for more urological surgeons. Prostatectomy is common and the clinical decision to perform the operation is seldom difficult. Transurethral resection is a technique which can be learned, like any other, from a good teacher with plenty of cases. This technique need not be the preserve of a urological specialist, just as colonoscopic polypectomy is neither the preserve of the physician or surgeon nor justification for gastroenterology as a specialty. Surely what most hospitals want and need in these hard economic times is more surgeons who, among other things, can resect prostates effectively. There is indeed a need for specialists in almost every field, but not everywhere.

MICHAEL KETTLEWELL

John Radcliffe Hospital,
Oxford OX3 9DU

SIR,—Your leading article "Second-best prostatectomy?" (1 March, p 590) is timely. There have, of course, been many general surgeons appointed with an interest in urology, who then saw the light and now do nothing else but urology. It is surprising that the figures of mortality are not even more startling because most units would accept a mortality rate on unselected series of transurethral resection only if it was in the region of 0.2-0.5%. You are quite right to point out that the figures recently published by Leach¹—2.3% in 600 prostatectomies—is hardly an improvement on Thompson-Walker's figures in the 1920s.

Apart from the other reasons discussed, it is important to point out that death from pulmonary embolus in prostatectomy performed by transurethral resection is virtually unknown, whereas a considerable amount of the mortality in open prostatic surgery is in fact associated with a disastrous incidence of pulmonary embolus.

Although the "difference in results between the specialist and the generalist is there for all to see," in fact this piece of information is not immediately available to referring practitioners and this leading article is more than welcome and timely.

GRANT WILLIAMS

London W1N 1AH

¹ Leach RD. *Ann R Coll Surg Engl* 1979;61:459-62.

SIR,—Your leading article "Second-best prostatectomy?" (1 March, p 590) raises some interesting points about the training of surgeons. While acknowledging that in the past "well-trained and dedicated general surgeons... learnt all there was to learn about urology..." you seem to accept that today the general surgeon with an interest in urology does not exist. If this is correct, why not?

It would be surprising if, as stated, the results of prostatectomy from specialist urological units were no better than those from general surgical units. Specialist units there must be; but, to modify a phrase used some 30 years ago by Sir Denis Browne when advocating the acceptance of paediatric surgery as a specialty, should the aim not be to set a standard rather than create a monopoly?

With economies restricting the level of existing services, to say nothing of their expansion at specialty level, would not the best way of improving urological care be more instruction to the present senior registrars and lecturers in the higher surgical training

programme (general surgery)? The urological aspect of their training may have suffered in recent years. The time these young men and women are required to spend in training is already too long and with new consultant posts apparently being delayed this problem is not likely to improve in the near future. The opportunity should therefore exist in a rotational programme for more instruction in urological surgery. With aids such as the teaching eyepiece available with modern endoscopes—perhaps with relay to a television screen—the statement that "...protracted apprenticeship and specialisation in urological surgery" is demanded in order to become a competent endoscopic resectionist may be questioned. The techniques required of a general surgeon with a special interest in vascular or paediatric surgery are probably equally demanding. Such general surgeons have contributed significantly to the improvement in standards of care achieved in district general hospitals and most accept the need for regional centres to which the particular problem of their specialty may be referred.

Is there not still a place for the general surgeon with special experience in urological surgery?

MALCOLM GOUGH

John Radcliffe Hospital,
Oxford OX3 9DU

SIR,—The statement in your leading article "Second-best prostatectomy?" (1 March, p 590) that the general surgeon with an interest in urology does not exist seems to be open to some misinterpretation. Either you are ignoring the existence of a large group of surgeons in this country who most certainly do exist or, perhaps, you are saying that there are no longer senior registrars in general surgery who have an interest in urology.

I was appointed as a general surgeon with an interest in urology 15 months ago. Since that time I have done a large number of transurethral operations and only a handful of open prostatectomies. There is a good balance between general surgery and urology and I have found the job most satisfactory.

Of course, the ideal solution would be to have enough funds available to appoint specialist urologists wherever they are needed. At the moment the money is not available and therefore a compromise must be found. The training of a disproportionately large number of urological senior registrars cannot be the answer; nor is it the answer to replace retiring general surgeons by urologists, for obvious reasons. It is therefore essential that a regulated number of senior registrars in general surgery continue to be trained in the specialist techniques of present-day urology, albeit for a lesser time than the specialist urological trainee. It is after all a compromise. The general surgeon with an interest in urology must continue to exist.

P M ATKINSON

Department of Surgery,
Memorial Hospital,
Darlington, Co Durham DL3 6HX

Cerebral atrophy or hydrocephalus?

SIR,—May I applaud your courage in trying to disentangle the complex web of conflicting data regarding the misnamed syndrome of normal-pressure hydrocephalus (9 February, p 348)? Since Adams and his associates showed that hydrocephalus could exist in

adults without a sustained increase in the intracranial pressure,¹ its occurrence following trauma, subarachnoid haemorrhage, or meningitis and its association with a cerebral neoplasm can be appreciated even if not fully understood. The cardinal feature of Adams's work was the demonstration that certain patients with dementia and hydrocephalus could make a sometimes remarkable improvement following a shunting procedure. The subsequent enthusiasm for shunting met with mixed success, several workers being unable to relate clinical improvement to any one of a large number of pre-shunt diagnostic procedures,²⁻⁵ while others were more optimistic.^{6,7}

However attractive an individual test may be in providing physiological or aetiological explanations for normal-pressure hydrocephalus, the clinical value lies in its ability to distinguish patients who will respond to cerebrospinal fluid shunting from those who will not.⁸ The problem is not simply one of diagnosing the presence of some form of obstructive hydrocephalus, but rather one of determining whether reasonable expectation of improvement justifies the risks involved in performing a shunting procedure in patients with dementia.⁶

To this end I agree that a multicentre trial is required where neurologists are prepared to refer all patients with the clinical features of a gait disturbance and progressive dementia. Following a static computed tomogram to confirm the hydrocephalus and to exclude an obvious cause for it, these patients would require to have pre- and post-shunt psychometry and dynamic metrizamide cisternography. It is only by having the courage to perform shunts on all of these patients that we will ever be able to determine the efficacy of neuroradiological investigations in predicting the likelihood of an individual patient benefiting from a shunt procedure.

IAN W TURNBULL

Department of Radiology,
North Manchester General Hospital,
Manchester M8 6RB

¹ Adams RD, Fisher CM, Hakim S, Ojemann RG, Sweet W. *New Engl J Med* 1965;273:117-26.

² Salmon JH. *J Neurosurg* 1972;37:423-8.

³ Shenkin HA, Greenberg J, Bouzarth WF, Guterman P, Morales JO. *JAMA* 1973;225:1486-9.

⁴ Jacobs L, Conti D, Kinkel WR, Manning EJ. *JAMA* 1976;235:510-2.

⁵ Jacobs L, Kinkel WR. *Neurology* 1976;26:501-7.

⁶ Messert B, Wannamaker BB. *Neurology* 1974;24:224-31.

⁷ Gunasekera L, Richardson AE. *Brain* 1977;100:749-54.

⁸ Stein SC, Langfitt TW. *J Neurosurg* 1974;41:463-70.

Single drug or polypharmacy?

SIR,—In attempts to prevent thrombosis enormous sums have been spent on many trials of usually a single or occasionally two drugs. The International Society of Haemostasis and Thrombosis recently considered these various trials and the conclusion was most disturbing. There was no general agreement that any drug had conveyed unequivocal benefit. Clearly no drug had so dramatic an effect that debate over the niceties of the trial was irrelevant.

Perhaps this means that the right drug or right dosage has not yet been found, but perhaps the whole approach is wrong. Thrombosis is a complicated process and must at least involve blood flow, platelet deposition, fibrin formation, and fibrinolysis. Each of these processes itself involves