(aggression, confusion), a distinction that might usefully predict the likelihood of success of intensive home care packages.

Mavis Nicholson and Dorothy White point out that the views of consumers matter[4]—a perspective almost completely ignored in surveys of residential care. The survey in Manchester in 1990 recorded the main reason for admission to each facility, including the category "personal choice." This included responses such as loneliness, fear of crime, and wanting to be nearer relatives. Personal choice accounted for a fifth of all admissions to private rest homes but was a negligible factor in other facilities. Cash restrictions may mean that a substantial number of disabled, financially disadvantaged elderly people who wish to enter residential homes but fail new assessment procedures will have no choice at all. Their lot will be whatever meagre community resources are left for domiciliary support.

R C BALDWIN

Department of Psychiatry,
Manchester Central Hospitals and
Community Care NHS Trust,
Manchester Royal Infirmary,
Manchester M13 9BX

1 Campbell Stern M, Jagger C, Clarke M, Anderson J, McGrother C, Battock T, *et al.* Residential care for elderly people: a decade of change. *BMJ* 1993;306:827-30. (27 March.)
2 Robinson RA. *Psychiatric disorders in the aged.* Manchester: World Psychiatric Association, Geigy UK, 1968.
3 Wilkin D, Mashiah T, Jolley DJ. Changes in behavioural characteristics of elderly populations of local authority homes and long-stay hospital wards, 1976-7. *BMJ* 1978;ii:1274-8.
4 Nicholson M, White D. Old people's homes: the relatives' view. *BMJ* 1993;306:918-20. (3 April.)

Foreign body aspiration

EDITOR,—While endorsing the advice of V S Taskar and colleagues[1] (and the manufacturers) always to replace an inhaler's safety cap, we believe it is also essential to recognise an inherent design fault. These so called safety caps are not safe at all because they fall off so easily and frequently in pockets, handbags, and briefcases.

We asked 15 consecutive patients who use inhalers to say whether or not the safety cap (or lid or mouthpiece cover) tends to say in place.

"The lid coming off" is a problem with 10 out of the 14 types of metered dose inhalers. Some asthmatic patients are evidently thereby exposed to the risk of inhaling house dust and other rubbish, in addition to the danger from larger foreign bodies.

Can manufacturers be persuaded to modify design so that safety caps stay on in ordinary circumstances? This was suggested to one major company in 1989, first verbally through the "rep" and then by letter to the medical director. Perhaps not surprisingly, that approach failed. Might a concerted effort succeed now?

MARY ANDERSON
SUE DOWSE

Heaton Moor Medical Centre,
Stockport SK4 4NX

1 Taskar VS, Bradley BB, Moussali HM, Hilton AM. Foreign body aspiration: a hazard of metered dose inhalers. *BMJ* 1993;306:575-6. (27 February.)

Dural puncture

Rotating needle increases risk

EDITOR,—In her review of headache after dural puncture Felicity Reynolds mentions that inserting an epidural needle with the bevel aligned with the dural fibres reduces the severity of the resulting headache should accidental dural puncture occur.[1] Though this is true, longitudinal alignment of the bevel also cleaves the fibres of the ligamentum flavum and may make identification of the epidural space less certain when the ligament is soft. Furthermore, the subsequent 90° rotation of the needle needed to thread an epidural catheter cranially must make dural puncture more likely. Hollway and Telford deliberately punctured the dura with Tuohy needles to site lumbar drains for neurosurgery.[2] After identifying the epidural space by loss of resistance they advanced the needle in 10 mm increments until the dura was pierced. They identified several instances in which dural puncture occurred only after rotation of the needle at a particular depth. Evidently the needle point had been tenting the dura and rotation caused it to incise a hole.

If avoiding dural puncture rather than limiting damage is to be the primary concern surely an epidural needle should not be advanced or rotated once the epidural space has been identified.

MICHAEL J JORDAN

Department of Anaesthesia,
St Bartholomew's Hospital,
London EC1A 7BE

1 Reynolds F. Dural puncture and headache. *BMJ* 1992;306: 874-5. (3 April.)
2 Hollway TE, Telford RJ. Observations on deliberate dural puncture with a Tuohy needle: depth measurements. *Anaesthesia* 1991;46:722-4.

Elective forceps delivery not indicated

EDITOR,—The editorial by Felicity Reynolds discussing dural puncture and headache states that elective forceps delivery reduces the frequency of headache in parturient women by avoiding straining.[1] On reading the paper cited to support this[2] we question whether the reduction in dural headache is the result of elective forceps delivery or the epidural infusion of crystalloid.

We reviewed our experience with epidural analgesia in labour during 1992. Of the 5990 women in labour, 1773 received epidural analgesia. The rate of vaginal operative delivery in the women with epidural analgesia was 15%. There were six cases of dural puncture and headache, an incidence of 0·3%. Two women delivered spontaneously, and three were delivered by forceps or ventouse and one by caesarean section. All women had an epidural infusion of crystalloid and application of an epidural blood patch.

Vaginal operative delivery may not always prevent headaches after dural puncture, and the decision to deliver may deprive women of the ultimate satisfaction of a spontaneous delivery. Until there is more substantial evidence to support elective instrumental delivery we suggest that management should be tailored to the individual woman to ensure efficient uterine action and that the decision is based ultimately on the presence or absence of good progress in the first phase of the second stage of labour.

MICHAEL ROBSON
CATHERINE McQUILLAN
JOHN M STRONGE

National Maternity Hospital,
Dublin 2

1 Reynolds F. Dural puncture and headache. *BMJ* 1993;306:874-5.
2 Okell RW, Springee JS. Unintentional dural puncture. *Anaesthesia* 1987;42:1110-3.

Blood patch not always benign

EDITOR,—We do not agree with Felicity Reynolds' advice that dural puncture, be it accidental or deliberate, is an indication for elective forceps delivery.[1] Our large survey of dural taps found no benefit in altering obstetric management.[2] Indeed, the logic of this advice is questionable. Straining increases epidural pressure as well as cerebrospinal fluid pressure, so there may be little or no net change in pressure gradient across the dural membrane.

We agree with Reynolds that severe postdural puncture headache should be treated early with epidural blood patch, but would add a note of caution. Meticulous follow up of patients who had received an epidural blood patch at Birmingham Maternity Hospital revealed a success rate of only 68%, comparable with the 75% success rate described by Brownridge[3] and well short of the 89% or more quoted by Gutsche.[4] In addition, two recent case reports of severe backache after blood patch confirm that it is not always a benign procedure to be undertaken lightly.[5,6] The complications of blood patch itself may be no less disastrous for the patient than those of dural puncture and may also, as one of us has found, lead to litigation. Further long term prospective follow up is urgently needed.

G M COOPER

Birmingham Maternity Hospital,
Birmingham B15 2TG

P C STRIDE

Cumberland Infirmary,
Carlisle CA2 7HY

1 Reynolds F. Dural puncture and headache. *BMJ* 1993;306: 874-6. (3 April.)
2 Stride PC, Cooper GM. Dural taps revisited. A 20 year survey from Birmingham Maternity Hospital. *Anaesthesia* 1993;48: 247-55.
3 Brownridge P. The management of headache following accidental dural puncture in obstetric patients. *Anaesth Intensive Care* 1983;11:4-15.
4 Gutsche BB. Lumbar epidural analgesia in obstetrics: taps and patches. In: Reynolds F, ed. *Epidural and spinal blockade in obstetrics.* London: Baillière Tindall, 1990:95-106.
5 Seeberger MD, Urwyler A. Lumbovertebral syndrome after extradural blood patch. *Br J Anaesth* 1992;69:414-6.
6 Stride PC. Lumbovertebral syndrome after extradural blood patch. *Br J Anaesth* 1993;70:489.

Subdural haematoma after spinal anaesthesia

EDITOR,—Simon M Whitely and colleagues presented an interesting though rare case of a chronic subdural haematoma after spinal anaesthesia for an elective hernia repair in a fit 41 year old man. They gave little detail of the speed of onset of the headache and whether or not there was an associated ictus that might suggest subarachnoid haemorrhage with extension into the subdural space. This may not be germane to their patient, but nevertheless subdural collections of blood following rupture of intracranial "berry" aneurysms occur in 1-8% of patients with subarachnoid haemorrhage due to bleeding aneurysms.[2]

It would be well worth considering cerebral angiography early in the follow up of young people presenting with apparently idiopathic or extremely rare causes of subdural collections of blood, in the absence of direct cranial trauma.

JOHN S NORRIS

Department of Neurosurgery,
University Hospital,
Nottingham NG7 2UH

1 Whitely SM, Murphy PG, Kirollos RW, Swindells SR. Headache after dural puncture. *BMJ* 1993;306:917-8. (3 April.)
2 Handel SF, Perpetuo FOL, Handel CH. Subdural haematomas due to ruptured cerebral aneurysms: angiographic diagnosis and potential pitfall for CT. *AJR* 1978;130:507-9.

Advanced life support course

EDITOR,—We are pleased to see the increasing interest in resuscitation or advanced cardiac life support courses, many of which are advertised in the *BMJ*. The first of these was introduced into the United Kingdom in 1987 by David Skinner at St Bartholomew's Hospital and was based on the American advanced cardiac life support course. Others were established later, and by 1990 a need for reciprocity between courses and standardisation was evident.

As a result, the Resuscitation Council (UK) agreed to develop a course and manual which it was hoped would provide a national minimum