

medicine. With child sexual abuse it is particularly dangerous to try to do so because of the devastating social consequences of an incorrect diagnosis. The emphasis of the working party's report on the subsidiary role of physical signs in this diagnosis—as well as on the absence of physical signs in many sexually abused children (even if physical signs have been present they may disappear with the passage of time)—is prudent.

The details in the report about examination methods, and on other matters such as the collection of forensic samples and

when to look for sexually transmitted disease, will be valuable to the corps of doctors whom it recommends should specialise in this work. These doctors' workload has greatly increased and will continue to do so, which should be taken into account in assessing paediatric staffing requirements of districts.

ROGER ROBINSON

Associate editor, *BMJ*

- 1 Butler-Sloss E. *Report of the inquiry into child abuse in Cleveland 1987*. London: HMSO, 1988.
- 2 Royal College of Physicians Working Party. *Physical signs of sexual abuse in children*. London: RCP, 1991.

Postoperative urinary retention in men

Don't automatically blame the prostate

Postoperative retention of urine may happen after any surgical operation, even without pre-existing urinary symptoms. When it occurs in men aged over 50 underlying bladder outlet obstruction from prostatic hypertrophy is often assumed to be causing it, acute retention simply being precipitated by the added effects of surgery and postoperative pain. This assumption is based on the knowledge that prostatic hypertrophy is common, with nearly one in three 40 year olds needing a prostatectomy by the age of 80,¹ 40% of them presenting with acute retention.² Thus if a man aged over 50 with postoperative retention fails to void normally a few days after his catheter is removed, custom dictates that he should proceed to a prostatectomy, albeit at a time when he is physically and mentally least prepared for it.

Better understanding of the physiology and pathophysiology of micturition suggests that such management is wrong in most cases. The smooth muscle of the bladder is innervated by cholinergic neurones, while the bladder neck and proximal urethra are rich in α adrenergic receptors; surgery in general, and anaesthetic agents in particular, can profoundly affect the function of these organs. For example, atropine and other anticholinergic anaesthetic reversal agents (some with a half life of three to four days) will depress detrusor contractility, leading to reduced bladder power.³ At the same time, stress induced sympathetic activity will increase bladder neck and proximal urethral tone, thus increasing outlet resistance.⁴ Opiates given at operation and postoperatively will suppress the bladder signal to micturate.⁵ Taken together, these may cause a bladder that has been filled (or even overfilled) by intravenous infusion to decompensate (remember Starling's Law on cardiac smooth muscle)—reducing the ability of the detrusor muscle to initiate contraction.⁶ Finally, the postoperative patient will find toileting difficult, being immobilised by connection to intravenous infusions, central venous pressure lines, cardiac monitors, and the like, and may, between analgesic administration, experience pain sufficient to inhibit the perineal relaxation necessary for the initiation of micturition.

Given these facts, incriminating the prostate gland as the sole cause of postoperative retention is questionable. In this issue, Anderson and Grant (p 894)⁷ describe managing a group of patients with postoperative retention by clean intermittent self catheterisation. Of their 32 patients, urodynamic assessment was performed in 22, of whom only five had objective evidence of bladder outlet obstruction. The rest had low pressure voiding, amounting to detrusor failure in eight. All these resumed normal micturition after a variable period of intermittent catheterisation (mean two months; range 6-32 weeks). Automatically performing prostatectomy

in men aged over 50 with postoperative retention is therefore right in only a few cases. In spite of its continuing appearance in surgical textbooks,^{8,9} the belief that postoperative retention occurs mainly in men with "prostatism" now seems like another "urological myth."¹⁰

Postoperative urinary retention may affect any patient, at any age, and of either sex and will have an iatrogenic cause (anaesthetics, bladder overdistension, pharmacologically reduced perception) in about four out of five cases. Short term pharmacological manipulation with indoramin (an α blocker) and bethanechol (a cholinergic agent) may be worth trying. If this fails emptying the bladder by intermittent catheterisation or by an indwelling suprapubic catheter is the management of choice. Not all elderly men will master the art of self catheterisation, and in those who cannot an indwelling suprapubic catheter is preferable to a urethral catheter. This avoids the complications of infection and stricture and permits occasional clamping to assess micturition capability without repeated removal and replacement.

In postoperative retention, as in so many other conditions referred to surgeons, knowledge of the underlying pathophysiology is essential to identify those who will benefit from surgery and those who will not.

P H O'REILLY

Consultant Urological Surgeon,
Stepping Hill Hospital,
Stockport SK2 7JE

- 1 Glynn RJ, Campion EW, Bouchard GR, Silbert JE. The development of benign prostatic hyperplasia among volunteers in the normative aging study. *Am J Epidemiol* 1985;121:78-90.
- 2 Craigen AA, Hickling JB, Saunders CRG, et al. Natural history of prostatic obstruction, a prospective survey. *J R Coll Gen Pract* 1969;18:226-32.
- 3 Virtanen R, Kanto J, Lisalo E, et al. Pharmacokinetic studies on atropine with special reference to age. *Acta Anaesthesiol Scand* 1982;26:297-300.
- 4 Gosling JA, Dixon JS, Lendon RG. The autonomic innervation of the human male and female bladder neck and proximal urethra. *J Urol* 1977;118:302-5.
- 5 Dray A. Epidural opiates and urinary retention: new models provide new insights. *Anesthesiology* 1988;68:323-4.
- 6 Petros JG, Bradley TM. Factors influencing post-operative urinary retention in patients undergoing surgery for benign anorectal disease. *Am J Surg* 1990;159:374-6.
- 7 Anderson JB, Grant JBF. Postoperative retention of urine: a prospective urodynamic study. *BMJ* 1991;302:894-6.
- 8 Mitchell JP. Retention of urine. In: Dudley HAF, ed. *Hamilton Bailey's emergency surgery*. 11th ed. Bristol: Wright, 1986:507.
- 9 Ellis H, Calne RY. The prostate. In: *Lecture notes on general surgery*. 7th ed. Oxford: Blackwell Scientific, 1987:362.
- 10 Foster MC, Upsdell SM, O'Reilly PH. Urological myths. *BMJ* 1990;301:1421-3.

Correction

Picking up the tab for erythropoietin

This editorial by Dr Roger Gabriel (2 February, p 249) incorrectly stated the Department of Health's position on prescription of growth hormone by family doctor. Mr Kenneth Clarke, when Secretary of State for Health, stated that family doctors can prescribe these drugs if they see fit, and not that they should be prescribed by family doctors, as published.