New variant CJD found in tonsils

Zosia Kmietowicz, *London*

A new test has been developed for diagnosing new variant Creutzfeldt-Jakob disease using samples of tissue taken from tonsils. New variant Creutzfeldt-Jakob disease (nvCJD) is thought to be transmitted to humans from beef infected with bovine spongiform encephalopathy. The test will be used to estimate how many people in the United Kingdom have been infected with and are likely to die from nvCJD.

Researchers from Imperial College and St Mary's Hospital in London reported that they had been able to detect the infectious agent of nvCJD in tonsil tissue removed under general anaesthesia from patients with the disease (*Lancet* 1999;353:183-9). The agent—protease resistant prion protein—was found in the tonsil tissue of nine out of 20 patients suspected of having nvCJD and referred to the research team. All patients testing positive for the agent have since been confirmed as having nvCJD, and patients who were negative for protease

The infectious agent of nvCJD has been found in tonsil tissue

resistant prion protein were found to have other diseases.

Commenting on the findings, John Collinge, professor of neurogenetics at Imperial College, said: "This test will undoubtedly allow us to diagnose new variant CJD earlier, even before symptoms develop." Until now, nvCJD could be diagnosed only by using samples taken after death or from samples of brain tissue removed during a high risk procedure.

Over the next two to three years the research team will be testing around 2000 tonsils for the infective protein to gauge the extent of infection in the general population. The tonsils will be taken from a sample of

the 80 000 that are removed routinely in the United Kingdom each year and will be screened anonymously.

Professor Collinge admits that there are problems with this type of screening because no one is sure how soon after infection the protein can be detected in tonsils. "The problem with this sort of analysis is that a negative result is not a result. We don't know whether everyone who gets CJD will have this protein in their tonsils, and a negative study is of limited value. But if we find that a significant number of people are infected then it will have important implications," he said. □

US Congress debates stem cell research

James Ciment, *New York*

The controversy surrounding the recent harvesting and culture of human embryonic stem cells—the cells that form within days after fertilisation and transform into all other forms of human cells as a fetus develops—was debated last week by the US Congress.

The ban on federal funding for research using human embryos should be lifted, argued Arthur Caplan, director of the Center for Bioethics at the University of Pennsylvania. He was giving evidence to the Senate appropriations committee. President Clinton banned the use of federal funding to create human embryos for research five years ago. Congress later broadened the prohibition to include any research using human embryos.

"The identification of human embryonic stem cells has been widely acknowledged as being of inestimable value...[as it] holds the promise of allowing the development of techniques for manipulating, growing, and cloning these cells to permit the creation of designer cells and tissues," Caplan said. This, he added, could aid research into a host of age related diseases, including osteoporosis, stroke, depression, arthritis, Alzheimer's, diabetes, cancer, heart disease, and Parkinson's disease. Parkinson's, caused by the death of cells in the brain that produce dopamine, might be cured by the placement of stem cells in the dopamine producing region, researchers in Sweden recently announced.

Caplan's testimony, together with the spate of recent developments in stem cell research (14 November 1998, p 1337), convinced the subcommittee's chair, Pennsylvania Senator Arlen Specter, and he announced a bill to partially lift the ban on federal funding. Specter, who pointed out the inconsistency of allowing federal support for research using fetal tissue but not embryos, also noted that President Clinton seems "favourably disposed" to the bill.

Proponents say that they recognise the moral implications of this kind of research. "As a society," Caplan noted, "we do not want to see embryos treated as products or mere objects for fear that we will cheapen the value of parenting [and] risk the commercialisation of procreation." But maintaining a ban on federal funding, noted Daniel Perry, executive director of Alliance for Aging Research, leaves research in the private sector, where there is little federal oversight. □

Wales to reform psychiatric care for children

Roger Dobson, *Abergavenny*

New safeguards to protect children in psychiatric hospitals throughout Wales have been proposed by the Welsh secretary, Alun Michael. A strategic review of psychiatric services will also be undertaken after an independent inquiry into inpatient care for young people pinpointed several problems.

The inquiry, carried out by the Hospital Advisory Service 2000, was set up after the north Wales child abuse tribunal heard evidence of incidents and allegations of child abuse at a former NHS psychiatric unit for children. The advisory service looked at a number of units in north and south Wales but focused in particular on two adolescent inpatient units. It concluded that in the North Wales Health Authority area there is currently inadequate provision to meet the full range of adolescent psychiatric illness. At the Harvey Jones unit in south Wales, it reported what were described as unacceptable delays of up to six months between referral and assessment.

Concern was also expressed about admission of patients aged under 16 years to adult psychiatric units. The advisory team found that at the Harvey Jones unit the quality of care was adversely affected by the use of bank staff, staff sickness, and short term contracting. At the Cedar Court unit in north Wales the levels of staff at night were insufficient to ensure protection for the adolescents from abuse by other residents.

Mr Michael said that the Welsh Office has consulted with the health authorities involved and taken action on all urgent issues identified in the report. Staffing levels at the Harvey Jones unit have been strengthened, and urgent training has taken place. □

Child and Adolescent Mental Health Services Residential Units in Wales: a Review of Safeguards and Standards of Care is available free of charge from the PCH Division, Welsh Office, Cathays Park, Cardiff CF1 3NQ.