deal with this change in public attitudes?

The most recent and most comprehensive

prevalence study in UK of urinary incontinence by Thomas et al, in 1980[1] showed that incontinence (defined as wetting twice a month or more) often affected 1,6% of men and 8,5% of women aged 15 to 64 and 6,9% of men and 11,6% of women aged 65 and over. At that time the great majority of these incontinent patients had not reported the symptom to a medical or nursing attendant. A UK working party called the Incontinence Action Group, published its report "Action on Incontinence" in 1983[2]. The report

Urinary incontinence was mostly concealed because of the stigma and shame attached to it

said "a dilemma exists between fostering public awareness and demand for treatment on the one hand, and on the other a medical and nursing profession which is largely unable to respond because of its inadequate knowledge". The Working Party surveyed the teaching time spent in the medical curriculum on the causes and management of incontinence and found that the major teaching on the subject took part in the geriatric medicine course and that this course itself was rudimentary in many medical schools (only 13 of the 29 medical schools at that time having an academic department of geriatric medicine). The average teaching time on incontinence in these departments was somewhere between one and one and a half hours per student.

Post-registration training for general practice in UK consists of two years of hospital appointments at house officer level and one year as a trainee in general practice. Information from course

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organisers in these vocational educational programmes suggested that most entrants to general practice picked up knowledge about urinary incontinence in an *ad hoc* fashion and the main source from which they were assumed to gain specific instruction, was in geriatric units if they served as senior house officers, and from community nurses attached to the general practices. Incontinence was dealt with specifically in only 13% of courses run by these course organisers.

With this meagre allotment of time devoted to a highly complex subject, it would be surprising if general practitioners were adequately equipped to deal with urinary incontinence.

How then should the subject be taught and understood?

First a few general principles:

a) Incontinence is a symptom and therefore requires an appropriate diagnosis before treatment can be attempted.
b) In old people, incontinence is one of the "geriatric giants" that is the four major presenting symptoms of illness in the elderly, namely mental confusion, falls, incontinence and immobility.
c) Incontinence is more often a disorder of the central nervous system than of the lower urinary tract.
d) Old age predisposes people to becoming incontinent, but does not cause incontinence — a further precipitating event is necessary.

Nowadays patients are more prepared to reveal their condition – but the medical profession is largely unable to respond because of inadequate knowledge

Having these general principles in mind, education may proceed with the following objectives:

1. To understand that bladder control is regulated through a reflex arc from the bladder to the second, third and fourth sacral segments of the spinal cord, through the parasympathetic nerves and this reflex arc itself is sufficient for automatic bladder-filling and emptying. The acquisition of continence depends on sensory impulses being transmitted to the bladder centre in the cerebral cortex and so entering consciousness; to an awareness of social necessity of continence, and so the ability to transmit inhibitory impulses from the cortical centre to block the spinal reflex arc and thus prevent the bladder from contracting until time and place are appropriate. This process may be impaired by ageing (particularly of the cerebral cortex), and by pathological lesions anywhere on these long pathways.

2. Psychological and behavioural disturbances may impair this inhibition and cause the ideopathic unstable bladder.

3. The bladder itself may be the site of infection, tumour or calculus causing incontinence.

4. The urethra may be obstructed by prostatic enlargement or by constipation and cause overflow incontinence.

5. The urethra may be affected by atrophic changes due to oestrogen depletion in aged females.

6. The pelvic floor muscles — particularly the pubococcygeus — may be weak as a result of prolonged or difficult pregnancies leading to stress incontinence.

7. Congenital defects (spina bifida, spina bifida occulta, fistulae etc) may cause incontinence.

8. The classification of incontinence may be anatomically based (the pelvic floor, the urethra, the bladder and the central nervous system); in old age it is conveniently divided into transient and established incontinence — the former being the by-product of some other lesion and the latter the main presenting problem. The major causes are shown in Tables 1 and 2.

9. The management of incontinence may be conveniently accomplished in the first instance by the use of an algorithm (Figure 1). Having excluded simple precipitating causes, this then

Table 1 Transient incontinence

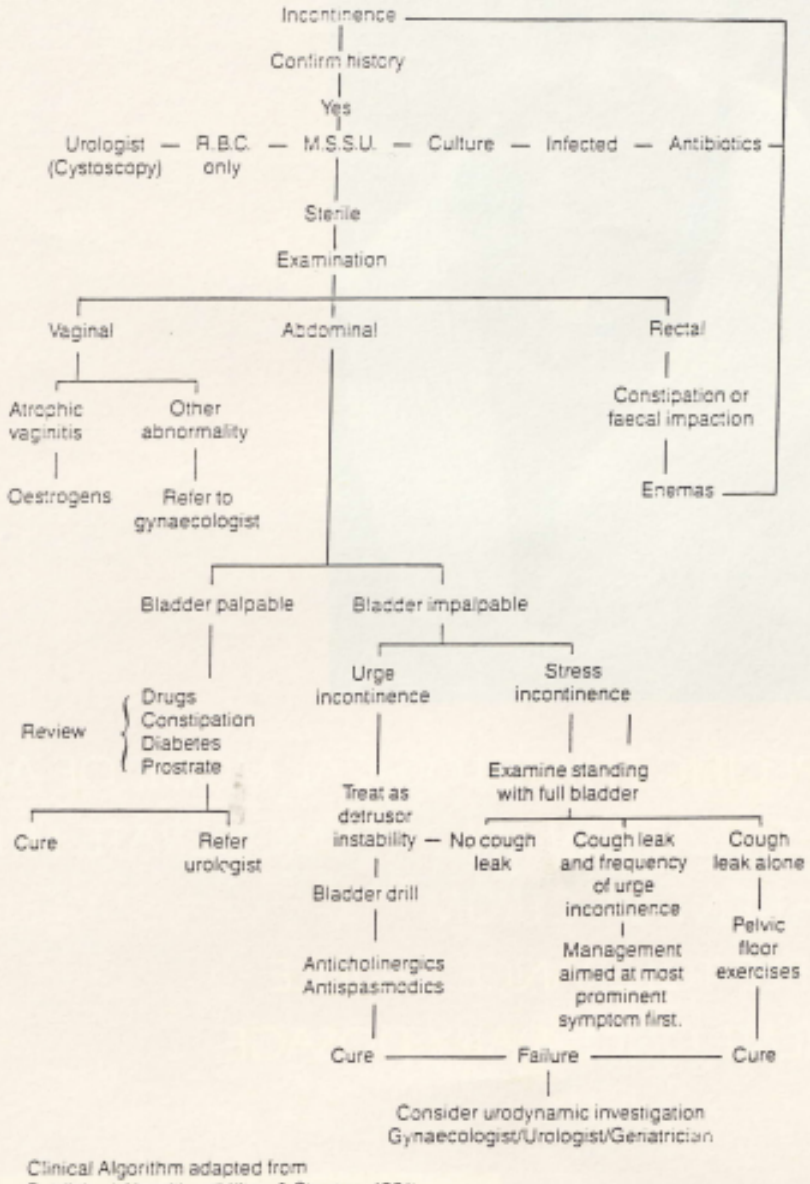
Acute confusional state	Atrophic vaginitis
Immobility	Retention with overflow
Stroke	— drug effect
Cystitis	— constipation

Table 2

Established incontinence

Ideopathic unstable bladder
Uninhibited neurogenic bladder
(Various cerebral lesions)
Detrusor sphincter dyssynergia
(Various spinal cord lesions)
Atonic neurogenic bladder
Autonomic neuropathy
Retention with overflow
Bladder outlet obstruction (prostate, stricture)
Stress incontinence
Bladder tumour or calculus

Figure I. DIAGNOSIS AND TREATMENT OF URINARY INCONTINENCE



Clinical Algorithm adapted from Published Algorithm (Hilton & Stanton, 1981).

leads the general practitioner to treating the condition in the first instance on a symptomatic basis of urge or stress incontinence.

10. In treating the symptoms of stress, or urge incontinence, the major treatment modalities are pelvic floor exercises, the use of drugs (cholinergic or anticholinergic), bladder training or bladder re-education (behavioural therapy), timed voiding.

11. Where the direct management based on the algorithm fails, referral to a specialist for urodynamic assessment, is necessary.

12. The practical management of incontinence which is intractable involves the use of appropriate and effective body-worn drainage systems and pads, internal or external catheters. The range of these is so considerable that the availability of a nurse consultant (continence nurse adviser) will be of great assistance to the general practitioner.

References

1. Thomas M, Plymat K R, Blannin J et al. Prevalence of urinary incontinence. Brit Med J 1980; 281: 1243-6
2. Action on Incontinence (Report of a Working Group). King's Fund Project Paper No. 43, 1983.