

and the production of episodes of *C. difficile*-associated diarrhoea or colitis are more theoretical than real for the antibiotic prophylaxis regimens set out in the guidelines published by the British Cardiac Society, the European Society of Cardiology and the American Heart Association.<sup>1-3</sup> The incidence of drug reactions is low and the cost of parenteral antibiotic prophylaxis (when required) is insignificant compared to the cost of medical and surgical treatment of a patient with infective endocarditis. Moreover, the suggestion that antibiotic prophylaxis as indicated in the guidelines might result in widespread harm is a fallacious and feeble one.

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## CME on Infection – Management of meningitis

Editor – May I comment on the section about tuberculous meningitis in the CME on infection (*Clin Med* November/December 2004, pp 502-3)? Although ethambutol is often included in the initial phase of standard regimens for the treatment of tuberculosis, I think the use of this agent unwise in tuberculous meningitis, a condition in which optic neuritis is a well-known complication. Ethambutol is especially to be avoided in children and when, as is often the case, consciousness is impaired. The standard US recommendations<sup>1</sup> take this view, while the UK equivalent<sup>2</sup>

accepts that the fourth drug may be omitted without loss of potency. So the alternatives are to omit ethambutol and to use a three-drug regimen, acceptable in areas with a low prevalence of isoniazid resistance or, if a fourth drug is indicated in the initial phase, to use streptomycin. Streptomycin and ethambutol were found to be interchangeable as the fourth agent in the large trials on which modern regimens are based.<sup>3</sup> Humphries, with vast experience of the disease in Hong Kong, considers that streptomycin should not be used in pregnancy.<sup>4</sup>

Paradoxical enlargement of tuberculomas, fascinating but rarely causing significant clinical problems, is discussed, but the much more important problem of hydrocephalus is inexplicably omitted. Controlled trials of many aspects of the management of tuberculous meningitis are lacking, but all those with experience of this dangerous disease place great emphasis on early detection and shunting for hydrocephalus as crucial in preventing or mitigating neurological deterioration. The work of Schoeman and colleagues at the University of Stellenbosch has been especially important in documenting the devastating effects of tuberculous meningitis complicated by hydrocephalus.<sup>5</sup>

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## In response

We thank Professor Lambert for his insightful comments, which highlight the fact that management of central nervous system (CNS) tuberculosis is a complex issue. In our article we cited the British Thoracic Society (BTS) guidelines, which recommend the use of a four-drug regimen in the initial phase of treatment of tuberculous meningitis (TBM) comprising isoniazid, rifampicin and pyrazinamide, with the fourth drug being one of thambutol, streptomycin, or ethionamide. The authors of the BTS guidelines attached a level of evidence of 'C' to this recommendation.<sup>1</sup>

In our clinical practice, which we believe is probably typical of physicians working in large urban areas, there has been an upsurge of cases of mycobacterium tuberculosis infections (MTB), largely among recent immigrants or asylum-seekers originating from areas with a high incidence of multi-drug resistant TB. In this context (6.3% of UK isolates being resistant to at least one first line drug in 2002<sup>2</sup>), our opinion is that it is now appropriate to treat patients with TBM in the initial phase with four drugs, as the consequences of inadequate treatment are so severe.

Streptomycin is a useful option in therapy, and we use it in a significant minority of our patients. However, it must be given parenterally, as a deep intramuscular injection.<sup>3</sup> Most patients find it so uncomfortable that it is usually mixed with lidocaine to reduce pain. Obviously, this requires extra time and input from healthcare staff, and may prolong a patient's hospital stay. It also, as with all aminoglycosides, carries an increased risk of renal- and oto-toxicity, which necessitates careful monitoring. In our experience, problems with toxicity arise more frequently with use of streptomycin than with ethambutol.

The BTS guidelines also recommend that ethambutol should not be used in unconscious patients, in whom visual acuity cannot be checked prior to onset of treatment, as noted by Professor Lambert. However, the guidelines comment that ethambutol should be used 'where appropriate' in children, provided there is a recognition of the need to report any eye symptoms, and the British National Formulary recommends its use 'with

caution' under the age of five years. Certainly, optic neuritis is a complication of both TBM and ethambutol therapy, however we note that, while it is well recognised, the retinopathy of ethambutol is dose dependent and uncommon, and reversible on withdrawal of the drug.

We acknowledge that hydrocephalus is a recognised complication of TBM and, as always, requires prompt diagnosis and surgical intervention as necessary.

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#### The Assisted Dying for the Terminally Ill Bill 2004

Editor – In the debate on end-of-life issues, Saunders (*Clin Med* November/December 2004 pp 534–40) reiterates some of the traditional arguments against the present Bill. In the context of care for those terminally ill patients who are suffering unbearably, it does not help to talk of Nazi fantasies and to see this Bill as a threat to other vulnerable groups. Depression and existential suffering can be relevant in any decision about treatment, not just at the end of life. As doctors we are involved in decisions in many ethically grey areas – including when to withhold or withdraw treatment, genetic testing etc. Saunders' last paragraph suggests a life-at-all-costs approach. This is not the best place for answering philosophical points – there is strong support for the Bill from some of our best-known philosophers and 'thinkers'. Of those who chair the ethics

committees of the British Medical Association, Royal College of Nursing (RCN) and Royal College of Physicians, one is on the Board of Directors of the Voluntary Euthanasia Society, whilst another sees changes along the lines of the Bill as perhaps inevitable. The viewpoint of the RCN leaders may not be that of the rank and file, as suggested in the article. For patients, the moral difference between doctors who end life in trying to control symptoms and those who end life when it is the only way of controlling those symptoms, may seem academic. What is important is that there should be greater patient involvement in the choice. The present system has served us reasonably well but doctors are feeling increasingly under threat regarding pain relief post Shipman (Medix Survey, 2004). Even leaving a limited supply of morphine with the patient could be construed as 'assisting suicide'. This Bill could help to consolidate present good practice with clearer protection for patient and doctor. We must learn to discuss problems of prognosis with greater honesty but also to listen to the views of the patient. The medical debate should move on to looking at how the Bill should be implemented. After all, when I was first a student a book on medical ethics gave clear, practical advice about 'accelerating death' if all else failed to control symptoms.<sup>1</sup>

Declared interest: on the Board of Directors of the Voluntary Euthanasia Society.

#### References

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Editor – I am grateful for the publication of the debate on the Assisted Dying Bill and the request to engage the College Fellowship on this issue. The current neutral stance of the College has not been taken on the basis of wide consultation and in many quarters has been interpreted as tacit support for the Bill, which I submit is likely to be contrary to the views of the Fellowship. The views of medical professionals seem to be related to

their involvement in the care of the dying, with those most closely involved being most set against the legalisation of assisted dying or euthanasia. Professor Tallis is in a minority of geriatricians on this issue, as a survey of UK geriatricians showed 81% considered active voluntary euthanasia never to be justified ethically.<sup>1</sup> Of palliative care specialists in the UK, 92% said 'no' in response to the question: 'Do you believe that the interests of patients with advanced incurable progressive diseases would be better served were legislation to be enacted to permit euthanasia or assisted suicide?'<sup>2</sup> In the Netherlands, 80% of patients receiving euthanasia are cancer patients, but we do not know the views of UK oncologists on this issue.

The core ethical argument in favour of the Bill is the 'request for the autonomy of the patient'. So, if a competent person persistently requests assistance to die, doctors should assist. If this is accepted, there is no philosophical reason why this should be limited to those diagnosed as 'terminally ill'.

In practice, the vast majority of requests for assisted suicide or euthanasia evaporate in the presence of high quality palliative care. As a profession, surely that is what we must argue for. If a small number of patients, despite high quality specialist palliative care, continue to request assistance to die, I do not think it is within the role of the medical profession to be the agents of the execution of that decision.

#### References

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- 2 Association of Palliative Medicine Survey 2003.

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Editor – I do not criticise the College for taking a neutral standpoint on the Assisted Dying Bill as doctors themselves are divided on this issue. The letters condemning the College for being neutral are revealing in their own light. Each person is entitled to his or her own view, but the majority should not overrule those rare individuals who wish to be given the right