of leaving much of their food and in both cases other patients would notice and either plead with or reprimand them. One of the most dramatic instances of the power of the majority group at the meal table concerned a man who rejected his meal with, "I told them no fish. No fish I told them." There persisted from others at the table a chorus of approving noises about the meal until he too ate his fish; and at the end of the course he commented, "Well, that's the best bit of cod I've had for a long time." So it was also that one patient who announced that she was going to write a letter of complaint about the meals found no supporters and the letter was never written.

Similar consensual norms prevailed in respect of what constituted a sufficient cause to press the bedside button and call a nurse. It was common for patients to announce to others their needs before pressing the button; for example, a patient might say, "I think I'm going to need a commode" or "I wonder if they'll give me another painkiller yet." These would then be informally screened. If it was only a case of a water jug that needed filling another patient might say, "They'll be round in a minute with tea." It was the general view that nurses were conscientiously responsive to calls and that this standard could be jeopardised only by abuse. So powerful was the influence of the patient group that embryonic complaints seldom survived gestation.

Conclusion

There are three observations running through this account which are worth pointing up by way of conclusions having a bearing on medical sociology. Firstly, there is an antipathy between sociological and medical norms regarding the status and prestige of experienced professionals. The most fleeting observation of a consultant's ward round shows medicine to be the more hierarchical and authoritarian. Observers accustomed to more democratic relationships are adversely disposed to this practice and to the regulation of the system which it symbolises. Sociological observation not grounded in the rationale of medical pactice tends to be negative in its evaluation. I suggest that medical practice should not be judged by its failure to conform to norms prevailing among social scientists.

Secondly, I believe that there is a case for the depersonalisation of patients as part of a coping strategy. It is achieved systematically and serves the disabled patient in settings that would otherwise be perceived as compromising or embarrassing.

Thirdly, the role of the patient population as an agency of social control is important. The patient group operates most effectively in the control of dissent and in the marginalisation of potential dissidents. The effect of this is to purify the role of the nursing staff, whose responsibility for care is unadulterated by conducting public relations with patients as consumers.

I thank my colleague Bob Skelton for comments on earlier drafts of this paper.

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Clinical Algorithms

Urinary frequency and urgency

LINDA CARDOZO

Definitions

Diurnal frequency is the passage of urine every two hours, or more than seven times during the day.

Nocturia is the interruption of sleep more than once each night because of the need to micturate. It is common to void during the night when sleep is disturbed for other reasons—for example, insomnia or lactation—but this does not constitute nocturia.

Urgency is a strong and sudden desire to void which, if not relieved immediately, may lead to urge incontinence.

Incidence and causes

Frequency and urgency are common symptoms which often coexist and may occur with other symptoms, especially incontinence or dysuria. It is unusual for urgency to occur alone because once it is present it almost invariably leads to frequency to avoid urge incontinence and to relieve the unpleasant symptom.

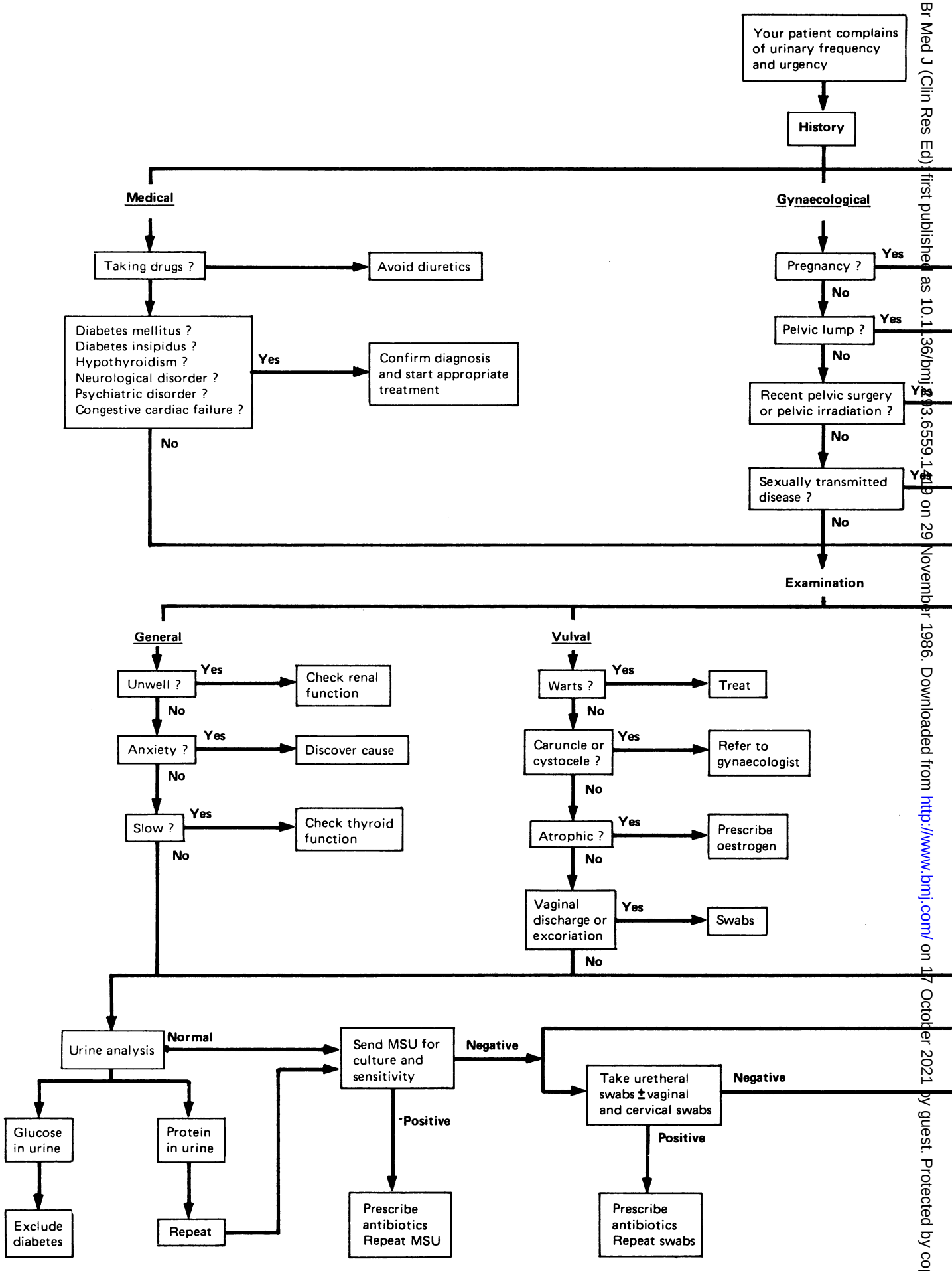
About 20% of adult women suffer from frequency of micturition and 15% have urgency. There is a slight increase in the incidence of these symptoms around the time of the menopause.[1] The incidence of nocturia increases with age, and women over the age of 70 normally have to void during the night.

The table shows the more common causes of frequency and urgency of micturition.

Common causes of frequency and urgency of micturition

Excessive drinking	Genital warts
Habit	Bladder mucosal lesion (eg papilloma or neoplasm)
Anxiety	Bladder calculus
Urinary tract infection	Urethral caruncle
Urethral syndrome	Urethral diverticulum
Detrusor instability	Radiation cystitis or fibrosis
Pregnancy	Upper motor neurone lesion
Cystocele	Impaired renal function
Pelvic mass (eg fibroids)	Diabetes mellitus
Small bladder capacity	Diabetes insipidus
Urethritis	Hypothyroidism
Chronic retention of urine	Congestive cardiac failure (nocturia)
Diuretic treatment	
Previous pelvic surgery	

King's College Hospital, London SE5
LINDA CARDOZO, MD, MRCOG, consultant gynaecologist



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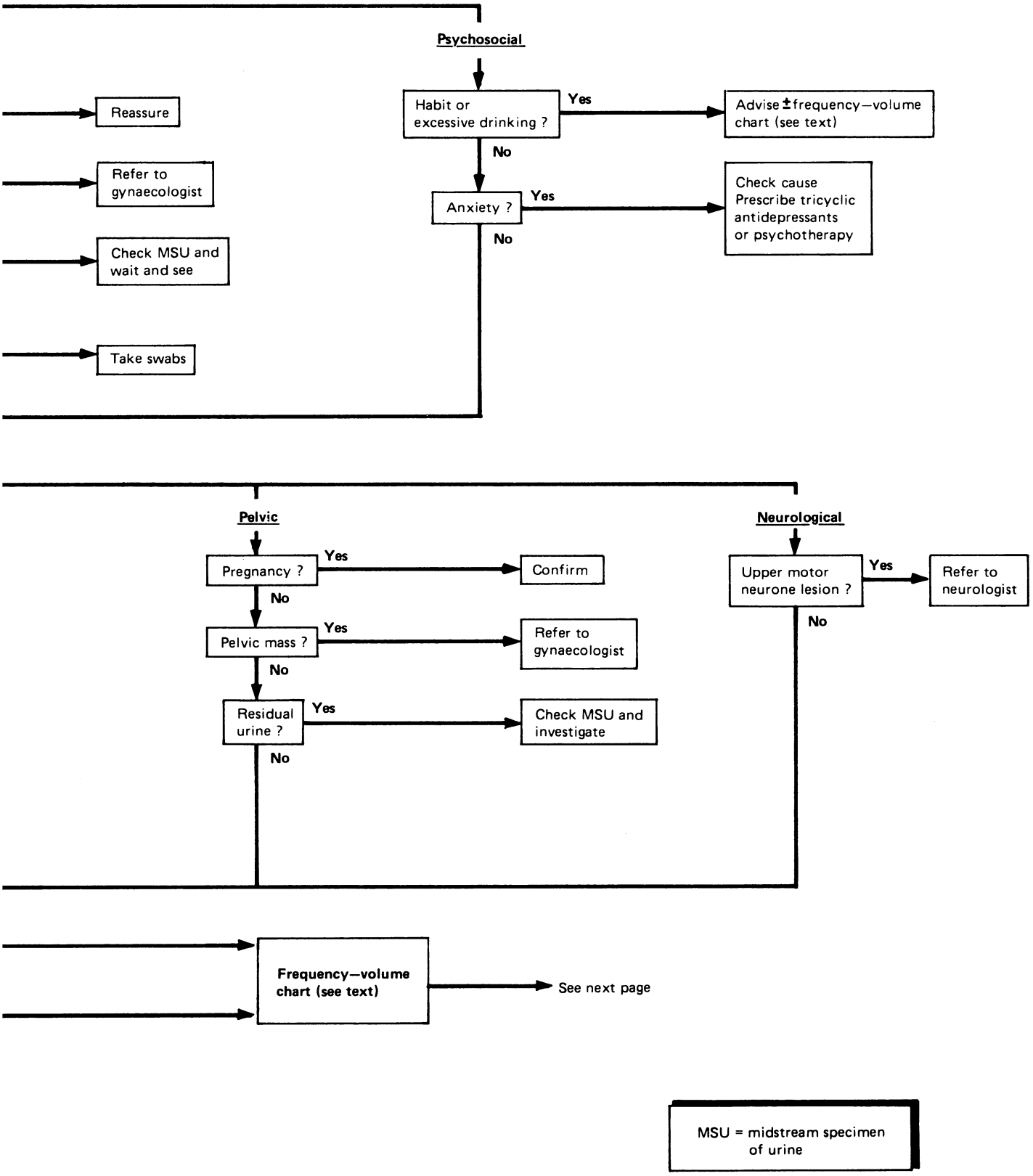

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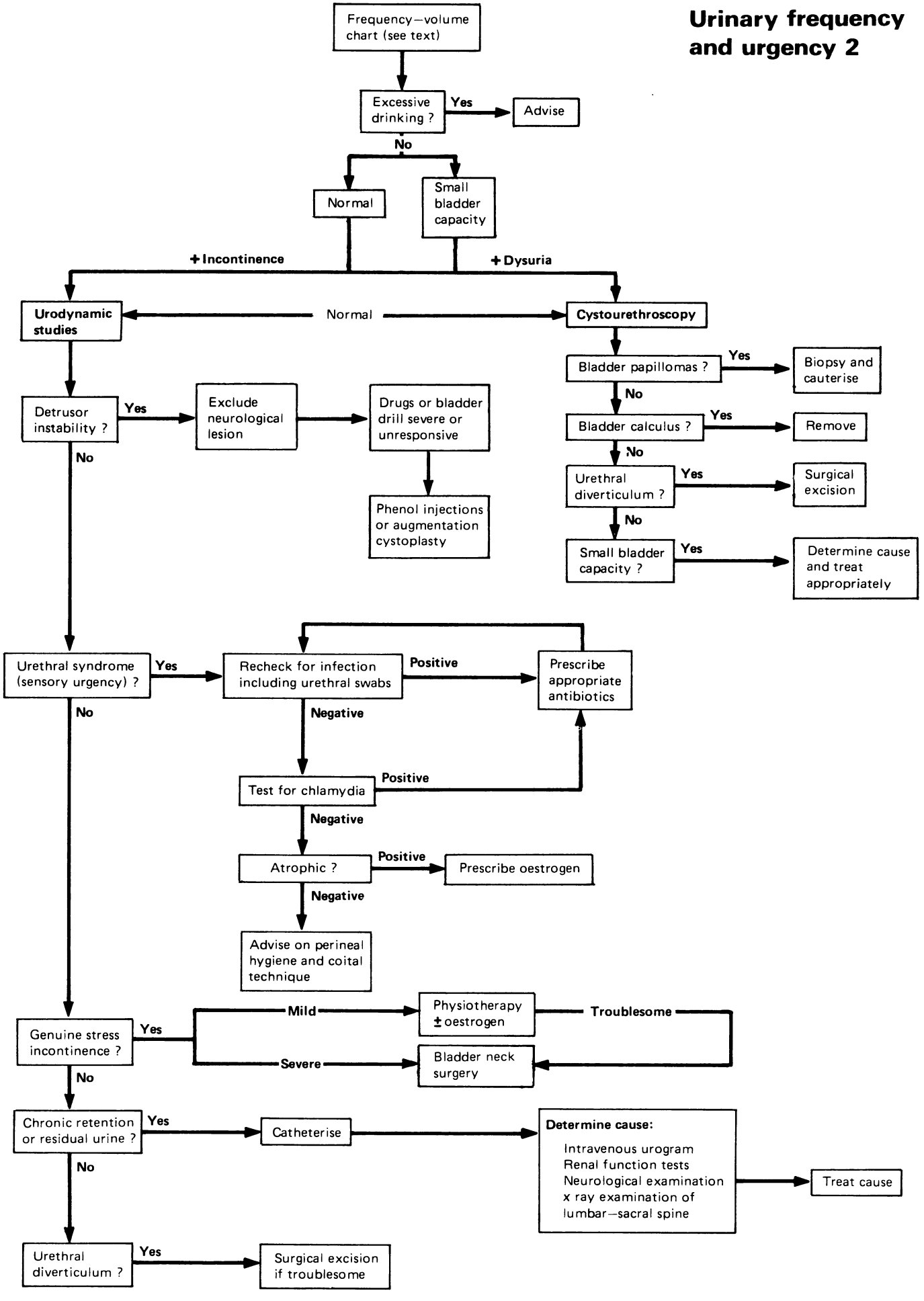

Assessment

Many of these problems can be excluded by history and examination alone (see algorithm).

One of the commonest causes of frequency and urgency of micturition is lower urinary tract infection—either cystitis or urethritis—and it is therefore important to exclude infection before undertaking expensive time consuming investigations. When difficulty is encountered obtaining an uncontaminated midstream specimen of urine suprapubic aspiration should be used. If the symptoms are strongly suggestive of infection but results of culture are negative three early morning specimens should be sent for testing for acid fast bacilli. Patients with abnormal vaginal discharge or obvious vulval excoriation should have vaginal, cervical, and urethral swabs sent for culture. Chlamydia may be a causative organism and requires a special culture medium.

Women with a history of haematuria and loin or groin pain in whom a urinary tract infection cannot be identified should be referred for intravenous urography and cystoscopy. If impaired renal function is suspected serum urea and electrolyte concentrations, creatinine clearance, and urine osmolarity should be estimated.

Frequency of micturition often occurs in women who have a normal bladder capacity. The most common reason for this is excessive fluid intake, which can easily be determined using a frequency-volume chart. The patient is instructed to measure the volume of all her standard drinking utensils and for one week she is asked to chart everything she drinks and the volume she voids at the appropriate time on her chart. For some women who void frequently through habit or because they are anxious that they might be incontinent if they do not always have an empty bladder a frequency-volume chart may be therapeutic. Most people void a much larger volume when they wake in the morning than at any other time of day, and once this has been shown and it has been explained that bladder sensation is unreliable these women may be reassured and find it easier to void less often.

When the symptoms are troublesome and simple measures fail to show a cause the patient should be sent for either urodynamic studies or cystoscopy. The choice of investigation depends on the presence of additional symptoms. For patients with incontinence in addition to frequency with or without urgency it is best to organise urodynamic studies because cystoscopy is usually unrewarding. On the other hand, if there is dysuria in addition to frequency and urgency cystoscopy may provide more information.

Urodynamic investigations are not yet available in every district general hospital, but referral to a tertiary centre for thorough assessment is usually worth while (see algorithm). Subtracted cystometry detects detrusor instability, which is a major cause of urgency and frequency. It also shows chronic retention of urine with an atonic bladder, which may lead to frequency or recurrent urinary tract infections. Videocystourethrography with pressure and flow studies is useful when there is also incontinence of urine because it enables the cause to be determined. It also shows vesicoureteric reflux, trabeculation or sacculation of the bladder, or urethral diverticula.

Cystourethroscopy can be performed under local or general anaesthesia using either water or carbon dioxide, but it is rarely diagnostically helpful. Cystoscopy may show a small bladder capacity due to interstitial cystitis or there may be a papilloma, calculus, or, more rarely, a neoplasm. Urethroscopy can be used to detect a urethral diverticulum or urethritis.

In many cases results of all investigations are negative. Some women develop frequency of micturition as a habit after an acute urinary tract infection or an episode of incontinence. Urethral syndrome is another common cause of recurrent episodes of frequency and urgency, often accompanied by dysuria, in which results of all investigations prove negative. The urethral syndrome can occur at any age but should not be diagnosed until all organic causes have been excluded.

Treatment

If an underlying cause can be identified this should be treated first. It is often difficult to treat patients in whom there is no obvious organic disease. Patients with urgency and frequency should be advised to limit their fluid intake to two litres a day and to avoid drinking at times when their frequency causes the most embarrassment. Certain drinks such as tea, coffee, and alcohol precipitate nocturia in some individuals and should therefore be avoided.

Habit retraining is useful for women without organic disease and can be undertaken by patients at home.[2] Patients are advised to void by the clock and to increase each week the length of time between voidings until the time interval is socially acceptable. For those who cannot manage this at home inpatient bladder drill has been used with good improvement rates.[3]

Response to drugs is variable. Propantheline 15-45 mg thrice daily helps some women with frequency. If anxiety or nocturia, or both, are problems imipramine 50 mg twice daily should be tried. Desmopressin (a synthetic vasopressin analogue) is useful for some elderly patients who complain of nocturia alone.[4] If urgency or urge incontinence coexists with frequency then oxybutynin chloride 5 mg four times a day or emepronium bromide 200 mg four times a day should be tried, but both drugs have unpleasant side effects when effective doses are prescribed.

The urethral syndrome is difficult to treat and is probably caused by a combination of factors. If attacks are related to sexual intercourse perineal hygiene and a change in coital technique should be advocated. For acute attacks high fluid intake combined with bicarbonate to alter the pH of the urine and a short course of antibiotics such as co-trimoxazole or nitrofurantoin are recommended. Prolonged low dose chemotherapy may be used for relapsing or chronic cases. Recently, chlamydia has been identified as a causative organism and this responds to a 14-21 day course of doxycycline.

In perimenopausal and postmenopausal women oestrogen either taken orally or applied to the vagina may alleviate the symptoms of urgency, frequency, and dysuria and sometimes also improves mild incontinence. Prolonged, unopposed oestrogen replacement therapy may, however, lead to cystic glandular hyperplasia of the endometrium and so a progestogen should also be given for 10-13 days a month.[6]

For some women, especially those with an anxious disposition, the symptoms of urgency and frequency of micturition are psychosomatic, and after all other treatment fails referral to a psychiatrist for psychotherapy may be useful. For most patients with these distressing symptoms, however, no underlying cause can be identified and treatment must be empirical. In some cases the symptoms will abate spontaneously, but others will unfortunately always have to live with some degree of disability.

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