the cerebral perfusion pressure, if necessary by increasing the arterial pressure, seems a logical goal of treatment, though there is little direct evidence that such intervention improves the prognosis.

Clinical features are helpful in predicting the outcome. Young age, low conscious level, abnormal oculocephalic responses, a high ratio of albumin in cerebrospinal fluid to that in serum, and laboratory evidence of infection of the central nervous system are pointers to a poor prognosis.[4 10] The case fatality rate was 34% among 338 children under 3 years of age with acute encephalopathies enrolled in the national childhood encephalopathy study and was similar whether or not encephalitis was specifically diagnosed. At follow up 10 years later almost half the survivors had motor dysfunction and educational dysfunction; well over a third had neurological dysfunction; and almost a fifth had behavioural, self care, and sensory dysfunction. Mortality and morbidity were even higher in children with multisystem disease (who hardly ever had pleocytosis in the cerebrospinal fluid).[12] In a study of 462 Finnish children under 17 years of age the mortality and serious morbidity of encephalitis were 2·8% and 6·7%, with a sevenfold and 12-fold increased risk of these outcomes after *M pneumoniae* encephalitis and herpes simplex virus encephalitis respectively.[10]

Acute childhood encephalopathies make a substantial contribution to chronic neurological handicap, and the impact on individual families (frequently exacerbated by diagnostic uncertainty) may be devastating. The recent launch of a patient support group (helpline telephone number 01751 432 369) for those affected by these illnesses is therefore welcome.

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Detection of prostate cancer

Screening the whole population has not yet been shown to be worth while

In August 1994 the United States Food and Drug Administration approved a blood test for use in detecting cancer of the prostate. The Hybritech Tandem assays for prostate specific antigen were recommended for use in combination with digital rectal examination. The decision was based on data from detection studies—but mainly on a recent study of 6630 men carried out in six different centres by Catalona *et al.*[1] Clearly prostate cancer can be detected earlier and at a higher rate when this combination of tests is used. The study group concluded that "the majority of prostate cancers have spread beyond the gland when first diagnosed using the conventional detection method, digital rectal examination. With no curative therapy for advanced prostate cancer available currently or in the foreseeable future, the most promising alternative for improving the prognosis of patients is to enhance early detection." The report went on to claim that the test improved the detection of prostate cancer confined to the gland by as much as 78% over conventional rectal examination. The proportion of cancers confined to the prostate in the 114 men who underwent surgical treatment by radical prostatectomy was 71%—an important improvement over earlier studies such as that by Van den Ouden *et al*, who found that, of 172 patients apparently suitable for radical prostatectomy, only 58 (34%) had cancers confined to the prostate.[2]

This decision on the use of a commercial test for prostate specific antigen (in conjunction with digital rectal examination) is in line with other policy in the United States. The American Cancer Society and the American Urological Association have agreed to recommend to men above the age of 50 years (and earlier in high risk groups) an annual prostate specific antigen test combined with digital rectal examination.[3] While there is little doubt that screening with this combination is effective in detecting more cancers and more locally confined disease, controversy continues over whether these tests should be applied to the general population of healthy men, only to men seeking medical advice, only within studies, or not all. The cause of this controversy is that no one yet knows whether the men in whom cancer is found benefit in terms of avoiding death from their cancer and improving their quality of life. No randomised studies have been completed that show advantages from early detection and early treatment.

Prostate cancer is the second most common cause of death from cancer in men in most Western countries. About half of those who are found with conventional methods to have prostate cancer will die of the disease.[4] Clinically detected prostate cancer is progressive in all patients. Treatment is available to delay progression. This delay—and the sometimes slow course of prostate cancer—leads to a large proportion of intercurrent deaths: as many as half of the men die with their prostate cancer rather than of it. Those who die and those who do not die of prostate cancer may go through a great deal of suffering. Curative treatment for advanced disease is unavailable. Two recent reviews have addressed many of these facts.[5 6]

While it is evident that clinical prostate cancer kills, many of the cancers found at necropsy have been undetected, caused no symptoms, and have not contributed to death. One study found that the prevalence of prostate cancer in 60 year old men at death was 32%[7]—but the prevalence in living men in western European countries is only about 4%.[4] If all occult cancers were detected there might be overdiagnosis by a factor of eight. Fortunately, this is not the case. The detection rate with prostate specific antigen and digital rectal examination in most studies, including Catalona *et al*'s, are in the region of 3%. Furthermore, most tumours found at screening seem to be aggressive in character. With that background,

the low predictive value of the tests (30-35%) is welcome.

What, then, is the future? The logical approach would be to carry out prospective randomised studies comparing the results of the available, potentially curative forms of treatment (radical prostatectomy, radiotherapy) with those of delayed treatment. This approach is being taken in Scandinavia and Britain. But results will not come quickly—because of methodological difficulties in randomisation schemes, exclusion of the most aggressive tumours, the "learning curve" for those carrying out radical prostatic surgery, and the need for a 15 year follow up for a final verdict. Meanwhile pressure is mounting for patients in general practice to be offered screening.

The approach in the United States is at the other extreme. Lu-Yao and Greenberg have clearly shown that the incidence of prostate cancer is rising while mortality stays unchanged.[8] The most likely explanation of these figures is the growth of screening. The increasing discrepancy between incidence and mortality during 1989-93 does not, however, mean that the approach across the Atlantic is doomed to fail. Changes in mortality from prostate cancer will occur later if at all. Believers in screening point out that every clinical prostate cancer has to pass through a localised stage. Time will have to show whether the enormous effort made with early diagnosis and treatment in the United States will bring down mortality from this cancer.

My own view is that the best compromise is to carry out randomised screening studies that compare screening with no screening and use mortality from prostate cancer as the main end point.[9] Such studies are in progress in Europe (the European randomised study of screening for prostate cancer) and in the United States, where a screening trial for prostate, lung, colon, and ovarian cancer is run by the National Cancer Institute. This approach has recently been criticised in the *Lancet*, but the critics underestimated the risk of localised prostate cancer.[10]

For the time being I think that the available screening tests should not be applied to the whole population—because the balance of risk and benefit has not been clearly shown to favour screening and early treatment. The tests are useful in symptomatic men presenting themselves for consultation and should also be made available when men ask for them. More publicity should be given to the potential benefits and uncertainties of screening. Another uncertainty is that the upper age limit for treatment has not yet been defined conclusively. Men much beyond the age of 70 seem likely to have limited benefit. In older men—and possibly in others too—the treatment of locally confined disease should include the possibility of watchful waiting.

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Perinatal and infant postmortem examination

Difficult to ask for but potentially valuable

The relatively large concentration of deaths in the perinatal period and infancy and the need to provide explanations for parents might suggest that clinicians frequently turn to pathologists for information from postmortem examinations. Yet Cartlidge and colleagues in this week's *BMJ* draw attention to the fact that the rate of postmortem examination for perinatal and infant deaths in Wales is only 58% (p 155).[1] Their results are probably typical of the rest of Britain. For example, the confidential inquiry into stillbirths and deaths in infancy in the North Western region found a similarly low rate of only 53% in 1993 (A J Barson and J A Sands, personal communication).

The value of the perinatal postmortem examination extends beyond its ascertainment of factors that contributed to death. It may provide the basis for informed genetic counselling; it may challenge or verify diagnoses made by new techniques before death; it serves to monitor possible adverse effects of new treatments; it is a basis for research and education; and, finally, it can be a source of information in epidemiological surveys.[2] All this assumes a high quality postmortem examination, but the evidence suggests that this is far from guaranteed. In the Welsh survey a postmortem examination was not requested in 17% of all deaths and not permitted in 25%. Clinicians are urged to take a more positive attitude towards postmortem examination, and others have suggested the same with respect to deaths in children.[3-5] Yet there is a difficult problem here, partly because of changing attitudes towards perinatal death. Whereas previously the idea of a funeral service for a stillborn infant would have been looked at incredulously, it is now quite common.[6] Obstetricians are faced with the uncomfortable prospect of letting parents nurse and bond with their stillborn infant, perhaps for some hours, and then asking for consent for a postmortem examination.

Similarly, there has also been a change in the circumstances surrounding neonatal death. Deaths now commonly occur after prolonged intensive neonatal care, particularly in extremely immature babies. Life support may be withdrawn after distressing discussions with parents, who often express a wish to nurse and perhaps bath and dress their dead baby. In these circumstances an understandable reason for parents declining consent for a postmortem examination is that their baby has "already suffered enough."

There is no euphemism to describe a postmortem examination. On the one hand, parents desire their last memory of their baby to be one that is disentangled from technology; on the other hand, there is the perception of their loved one's body being desecrated.

How can we work towards resolving this problem? Firstly, seeking parental consent for postmortem examination