Variant CJD: finding a needle in a haystack?

Sir,

The editorial about variant Creutzfeldt–Jakob disease (vCJD) by Dr de Silva (Vol 61(2), 2000, p. 82) raises important questions which it is currently difficult to answer.

In approximately two-thirds of the vCJD cases, the age at death was between 15 and 30 years, while data from the European Union Collaborative Study Group on CJD show that almost all sporadic CJD cases are older than 30 years. One possible explanation of the remarkable age distribution of vCJD cases is that exposure has been much more higher in adolescents and young adults than in younger and older age groups. However, the precise nature of the exposure is still unknown and further data are necessary to perform a reliable case-control analysis of environmental risk factors of vCJD. Another explanation is that incubation period of, or susceptibility to, the disease depends on age. Moreover, the proposed explanations might be not mutually exclusive.

Interaction between genotype and prion strain could explain why, so far, all vCJD cases were homozygous for methionine at the codon 129 of the prion protein gene (PRNP). It is not yet possible to know whether individuals with other genotypes are protected against vCJD, or whether they have longer incubation period, by comparison with other genotypes.

The question about the future number of cases of vCJD is related to the preceding ones. The number of vCJD cases depends on the level and the duration of the exposure, the length of the incubation period, and the size of the population which has been exposed to the BSE agent not only in the UK, but also in other European countries. Five years after the onset of the first vCJD case, there is still much uncertainty about the future vCJD epidemics.

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Sir,

The great achievement of the CJD unit in 1996 was that it had managed to detect a clinicopathological syndrome which was not quite what it was looking for. If vCJD had been identical in presentation to sporadic CJD (sCJD) it would be difficult to detect it even now as an increase in cases above the 50 or so cases of sCJD which occur every year in the UK. vCJD did not conform to the diagnostic criteria of sCJD, but it was found and recognized as being distinct.

Subsequent analysis of archival and foreign cases of CJD have found only one case of vCJD in France, whose aetiological significance is uncertain. All this is a credit to good, old fashioned clinical diagnosis. Molecular and biochemical methods are a good adjunct but will not replace clinical acumen. The Holy Grail of a 'pre-clinical diagnostic screen' will not materialize; tests which are very accurate in post-diagnosis, terminal cases may be useful indicators in some unusual cases, but they are not going to detect people infected with the agent of BSE but in whom the pathogenic process is only just beginning. Nor is a cure just around the corner. Understanding pathogenesis (or finding the gene) does not lead automatically to an effective treatment.

The number of cases of vCJD is inching up. There are too many unknowns to predict the eventual size of the epidemic (although there have been many attempts to do so). We do not know whether the cases so far were acquired at the beginning of the BSE epidemic, before the cows were demonstrably sick and when infective impact on the human population was low, or whether they were acquired as a result of exceptional exposure at the height of infectivity in human food. Either way, there are likely to be more cases in the next few years, perhaps for several decades to come.

Good clinical vigilance and sound medical care will be necessary to support the victims and their loved ones.

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Indications for lanreotide

Sir,

Further to M. Cullens excellent article on extending the therapeutic horizons of lanreotide (Vol 60(10), 1999, p.714), I wish to add another exciting development focusing on lanreotide. In thyroid eye disease, somatostatin receptors have been identified on activated lymphocytes found in the orbital tissues (Kahaly and Forster, 1998).

Orbital scintigraphy using Octreoscan 111 has been shown to be useful in visualizing the somatostatin receptor-bearing cells and also to select patients who might benefit from octreotide and lanreotide therapy (Krassas et al, 1999). Preliminary studies (Krassas et al, 1997, 1999; Krassas, 1998) using these agents, albeit with small numbers of patients, have shown beneficial effects on patients with thyroid eye disease and generate promise for a potentially useful role for lanreotide in thyroid eye disease in the future.

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Tuberculous peritonitis: a non-invasive test

Sir,

The case report of Thomas et al (Vol 60(8), 1999, p. 602) reminds us that tuberculous peritonitis can mimic other pathologies and can be a difficult diagnosis to make.

In their discussion they fail to mention the role of ascitic fluid adenosine deaminase activity in assessing ascites of unknown aetiology. Studies have reported that ascitic adenosine deaminase activity has a sensitivity of 100% and a specificity of 96% for tuberculous peritonitis (Voigt et al, 1989).

Co-existing medical conditions (such as cirrhosis or malignancy) give rise to false positive results (Hillebrand et al, 1996) but there are no reports in the English literature on the affect of continuous ambulatory peritoneal dialysis on ascitic adenosine deaminase activity. In conditions that are difficult to diagnose, an easy, rapid, safe and reliable test such as ascitic adenosine deaminase activity must have a place in routine investigations.

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