Blood to be screened for CJD

Concern about the new variant of Creutzfeldt-Jakob Disease (CJD) has prompted Britain's blood supplier to tighten its donor screening process. As of this month, the National Blood Authority began questioning potential donors about their family history. Those people whose siblings, parents, or grandparents have developed the disease and people who have been treated with human growth hormone will be prevented from donating.

The decision to question potential donors follows the discovery that bovine spongiform encephalopathy (BSE) may be transferred from cow to calf (10 August, p 317). While the method of transfer is unknown, there is concern that it could be bloodborne.

There is no evidence at present to indicate whether CJD, the human equivalent of BSE, can be contracted through the blood. However, a paper published in this week's *Transfusion Medicine* by Stephen Dealler, microbiologist at Burnley General Hospital, reviews the evidence to date. It shows that blood from an animal infected with a transmissible spongiform encephalopathy can be infective if injected into the same species.

In the article Dr Dealler calculates the number of people likely to have been infected with CJD from eating BSE infected food, and then those who will give blood before the symptoms develop. At a maximum level of infectivity, he suggests around 60 000 people a year would receive an infected transfusion. However, this would not necessarily translate into the same number of new cases, he admits, as many people who receive donated blood die within a year of the transfusion.

Using animal models to calculate the amount of blood needed to cause infection, Dr Dealler suggested that it was very small. "It takes about 10 infected units. This makes it the second most infective way of spreading the disease after direct injection into the brain," he said. One pint of blood would easily contain about 1000 times the necessary levels.

Because CJD has a latency period of about 20 years and no test can identify infected people, concern exists about an epidemic of disease in transfused people. In the US the prospect of another disease being transmitted through the blood supply (following AIDS and hepatitis C) has led to greater vigilance in many donation centres. According to Dr Joseph Fratantoni at the Food and Drug Administration's Center for Biologics Evaluation and Research, there had been at least nine incidents when blood and blood products were recalled months later because the donor went on to develop CJD. He said

Patients at risk of developing CJD will not be able to give blood

while whole blood had a shelf life of about five weeks, some blood derived products could be kept for much longer — such as factor VIII for 24 months and albumin for up to five years. Dr Fratantoni said there had been discussions that some donation centres would rule out blood from people who had lived in Britain, but this was not policy and he did not think it had been enforced anywhere.

A report in 1993 found that four Australians died of CJD five years after receiving a blood transfusion although the link was not proven. However, a Swedish study which investigated the recipients of blood donated by a man who died of CJD over two decades after making the donation found that none of the people had developed the disease. CJD has been transmitted to humans through the transplantation of infected corneas and dura mater and treatment with human pituitary growth hormone.—JANET MORGAN, *medical journalist, London*

Signing gun licences would put heavy burden on GPs

The Home Office has admitted that asking general practitioners to countersign applications for firearms certificates in Britain would place a significant burden on them.

The admission came in a memorandum to the House of Commons' home affairs committee on control of hand guns, which nevertheless recommended last week that doctors should have to endorse all applica-

tions to verify a patient's medical history (17 August, p 379). On current figures, there would be an average of around 35 000 applications for firearms and 145 000 for shotguns in Britain each year. "Countersigning these or providing other information would place a significant burden on doctors," the Home Office states in the memorandum.

Currently a doctor's signature is not required by law but can be sought as a "reputable member of the community" known to the applicant in the same way as ministers of religion, justices of the peace, lawyers, civil servants, and bankers.

The Home Office memorandum also casts doubt on the assumption that general practitioners are uniquely well placed to provide relevant information about the applicant's suitability, given their knowledge of their patients' physical and mental health. Unlike suitability to drive a car—in which objective medical criteria apply and the role of doctors is well established—the Home Office says that there is no clear scientific evidence about what factors determine a person's fitness to possess a gun. This was also one of the main objections stated by the BMA and the Royal College of Psychiatrists in their evidence to the committee.

A further problem is that some doctors already refuse to sign certificates as a matter of principle, and any regimen of compulsory medical certification might need to cater for these cases. The Home Office says that it is not clear how this could be done in a way that was fair to all parties.

The Home Office memorandum was also submitted to Lord Cullen's inquiry into the Dunblane tragedy, which is expected to issue its findings by the end of September.—JOHN WARDEN, *parliamentary correspondent, BMJ*

Headlines

Health authority refuses referral: Solihull health authority has refused to approve the referral of Mandy Allwood, who is carrying eight fetuses, to a London hospital for maternity care. The authority said that she would receive just as good care if she was managed in Birmingham. The authority added that it is already under great financial pressure and approval could result in a significant loss of services for the rest of the population of Solihull.

Coroner links death to eating beef-burgers: A coroner created a legal precedent by saying the death of 20 year old Peter Hall, who died of Creutzfeldt-Jakob disease (CJD) in February, was caused on the "balance of probabilities" by something like a beefburger infected with bovine spongiform encephalopathy. He recorded a verdict of misadventure. All previous inquests of CJD cases have had verdicts of death by natural causes.

Guidance on BSE released: The first general guidance for all occupational groups who may be exposed to bovine spongiform encephalopathy (BSE) in the course of their work has been published by the Department of Health and the Ministry of Agriculture, Fisheries, and Food. It includes personal protection measures and recommends new ways of killing cattle.

Cigarette manufacturers forced to reveal ingredients: The governor of Massachusetts has signed into law a bill requiring cigarette manufacturers to reveal the nicotine and addictive contents of their products. The state also plans to publish an analysis of how addictive various brands are. The tobacco industry fought the legislation and is considering retaliatory legal action. New York will propose similar legislation next year.

More GPs become fundholders: More than 56% of all GPs in England will be in charge of their own budgets from next April, according to latest government figures. A further 1672 GPs have applied to join the scheme, bringing the total to more than 15 000.

More private hospital beds were closed than opened last year: Laing's review of private health care shows that the number of subscribers to private medical insurance dipped last year in England and Wales, with more private hospital beds closing than opening for the first time in a decade. The review also shows that NHS pay beds increased their share of the market last year to 15%.

Hormone therapy may protect against Alzheimer's disease

Research published last week suggests that oestrogen may significantly delay the onset and reduce the risk of developing Alzheimer's disease. A New York based study found that women who had taken oestrogen after the menopause for 10 years or more were between 30% and 40% less likely to develop Alzheimer's disease than women who had never had hormone treatment (*Lancet* 1996;348:429-32). And if women who had taken oestrogen did develop Alzheimer's disease it started significantly later in life.

The researchers followed up 1124 elderly women, with an average age of 74 years, who were assessed as non-demented by means of an interview, examination, and an hour of neuropsychological tests. During follow up, which ranged from between one and five years, 167, or 15%, of the women developed Alzheimer's disease as assessed by an independent group of doctors using standardised tests.

Of the 968 women who had never used hormone replacement therapy, 158 (16.3%) developed the disorder, compared with nine of the 156 women (5.8%) who had taken oestrogen after the menopause. Women who had used oestrogen for longer than one year showed the greatest reduction in risk, and none of the 23 women who were taking oestrogen when the study started developed dementia.

The significant differences between women who had used oestrogen and those who had not were still apparent even after adjustment for differences in education, ethnic origin, and apolipoprotein E genotype in the two groups of women. The authors admit that an unexamined bias could still account for the differences and say that a prospective trial is now justified.

Commenting on the research, Dr Declan Murphy, senior lecturer and consultant psychiatrist at the Institute of Psychiatry in London, said: "The evidence is still preliminary but highly promising. We know that hormone replacement therapy protects the uterus, the bones, and the cardiovascular system. Now it seems we can add the central nervous system to its broad protective role."

Dr Murphy's own research has shown the importance of oestrogen in female postnatal brain development, and in an accompanying editorial he suggests possible mechanisms by which oestrogen may delay the onset of Alzheimer's disease. "Given that oestrogens are crucial for brain development—particularly for the hippocampus and perhaps the parietal region—these sex hormones may also play an important part in modulating age related brain diseases. Neuronal atrophy of these areas is characteristic of Alzheimer's disease, and so anything which modulates neuronal death in these areas may be of value," Dr Murphy said.

Oestrogen also upregulates neurochemical transmitters which are compromised in Alzheimer's disease, and it decreases the effects of toxic chemicals such as high concentrations of cortisol. In addition, oestrogen seems to modulate cerebral blood flow.

"This may have important therapeutic implications, not only for patients with Alzheimer's disease but possibly also for those with multi-infarct dementias," Dr Murphy said.

Professor Gordon Wilcock, professor of care of the elderly at Bristol University, said that he was impressed by the study's size and design. "Hormone replacement therapy could certainly not be recommended for all postmenopausal women, but if an individual has a family history of Alzheimer's disease or if she is showing early clinical signs of the disease it could be beneficial in slowing disease progression," he said. "And if an oestrogen analogue could be developed without the feminising effects of the sex hormone, it could benefit men too," he added.—ALISON BOULTON, *medical journalist, London*

Hormone replacement therapy may protect against tissue degeneration caused by Alzheimer's disease

Change in funding will boost part time junior posts

Health minister Gerald Malone has announced moves which he says will ease the funding of part time posts for junior hospital doctors in England. The changes, which are supposed to assist flexible working, stem from an NHS Executive report, *Funding Post Graduate Medical and Dental Education in England*.

Two key changes are being introduced. Firstly, the NHS education budget, funded through a national levy on health authorities, will in future fund all of the basic salary of preregistration house officers in their first year of work, instead of NHS trusts bearing half the costs. Secondly, NHS trusts will assume responsibility for funding any additional duty hours undertaken by part time junior doctors. These hours, which are over and above a doctor's training, are currently funded by postgraduate deans from the education budget. This limits opportunities for creating part time posts.

Under current funding arrangements it is less expensive for postgraduate deans to create full time posts, with individual trusts meeting half the costs, than to create part time posts and bear the costs of trusts' requirements for additional duty hours. The new proposals will remove this disincentive.

Mr Malone said that the new package would create a much more flexible system and added: "There should be no financial barrier to part time working and innovative contracts designed to suit today's junior doctors. This reform package leads the way for the further development of medical training in hospitals."

But Dr Steve Hajioff, deputy chairman of the BMA's junior doctors committee, said: "We had hoped for a levelling up of funding arrangements so all posts were funded 100% by postgraduate deans, as happens in Scotland, not a levelling down."

"While it will encourage flexibility, I am concerned about how trusts will use these posts. There is a real danger of financial exploitation of flexible trainees. A canny trust manager could use a flexible trainee to work 50 hours a week and so save money."

The new arrangements, which come into force in April 1997, are intended to be cost neutral. The education levy for preregistration house officers will be £62m, and trusts will spend about £200m on funding additional duty hours. The NHS Executive says that the changes recognise that the preregistration year is a completion of undergraduate education rather than specialist training. They will remove barriers to flexible training and improve opportunities for doctors who wish to continue training on a part time basis.

Other recommendations for the funding of medical education are being discussed with NHS managers and the medical profession. The results of this consultation will be announced early next year.—JOHN WARDEN, *parliamentary correspondent, BMJ*

Professor Hoyer is believed to be the first doctor to donate a kidney to a non-relative

German doctor donates kidney

It sounds like the storyline in a television medical drama, but the case of a transplant surgeon voluntarily donating one of his kidneys to a patient really happened. Last month Professor Jochem Hoyer, an experienced transplant surgeon in Lübeck, Germany, donated his kidney to a 29 year old man whose identity he did not know.

Professor Hoyer said that he donated his kidney "to give moral support to all those who face the decision whether to help out a related person with a kidney." He denied that he had intended to encourage anonymous donation from living donors, but said that he had been impressed by a colleague who during discussion had rebuked him: "How can we talk healthy people into donating organs if we are not ready to do it ourselves?"

Professor Hoyer, aged 53, is a professor of medicine and director of the transplant centre of the Medical University of Lübeck. The operation was performed at the transplant centre at the University of Munich, where Professor Hoyer had spent four years as a senior house officer in the 1970s. Professor Walter Land, director of the Munich transplant centre, said the doctor's decision was in his view an "altruistic act" and that it was unanimously agreed by the hospital's ethics committee.

This marks a considerable change in the Munich transplant centre's position on the donation of organs from living donors. In 1988 the centre was the first in Germany to stop all transplants of organs from living donors. At that time it was feared that transplants from living donors could become commercialised on a worldwide scale and that donors would not always make their decision freely.—HELMUT KARCHER, *medical writer, Munich*

Call for fewer trusts in Wales

The Welsh Office was this week coming under increasing pressure to review the size of trusts in Wales in the wake of the crisis at Swansea's Morriston Hospital. Last week the trust chairman resigned after a vote of no confidence in him and his chief executive by consultants.

Sixteen of the consultants have also resigned as clinical directors, and Dr Keith Vaughton this week handed in his notice as medical director of the trust, although he remains as a consultant. The resignation by the consultants was in protest at redundancy notices issued to two consultants and a senior hospital doctor after a £1.8m elderly care contract was lost to the neighbouring trust Singleton (17 August, p 385).

The Welsh Office announced this week the appointment of Professor Sir William Asscher, who retires at the end of September as principal of St George's Hospital Medical School, London, as the new chairman of Morriston NHS Trust. As the appointment was being made there were calls for some trusts, including Morriston and Singleton, to be merged. The problem of a number of competing trusts in small areas is replicated in some other urban areas in Wales. There are 30 trusts in the principality, including five ambulance trusts, for a population of just 2.8 million.

In a letter to the Welsh secretary, William Hague, Labour's health spokesman in Wales, Rhodri Morgan, said: "It is clear that competition across a range of medical and surgical services between Morriston and Singleton is not doing the NHS any good. Cooperation would be far better than competition, and merger of the trusts would bring administrative savings that could be directed into patient care. Merger in Swansea would be welcomed across the board, and I believe that there is a strong case for doing the same, for example, between the University Hospital of Wales and Llandough trusts in Cardiff."

Dr Bob Broughton, the BMA's Welsh secretary, said: "This concept of reviewing the appropriate size of trusts and looking for possible mergers has been informally discussed by officers and may well be the subject of further debate."

The chief executive of Morriston, Tony Beddow, was still in post, 10 days after the vote of no confidence in him and the chairman. His position is expected to be top of the agenda for the incoming chairman and new board. After the resignation of chairman Peter Allen, four of the remaining five non-executive directors of the trust also resigned in support. In a statement they said they had resigned collectively "in recognition of our full support for Mr Allen's chairmanship and in the belief that recent events have made our continued membership of the board untenable."

The redundancies that sparked the row have been withdrawn. One of the main worries of doctors was that, had they gone ahead, Morriston would have been forever associated with redundancies, thus damaging future recruitment.—ROGER DOBSON, *medical journalist, South Wales*

Government agents raid the Cannabis Buyers' Club

Police and city officials in San Francisco have backed a move to legalise marijuana for medicinal purposes. But calls for a state of emergency declaration to allow the sale of the drug to users suffering from AIDS and other life threatening diseases were defeated last week.

The emergency declaration was drawn up in protest at the recent closure of the Cannabis Buyers' Club of San Francisco, which was founded to provide marijuana as a relief for those suffering from chronic diseases such as AIDS, cancer, and multiple sclerosis. The move has inflamed a long simmering controversy about the medicinal value of cannabinoids and has stirred interest in Proposition 215, an effort to legalise the use of marijuana for therapeutic reasons, which will be voted on in California this November.

The Department of Justice seized more than 150 lbs (68 kg) of marijuana, more than \$60 000 (£40 000), and several hundred growing marijuana plants from the club. The attorney general's office claims that minors were buying marijuana in the club, that it was being resold on the street, and that club members did not check to make sure that customers had valid prescriptions from doctors.

The local community, however, seems sympathetic to the targets of the raid. San Francisco Sheriff Michael Hennessey rejected a request from the attorney general's office to enforce a temporary restraining order forbidding the sale of marijuana at the club. He has also said that he has no intention of making any arrests.

But the city's board of supervisors defeated a resolution that would have created an emergency declaration to allow the medicinal sale of marijuana and permitted the club to resume operation. District Attorney Terence Hallinan explained that there must be a serious public hazard posing an immediate threat to life before an emergency can be declared and

that this situation did not meet those requirements.

Psychiatrist Dr Tod Mikuriya, medical coordinator of the Cannabis Buyers' Clubs in California, said that there is evidence that cannabis has immunomodulatory properties, making it useful in treating conditions such as asthma, lupus, multiple sclerosis, and degenerative neurological and musculoskeletal diseases. He maintained that a few puffs of marijuana several times a day may allow patients with such diseases to avoid drugs such as prednisolone and non-steroidal anti-inflammatory agents and their associated side effects.—NORRA MACREADY, *medical journalist, Irvine, California*

Doctors in Wales should learn Welsh

Doctors in Wales should sit a language proficiency test and there should be financial and career incentives for those who speak Welsh, according to Dr Carl Clowes, director of medical services in Powys Healthcare NHS Trust.

Speaking at a conference organised by Age Action Ireland, Dr Clowes said: "Our objective should be that when receiving health care, all patients should at the very least have the opportunity of a consultation in the language of their choice."

Welsh is the first language of many people. In parts of Wales more than 50% of people aged over 65 speak Welsh as their first language. Although the number of Welsh speakers in Wales is half the one million speakers in 1931, it is now increasing, helped by the Welsh Language Act and a national curriculum that requires all children to learn the language.

Speaking after the conference, Dr Clowes urged the medical profession urgently to debate the language issue. "We could have financial or career incentives for doctors who speak Welsh. We may need to have a profi-

ciency test of some kind. There is also a need for more language tuition sessions. I accept these are all sensitive areas and there may well be tensions as a result, but what is important is that health services in Wales have a creative response to the act."

Although there is a strong support in the medical profession in Wales for the language, there is concern that any additional requirement in recruitment may deter some applicants. Dr Bob Broughton, Welsh secretary of the BMA, said: "We are approaching an immense manpower crisis in medicine. Our general practice training posts are down to one third of capacity and several specialties are finding it difficult to recruit, and to put a language requirement on top of that would be most inappropriate."

Many other professions, such as social workers and teachers, particularly in the Welsh speaking heartlands of west and north west Wales, have in recent times operated under local authority policies that require applicants either to speak Welsh or to undertake to learn it.—ROGER DOBSON, *medical journalist, South Wales*

France allows sperm injection to treat infertility

The French government has authorised 50 specialist centres to carry out the infertility treatment known as intracytoplasmic sperm injection. The decision surprised those doctors who regard the technique as risky. Only last year the minister of health recommended that it should be confined to only two or three specialist centres.

The technique entails injecting a sperm directly into an ovum and is suitable for couples in which the man is infertile. Some specialists in reproductive medicine are concerned that intracytoplasmic sperm injection could lead to fertilisation by abnormal sperm, increasing the risk of congenital abnormalities and perhaps even leading to the paradoxical possibility of the hereditary transmission of sterility. Dr Jean-François Mattéi, professor of medical genetics and coauthor of the French bioethics legislation, wants the technique confined to a few highly experienced non-profit making centres. Several specialists suggested that a long term follow up system should be set up to evaluate risks with the technique.

Following the advice of a committee of specialists in reproductive medicine, the secretariat of state for health earlier this month published the list of the 50 authorised centres, split evenly between the public and private sector. The government does not outline any specific follow up system; neither does it place any restrictions on the method of obtaining sperm for the technique.

Last month the Dutch health council called for tighter regulations on intracytoplasmic sperm injection (3 August, p 248). —ALEXANDER DOROZYNSKI, *medical journalist, Paris*

The Cannabis Buyers' Club was set up to provide marijuana for those suffering from chronic diseases