Traditional butchery methods linked to vCJD cluster

Roger Dobson Queniborough

A report into the largest cluster of cases of variant Creutzfeldt-Jakob disease (vCJD) in the United Kingdom has said that beef products bought from traditional family butchers might have been involved.

The report linked deaths from vCJD in the Leicestershire community of Queniborough to a series of factors in the supply chain of local meat, including meat preparation practices used by traditional butchers and slaughterers two decades ago, which might have allowed brain issue infected with bovine spongiform encephalopathy (BSE) to come into contact with meat.

"We have found an association which provides a biologically plausible explanation suggesting that four out of the five people with vCJD may have been exposed to the BSE agent through the purchase and consumption of beef from a butcher's shop where the meat could be contaminated with brain tissue," said the report from Leicestershire Health Authority.

The study showed that the people with vCJD were 15 times more likely to have purchased and eaten beef from a butcher

who removed the brain from the animal than controls who bought meat from outlets where contamination with brain material was not a risk.

At that time-the early to middle1980s-a number of traditional butchers often carried out their own processing of whole carcasses; in 1983, 132 slaughterhouses were registered in Leicestershire, compared with 21 now. Part of the traditional butchering practice involved a technique known as pithing, where a hole was made in the animal's skull. This practice produced a fine spray of brain tissue, which could have contaminated meat destined for human consumption. The cattle were slaughtered in small abattoirs that used pithing and where carcasses were not washed down.

The report said that at the same time, farming practices meant that beef cattle in the area had a greater lifetime exposure to potentially contaminated feed because the local beef cattle were raised alongside dairy cattle and were fed meat and bone meal supplements from the age of 6 days rather than 6 months (as is the case for pure beef herds). Also, most of the cattle were Friesian cross bred: slow to fatten and therefore slaughtered later than some other breeds.

All five people who died of vCJD had lived within five kilometres of each other between 1980 and 1991. Only one had moved out of the area, in 1991.

The report said that the association may not apply to other



Queniborough: "Result is compatible with existing theories"

cases of vCJD: "On a national basis, it is unlikely to explain how all of the people who have developed the disease were exposed to the BSE agent."

Dr Chris Martyn, clinical scientist at the Medical Research Council's Environmental Epidemiology Unit at Southampton University, said: "The negative would have been a more surprising result. If, for example, it had been found that these people had been vegetarian and never eaten beef, that would have been interesting, but this result is compatible with existing theories."

He added: "At first sight it is a very remarkable finding that you should have so many cases in such a small area. But epidemiologists are almost always sceptical about clusters, particularly when there is a long lead period. Clustering works well when disease occurs soon after exposure, but one of the things about clusters is that they are defined post hoc. You find the cases, then draw a tight boundary around them.

"There are many examples of clusters of disease which have led nowhere. A cluster of cases of multiple sclerosis in Glasgow, for example, was linked to a sick dog, another cluster to people who had been in the same class at school. But when you look closer there are often many more common factors."

So far 85 people in the United Kingdom and two people in France have died from vCJD, and there are as yet no confident estimates as to what the eventual number of people affected by the disease could be.

The report of Leicestershire Health Authority's investigation is at www.leics-ha.org.uk

Pregnant women cannot be tested for drugs without consent

Scott Gottlieb New York

The United States Supreme Court has ruled that hospital workers cannot test pregnant women for use of illegal drugs without their informed consent or a valid warrant if the purpose is to alert the police to a potential crime.

The court's 6 to 3 decision stemmed from a 10 year old lawsuit brought against the city of Charleston, South Carolina, by women who were arrested, under a cooperative programme between a public hospital and the police department, after a positive urine test for cocaine.

The Supreme Court ruled that the facts of the women's pregnancy and of possible danger to their fetuses through use of illegal drugs did not change their basic constitutional rights. Justice John Paul Stevens said for the court majority that the hospital's test to get evidence of a patient's criminal conduct was an unreasonable search if the patient had not consented.

In the ruling, the Supreme Court overturned a 1999 decision by a lower federal court that said that regardless of whether the women provided informed consent, the clandestine drug testing programme was justified by the "special needs" of stopping drug use by pregnant women and getting the women into treatment.

In the current opinion, the Supreme Court said that the "special needs" exception to the fourth amendment—which the court has recognised in limited circumstances to justify drug testing for health and safety purposes, such as the testing of airline pilots and train drivers—did not apply to a programme that was so directly connected to law enforcement.

"While the ultimate goal of

the programme may well have been to get the women in question into substance abuse treatment and off drugs," the Supreme Court said, "the immediate objective of the searches was to generate evidence for law enforcement purposes in order to reach that goal."

Medical organisations, including the American Medical Association and the American Public Health Association, filed briefs with the court on behalf of the plaintiffs that made that argument. In its judgement, the Supreme Court took explicit note of these briefs, saying that in light of them, "it is especially difficult to argue that the programme here was designed simply to save lives."