LETTERS TO THE EDITOR

Obstacles to research in A&E

EDITOR,—Harnden *et al*¹ point out that research in A&E lags behind that of other specialties. They highlight the need for a sufficiently large group of A&E doctors with the skills needed to plan and execute top quality research; such research will not be stimulated without adequate funding. The specialty needs to lobby for topics in emergency medicine to be included in the priority areas for NHS research and development. Without such funding it is probable that only ad hoc studies without rigorous design will be undertaken.

An American study showed that finding time and funding, administrative obligations, and pressures to do clinical work were the most important obstacles to research productivity.² A small survey has recently been undertaken within the West Midlands to establish what trainees considered to be the main obstacles to undertaking research. Thirteen trainees attending a regional training afternoon were asked to complete a questionnaire anonymously. They were asked "What do you see as the main obstacles to research in your present A&E post?" and were asked to score nine areas from 1 to 5, 1 being an important obstacle and 5 being not seen as an obstacle. They were also asked to specify any other obstacles which were not included in the original list.

The results are summarised in table 1. No additional aspects were volunteered apart from the nine areas we had provided. Only three individuals (23%) had published a paper or presented a paper relating to a trial or questionnaire study in the last two years. The use of protected time for research was deemed important, although it could be argued this result suggests the need for better time management. The responses suggest a need to include more teaching in research methodology. Most of the problems would, in our opinion, be improved by the research support provided by access to an academic department. It is reassuring to see that trainees are interested in research and the lack of compulsion is not preventing their participation.

We reviewed articles published in 1996 in the *Journal of Accident and Emergency Medi-*

cine. This showed that in only seven of 67 pieces of research was any funding acknowledged (four by interested companies, two with national funding organisations, and one from a local prize). As the Culyer report³ recommendations are instituted, it may become more difficult to undertake unfunded projects. We suspect that many current A&E projects rely on secretarial and reception staff time that is service funded. A&E departments need to ensure that they are establishing their "Culyer funding".

The establishment of regional A&E research centres would enable those interested in academic A&E to pursue this career, but would also provide the infrastructure to advise the novice researcher. Teaching programmes could be developed; these have been shown to increase confidence and interest in research.⁴ Use of non-medically qualified research associates is effective and cost-efficient. In particular they can increase recruitment into studies⁵ but they are invariably based in university departments. These changes could result in many people participating in research with the added benefit of project management being coordinated by a specialised research unit.

A&E research is needed. We must ensure an infrastructure is developed to facilitate this.

MATTHEW COOKE

Department of Accident and Emergency Medicine,
University of Birmingham & City Hospital NHS
Trust, City Hospital, Dudley Road, Birmingham
B18 7QH

SUE WILSON

Department of General Practice, University of
Birmingham, The Medical School, Birmingham
B15 2TT

- 1 Harnden RD, Hamer DW, Gray A, McGowan A, Clancy MJ. Research in accident and emergency medicine. *J Accid Emerg Med* 1997;14:118-9.
- 2 Sanders AB, Fulginiti JV, Witzke DB, Bangs KA. Characteristics influencing career decisions of academic and non academic emergency physicians. *Ann Emerg Med* 1994;23:81-7.
- 3 Culyer A. *Supporting research and development in the NHS*. London: HMSO, 1994.
- 4 Fraker LD, Orsay EM, Sloan EP, Bunney EB, Holden JA, Hart RG. A novel curriculum for teaching research methodology. *J Emerg Med* 1996;14:503-8.
- 5 Bradley K, Osborn HH, Tang M. College research associates: a program to increase emergency medicine clinical research productivity. *Ann Emerg Med* 1996;28:328-33.

The groin cannula: effective pain relief for fractured neck of femur

EDITOR,—In 1995 the Audit Commission published "United they Stand", on coordinating care for elderly patients with hip fracture. Although the document emphasises that the total package of care rather than any one single factor influences outcome, the East Anglian Audit¹ and the Hastings Accident and Emergency (A&E) protocol are given special mention. The former suggests that early mobilisation reduces both mortality and length of stay, and the latter encourages the use of nerve blocks for immediate analgesia.

Finlayson and Underhill² found femoral nerve block to be effective in cases of both extracapsular and intracapsular fracture. The safety and effectiveness of large volume femoral nerve block in cases of extracapsular femo-

ral neck fractures have recently been confirmed by Haddad and Williams³ in a randomised controlled trial. Single injections were carried out in A&E using a volume of 0.3 ml/kg of 0.25% bupivacaine. The volume is large enough to spread proximally and block the adjacent obturator nerve and lateral cutaneous nerve of thigh, producing a so called 3-in-1 or triple nerve block.

The duration of statistically significant reduction in pain in the Haddad and Williams study³ was between two and eight hours. In order to maintain this efficient means of pain relief, which lacks the troublesome side effects of opioid, it is necessary to make use of continuous infusion or intermittent top ups.

One of us (JM) has evaluated the ease of placement of an 18G venous cannula (Venflon, Viggo, Sweden) in the femoral nerve sheath to establish and maintain (by intermittent top up) triple nerve block in 42 cases of fractured neck of femur. Percutaneous cannula placement is guided by palpation of the femoral artery and the patients' reporting of paraesthesiae in the distribution of the femoral nerve.

The results are shown in table 1. No cases of vascular puncture were encountered. Initial doses were usually 0.5% bupivacaine, 0.3 ml/kg, and intermittent top ups of 20 ml of 0.25% bupivacaine were given by orthopaedic SHOs twice daily at 10.00 and 22.00.

Table 1

	Analgesia from triple nerve block		
	Effective	Ineffective	% Success
Fractured NOF	31	11	74

In conclusion, local anaesthetic nerve block can be established easily in the A&E department using a percutaneous blind technique with an 18G venous cannula. Intermittent top ups with local anaesthetic may then be carried out by orthopaedic staff to maintain this very efficient method of analgesia. Use of a nerve stimulator to guide placement of the cannula and improve the rate of success is now being evaluated.

JOHN MACKENZIE

Department of Anaesthetics, Royal Berkshire Hospital,
Reading

RICK PULLINGER

Department of Accident and Emergency Medicine, John
Radcliffe Hospital, Oxford

- 1 Todd CJ, Freeman CJ, Camilleri-Ferrante C, Palmer CR, Hyder A, Laxton CE, *et al*. Differences in mortality after fracture of hip: the East Anglian Audit. *BMJ* 1995;310:904-8.
- 2 Finlayson BJ, Underhill TJ. Femoral nerve block for analgesia in fractures of the femoral neck. *Arch Emerg Med* 1988;5:173-6.
- 3 Haddad FS, Williams RL. Femoral nerve block in extracapsular femoral neck fractures. *J Bone Joint Surg [Br]* 1995;77B:922-3.

Emergency medicine training in Australia

EDITOR,—A period of emergency medicine training in Australia for United Kingdom trainees was endorsed by Ryan and Gaudry in their recent article.¹ The two main benefits for

Table 1 Survey of obstacles to research: 1=very important obstacle, 5=not an obstacle

	Mode	Average	95% CI
Too busy	1	2.33	2.55
Lack of statistical support	1	2.36	2.81
Lack of statistical knowledge	1	2.75	2.91
Financial	2	2.27	2.49
Knowledge of research methods	2	2.75	2.23
Advice on research technique	2	2.83	2.34
Lack of ideas	3	3.25	2.38
Not interested in research	4	3.00	2.51
Research not required for career	4	3.67	1.74

CI, confidence interval