In brief

Pinochet returns to Chile: The former Chilean dictator, Augusto Pinochet, finally returned to Chile last week after Jack Straw, the UK home secretary, decided he was unfit to stand trial and refused to extradite him to Spain to stand trial for human rights crimes. The 84 year old, released after an examination by three UK doctors and a neuropsychologist, remained at the centre of controversy amid suggestions that he might have duped the doctors.

BMA rejects change in law on doctor assisted suicide: At a consensus conference last week the BMA rejected moves to change the law on doctor assisted suicide. It agreed that there was a difference between a patient's autonomous refusal of treatment, even if it resulted in death, and acts or omissions that had the intention of causing death.

Woman with CJD may have contaminated instruments: The Department of Health has launched an inquiry after surgical instruments used to deliver the baby of a woman who was subsequently found to have Creutzfeldt-Jakob disease (CJD) were used for two months after the birth. The baby is being tested for the disease.

Over six million Britons use internet for medical information: A Gallup Organisation survey suggests that over six million people in Britain regularly use the internet to search for medical information and treatments. Of the 1040 people surveyed, 13% said that they challenged their GP's diagnoses with information gained from the internet.

UK junior doctors receive improved offer: After months of negotiations the junior doctors' leaders have received an improved pay offer from the health departments, which will be considered by the BMA Junior Doctors Committee on 17 March.

News *e*xtra eBMJ

More news stories are available on the BMJ's website **www.bmj.com**

Doctors fail to follow advice in giving tPA

Scott Gottlieb *New York*

When given by experienced doctors, tissue-type plasminogen activator (tPA), a drug known mostly for treatment of heart attacks, can improve the recovery of patients who have had strokes, according to a new study.

But doctors prescribing tPA often err by giving it to patients without proper indications for the treatment or by failing to give the drug at the right time.

In the first of two studies, researchers looked at treatment for 3948 stroke patients admitted to hospitals in Cleveland, Ohio, from July 1997 to June 1998. Of these, only 70 patients received tPA, partly because it is regarded as helpful only if patients get it within three hours of experiencing a stroke (*JAMA* 2000;283:1151-8).

The researchers found that tPA was associated with in-patient mortality of 15.7%, more than three times the death rate among stroke patients who did not receive the drug. The in-patient mortality in the patients who received tPA was also nearly double the 7.9% expected death rate based on the severity of the patients' illness.

These researchers also found, however, that in about a third of cases, doctors violated the treatment rules for using tPA, often giving it after the three hour limit and when patients had already taken anticoagulants.

The second, contrasting study was conducted at Stanford University Medical Center, California, and at 23 other academic hospitals and 33 community hospitals throughout the United States. It showed a much lower rate of symptomatic cerebral haemorrhages—only 3% of 389 stroke patients given tPA experienced such haemorrhages (*JAMA* 2000;283:1145-50).

The Stanford study differed from the Cleveland study in that the Stanford doctors knew that they were being scrutinised and had previous experience in the use of tPA—and in knowing which patients should not receive the drug according to accepted guidelines. In the Cleveland study, in half of the cases, treatment with tPA involved deviation from treatment guidelines compared with a third of the cases in the Stanford study.

The findings of these two studies create a dilemma for doctors treating patients with stroke. tPA is known to lower, by about 13%, the rate of lingering disability, including dysarthria and weakness; but to be effective, tPA must be administered within three hours of the first symptom of a stroke to reduce the chance of further brain damage.

"I think the findings should be … a wake up call to physicians that we need to treat patients sooner in the emergency room," said Gregory Albers, lead author of the second study and a physician with the Stanford Stroke Center at Stanford University, Palo Alto. □

Cannabinoids might reduce spasticity in multiple sclerosis

Scott Gottlieb *New York*

Cannabinoids, the active ingredients found in marijuana, may help control the tremors and muscle spasticity experienced by patients with multiple sclerosis, says a new study (*Nature* 2000;404:84-7).

Researchers examined mice with chronic relapsing experimental allergic encephalomyelitis, an autoimmune disease which has symptoms considered to be closely related to those of multiple sclerosis.

The animals were given synthetic cannabinoid compounds and then the frequency with which their limbs became spastic was measured. When the cannabinoids were given, tremors and spasticity improved within minutes, and often the symptoms did not return for hours.

AP PHOTO/RANDI LYNN BEACH

Growing marijuana for medical use: cannabis may help to reduce tremors in patients with multiple sclerosis

The compounds injected into the mice stimulated cannabinoid receptors on the surface of nerve cells. This indicates that the receptors are involved in regulating muscle tone, according to David Baker of University College London, who is lead author of the study.

The symptoms were not eased merely by the sedative effect of cannabinoids, since some of the compounds do not bind with the receptor known to be responsible for the euphoria associated with marijuana. Other signs of sedation, such as a drop in body temperature, also were not found, Dr Baker said.

The benefit of cannabis in treating some of the symptoms associated with multiple sclerosis has been supported by small clinical studies, many of which had non-quantifiable outcomes.

"Although not a cure, our research suggests that cannabinoids can play a crucial role in controlling some of the neuromuscular problems seen with [multiple sclerosis]," said Dr Baker. □