Letters to the Editor

Puerperal subdural empyema

Sir,
Intracranial complications during pregnancy or the puerperium may manifest in the form of seizures, neurological or endocrine deficits, or deterioration in sensorium. Subdural empyema complicating an otherwise uneventful pregnancy or puerperium, to the best of our knowledge, has not been reported earlier

Case report

A 20-year-old woman delivered a normal full-term baby in hospital in March 1994. She was normotensive and gave no history of taking oral contraceptives. On the fifth post-partum day, she complained of increasing headache followed by generalised tonic-clonic seizures. Seizures were controlled by intravenous diazepam. Clinically, she was drowsy, febrile and had paresis of her left lower limb with Babinski sign. Fundus was normal. There was no evidence of chronic middle ear disease or sinusitis. Computed tomography (CT) of the brain showed falcine subdural empyema (figure). Antibiotic therapy (penicillin, chloramphenicol, metronidazole) was started and the subdural empyema was evacuated by a burr hole. About 30 ml of thick creamy pus was evacuated. There was rapid resolution in her symptoms and she was discharged after six weeks of antibiotic therapy. Pus and blood cultures were sterile. She was asymptomatic at the time of last review in May 95.

Subdural empyema is an uncommon intracranial suppurative lesion, known for its high mortality and morbidity. It constitutes 13–20% of all intracranial suppurations.^{1–3} In a study from Chandigarh,⁴ it was seen to account for 10% of all intracranial suppurations. In the Western literature, the common predisposing factors quoted are paranasal sinusitis⁵ and meningitis.⁶ Chronic middle ear disease is a major aetiological factor from India.^{4,7} Other aetiological factors may be trauma⁴ and subdural effusion.⁷ We could not find any report of pregnancy or puerper-

ium being associated with subdural empyema. In view of the absence of other known aetiological factors, one can only surmise that the parturient uterus acted as a port of entry for infection in this case.

HS BHATOE
Department of Neurosurgery,
Command Hospital (SC),
Pune 411040, Maharashtra,
India

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Discussing CPR with patients and relatives

Sir,
We read with great interest the recent article on the difficult subject of discussing cardiopulmonary resuscitation (CPR) with patients and relatives.¹ Dr Stewart gives excellent advice on when and when not to involve patients and relatives in discussions on do-not-resuscitate orders. We concur with his advice. However, he does mention, in reference to a study we conducted, that confusion exists amongst patients, relatives, doctors and investigators.² We questioned 100 patients and their relatives about different aspects of CPR in the department of medicine for the elderly prior to the evolution of a CPR policy. All patients were told what CPR entailed and also about the futility of CPR in certain cases, eg, carcinomatosis. Interestingly, of 13 patients who had 'Do not resuscitate' in their case notes, eight of these wanted to undergo CPR. This led us to contact the defence unions quoting a particular case of a very elderly gentleman with metastatic bronchial carcinoma who was insistent on having CPR despite advice given to him by two doctors. Both defence unions suggested that he should not be denied CPR if he was consistent, although they subsequently refuted this advice.³ Clearly, instituting resuscitation in a futile situation like this is totally inappropriate and therefore we agree it would be detrimental to discuss this with the patient unless he/she insists on discussion.

Since our study we have realised the importance of adhering to a CPR policy. Our policy now includes advice about discussing these issues with patients and relatives. CPR status is considered on admission and each week all patients' CPR status is discussed in a case conference with nurses,

junior doctors and paramedical staff, as well as being considered on all the consultants ward rounds. We discuss CPR status with patients in appropriate circumstances. However, doctors (even senior ones) often lack the communication skills required for this and certainly these skills are not imparted as part of undergraduate or postgraduate training. It is sometimes difficult even to bring up the subject of resuscitation with a patient but including details of CPR policy in written information given to patients may be helpful in opening the conversation, eg, "I wonder whether you have read this part of your hospital booklet Mrs Brown which talks about resuscitation? What do you think about that? Are there any questions you want to ask me about resuscitation?" We find that this is often a good way to open the conversation on resuscitation with patients. Written information, however, is certainly not a substitute for the doctor discussing these important issues with patients in appropriate circumstances. In order for the doctor to perform these duties in a caring compassionate manner it is essential that he/she receives adequate training in these communication skills.

DEBRA KING
ROSEMARY MORGAN
Department of Medicine for the Elderly,
Wirral Hospital, Arrowe Park, Upton, Wirral,
Merseyside, L49 5PE, UK

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Polymyalgia rheumatica, temporal arteritis and malignancy

Sir,
We read with great interest the recent article on polymyalgia rheumatica, temporal arteritis and malignancy.¹ We wish to report a similar case in a 61-year-old woman who presented to her general practitioner with a six-week history of proximal muscle pain and stiffness. Her erythrocyte sedimentation rate (ESR) was 138 mm/h and a diagnosis of polymyalgia rheumatica (PMR) was made. Her symptoms responded dramatically to prednisolone 20 mg/day but her ESR remained elevated at between 71 and 79 mm/h. The patient was referred for further investigation and was found to have an IgA kappa paraproteinaemia of 28.4 g/l. Urinary Bence Jones proteins were absent. Her full blood count, renal function and serum calcium were normal. A bone marrow biopsy revealed an infiltrate of morphologically abnormal plasma cells accounting for 30% of all nucleated cells, consistent with a diagnosis of multiple myeloma. A skeletal survey showed a wedge fracture of one of the mid-thoracic vertebral bodies.

In 1987, Kalra and Delamere described five patients presenting with PMR-like symptoms who were found to have a monoclonal gammopathy and suggested that PMR could

Puerperal intracranial complications

- cortical venous thrombosis
- subarachnoid haemorrhage
- increase in the size of tumours such as meningioma
- post-partum pituitary infarction

Figure CT showing falcine subdural empyema

be a presenting feature of underlying lymphoreticular malignancy.² Ilfred *et al* have also reported four cases of benign monoclonal gammopathy associated with PMR and temporal arteritis (TA).³ Sera from these patients were found to contain heavy or light chains which bound to mouse femoral artery and which corresponded to the heavy and light chains of the patients' benign monoclonal gammopathy. They postulated that the benign monoclonal gammopathy may be anti-artery antibodies, possibly associated with the pathogenesis of PMR or TA.

These cases emphasise the need to remain aware of additional causes of a raised ESR in patients who present with PMR/TA. We agree that a chest X-ray and serum and urine electrophoresis should form part of the routine investigation of PMR/TA.

EP DAS-GUPTA
P BANDYOPADHYAY
JL KOK SHUN
JP NG

Department of Haematology,
Barnsley District General Hospital NHS Trust,
Barnsley, South Yorks S75 2EP, UK

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Management of acute myocardial infarction

Sir,

I read with interest the excellent review by Saltissi and Mushahwar on 'The management of acute myocardial infarction'.¹ They discussed the value of thrombolysis given late, ie, more than 12 hours after the onset of pain. However they did not comment on the importance of the site of infarction. Patients with inferior myocardial infarction benefit less from thrombolysis than those with anterior infarction² as their overall mortality is lower. Some even question the evidence for giving thrombolysis at all in this group.³ Studies have been undertaken to assess the possible benefit of late thrombolysis.^{4,5} Overall no significant benefits have been shown later than 12 hours. Subgroup analysis, however, has suggested that there may be groups that do benefit but

the identification of these individuals is not possible on current data. Saltissi and Mushahwar recommended that each patient presenting at or after 12 hours be treated on their own merits. Site of infarction should surely be a major consideration?

M TURNER
Department of Cardiology,
Derriford Hospital,
Plymouth, Devon, UK

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This letter was shown to Drs Saltissi and Mushahwar who responded as follows:

Sir,

Turner raises the vexed question of the effect of site of infarction (inferior versus anterior) on the efficacy of thrombolysis and whether this criterion should be used in deciding on the need for treatment in an individual patient.

In a review of limited size covering an enormous clinical area, we opted to omit discussion of the effect of infarct site because the jury remains out on this question. To our knowledge, although the large randomised trials of fibrinolytic therapy report baseline characteristics with regard to infarct site none has randomised patients prospectively on that basis. Retrospective subgroup analysis has usually shown a large significant benefit in anterior infarcts and a smaller, borderline non significant effect in inferior infarcts. The dangers of retrospective subgroup analysis are, however, well recognised and the results of such analyses should be used to generate hypotheses for testing in future trials rather than to answer questions in their own right.

Even systematic overview (meta-analysis) does not necessarily eliminate the statistical problems and give reliable results. The accuracy of analysis depends on the uniformity of the trials included, the more hetero-

genous the studies the more unreliable the result. Thus, the overview of effects of fibrinolytic treatment by the Fibrinolytic Therapy Trialists' Collaborative Group (ref 2 above) included all trials in which more than 1000 patients were randomised between fibrinolytic therapy and control in the absence of prior knowledge of the next treatment and unconfounded by other treatment variables. However, these trials varied enormously in other ways, eg, fibrinolytic agent used, use of adjunctive heparin and aspirin, time of randomisation, entry ECG criteria, etc. Thus a degree of uncertainty about the ensuing results must remain. Despite this, a strong trend to benefit from treatment by thrombolytic agents in inferior infarcts was found. They estimated that eight lives would be saved per 1000 patients treated which compares favourably with the measured detriment of two additional fatal strokes and three bleeds per 1000 patients treated.

A recent personal viewpoint (ref 3 above), cast doubt on the efficacy of thrombolytic therapy in inferior infarction. The author proposed several possible pathophysiological reasons why there might be a lesser benefit in inferior infarction. However the history of medicine is littered with treatments which seem a good idea at the time but which did not stand up to rigorous examination. Furthermore, the author recognised the pitfalls of the retrospective subgroup analysis used in his article. In our view, it is not acceptable to acknowledge such pitfalls and then dismiss them on the basis of untested pathophysiological hypotheses. To our mind, questionable science and plausible but unproven hypotheses neither singly nor together constitute good grounds for deciding on treatment guidelines.

Turner also alludes to the benefit of late thrombolysis and implies that site of infarction should be considered in deciding which subgroups might benefit. Two studies, LATE and EMERAS (refs 4,5 above) have specifically looked at the value of late thrombolysis. Both stated the baseline proportion of patients with anterior and inferior infarction but, to our knowledge, neither prospectively randomised nor reported results on the basis of site of infarction. In our view it is therefore not possible to comment reliably on effects of site of infarction on the efficacy of thrombolysis delivered in the time windows 6–12 hours or 12–24 hours post-infarct.

S SALTISSI
S MUSHAHWAR
Royal Liverpool and Broadgreen University
Hospitals NHS Trust,
Prescot Street,
Liverpool L7 8XP, UK

POSTGRADUATE MEDICAL JOURNAL CHRISTMAS QUIZ

The two winners of the Christmas Quiz were:

Dr KR Sharan – India
Dr DL Maxwell – London

The Editor would like to congratulate the winners who will each receive a free subscription to the *Postgraduate Medical Journal* for 1996