Photophobia, neck stiffness, nausea and vomiting, and signs of diminished by lying supine and bilateral jugular compression. Headache starting within 72 h of a dural puncture, which was criteria that I applied before starting treatment included bilateral claime for blood patch, being 70% effective. The diagnostic patients, the method has produced at least as good results as are in relieving post-lumbar puncture headache. As he noted, it is odd in that such a simple and effective technique seems entirely unknown in dependence on the particular method used.

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ACTH treatment for post-lumbar puncture headache

Sir,—In a recent letter [1], Dr Collier described his use of ACTH in relieving post-lumbar puncture headache. As he noted, it is odd that such a simple and effective technique seems entirely unknown and there is no reference to it in any recent review. I have used this method successfully since 1987. In a personal series of about 20 patients, the method has produced at least as good results as are claimed for blood patch, being 70% effective. The diagnostic criteria that I applied before starting treatment included bilateral headache starting within 72 h of a dural puncture, which was diminished by lying supine and bilateral jugular compression. Photophobia, neck stiffness, nausea and vomiting, and signs of dehydration may be present. Papilloedema and fever contra-indicate ACTH as a primary therapy. All patients had tried supine bed rest, forcing oral fluids and various analgesics, including i.v. caffeine, without improvement. ACTH has been effective after failed blood patch. Similarly, a second reinfusion of the original dose for recurrent headache after 24 h has been effective in two patients.

The method finally adopted differs from Dr Collier’s in that ACTH 1.5 u. kg⁻¹ is infused over 1 h in 1 or 2 litres of lactated Ringer’s solution. The infusion gives temporary headache relief so that the overall response tends to be biphasic. There is usually complete relief of symptoms at the end of infusion, which may wear off gradually if the patient walks immediately after the procedure. During the next 6–12 h final relief is established. This suggests a delayed onset for ACTH which would be consistent with its known pattern of action.

One may only speculate on any mechanism. It is possible that spinal puncture headache is found in a minority group with a different metabolic response to stress or trauma. One assumes that the release of aldosterone and mineralocorticoids is somehow involved in producing fluid and salt retention, that glucocorticoids have analgesic properties and that long-term glucocorticoids are used to lower intracranial pressure. It may be that active CSF secretion and absorption processes are affected by ACTH or some of the drugs used in spinal anaesthesia. Does the delay in onset of headache support a hormonal mechanism at work? Whatever the cause, intuitively a single dose of ACTH should be less hazardous than injecting blood into the extradural space of the slowly side effect that I have seen is an altered requirement for hypoglycaemic agents in diabetic patients.

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Hypertonic saline prehydration before spinal anaesthesia

Sir,—I read with interest the article by Baraka and colleagues [1] on the role of hypertonic saline prehydration in patients undergoing transurethral resection of the prostate under spinal anaesthesia. The authors have shown that prehydration with 3% saline 7 ml kg⁻¹ decreased the incidence of hypotension after spinal anaesthesia. This particular observation is encouraging. However, are the authors justified in using hypertonic saline prehydration in their population of elderly patients (mean age > 60 yr) with age-associated diminished cardiac reserve [2]? Is it likely that several of these patients were suffering from hypertension and coronary artery disease, and were prone to congestive cardiac failure. The authors themselves observed a significant increase in CVP after hypertonic saline prehydration.

Patients in this study were premedicated with atropine 0.4 mg i.m. and diazepam 5 mg orally. It would have been preferable to ensure that the patients were adequately sedated rather than administering atropine, which is associated with undesirable side effects, such as tachycardia and central nervous system excitation [3], especially in elderly patients.

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Sir,—Our report has shown that in patients undergoing transurethral resection of the prostate, prehydration with 3%