

In brief

Patient confidentiality to be tightened: New positions are to be created in the NHS to safeguard and protect the handling of confidential patient information as it passes between computers. The appointees will be known as Caldicott guardians, after Dame Fiona Caldicott, principal of Somerville College, Oxford, who chaired a review on patient confidentiality which reported just over a year ago (*BMJ* 1997;315:1562).

More evidence for obesity drug's effectiveness: Orlistat (Xenical), a gastrointestinal lipase inhibitor, blocks the absorption of about 30% of consumed fat and was found to be safe and effective in promoting and maintaining weight loss when combined with a low calorie diet during a two year research study involving 892 obese individuals (*JAMA* 1999;281:235). However, transient gastrointestinal side effects affected 80% of the subjects.

British people trust doctors: A MORI poll conducted for the BMA showed that out of 2000 people surveyed in Great Britain 91% trusted their doctors to tell the truth, 91% were satisfied with the way doctors do their jobs, and 25% felt that doctors were underpaid. About half thought that junior doctors should not be expected to work more than 48 hours a week, and only 2% thought that consultants did not take enough care when operating.

Mrs Clinton attacks violence against abortion doctors: In a speech marking the 26th anniversary of the US Supreme Court decision that recognised a constitutional right to abortion, the president's wife denounced violence against abortion doctors as "domestic terrorism." She said the Clinton administration would propose spending \$4.5m (£2.8m) in next year's federal budget to improve safety at abortion clinics.

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Clinton offers healthcare funding ideas

James Ciment, *New York*

In his State of the Union address to Congress last week, President Clinton presented a shopping list of new programmes, ideas, and funding plans, including several related to health and health care.

At the top of the list was a blueprint to ensure Medicare's financial viability into the 21st century. With the first "black ink" budget in 30 years—and projections of surpluses for the next 15—the president suggested that "one out of every six dollars" of the surplus be invested in Medicare, America's national healthcare programme for elderly people, which was enacted in 1965.

As with a similar plan "to save" social security, Mr Clinton said that the measure was necessary to ensure "the soundness of Medicare" as America's population ages. Demographers expect that the current ratio of 3.4 people of working age for every



Clinton's funding plans will ensure the soundness of Medicare

person over age 65 will be roughly halved over the next 75 years.

The president also mentioned two interrelated problems, those of guaranteeing the confidentiality of patients' medical records and the rights of sick and disabled people to be covered by health insurance. However, he did not elaborate on his plans to address these issues.

President Clinton also offered suggestions for more immediate legislation in the speech, which

came just hours after the Senate had adjourned his impeachment trial for the day. Among the new ideas was a plan to extend Medicare's coverage of prescription drugs and a \$1000 tax credit to help families pay for long term care for elderly people and those who are chronically ill.

Finally, the president brought up the idea of a patients' bill of rights. "You should have the right to know all your medical options," he said. □

Researchers discover how opiates cause immunosuppression

Abi Berger, *BMJ*

Opiate drugs are potent painkillers and are also used recreationally. Opiates are known to suppress the immune system, and immunologists at the Jerome H Holland Laboratory for Biomedical Sciences at the American Red Cross in Maryland have discovered how this immune suppression comes about (*Nature* 1999;397:218).

Yufang Shi and colleagues have been studying the role of programmed cell death (apoptosis) in the regulation of the immune system. One mechanism known to trigger apoptosis in lymphocytes involves a protein receptor called Fas.

Cell death occurs when the Fas receptor, which is found on the surface of cells, binds with its agonist (a protein called FasL). Shi's team has discovered that opiates seem to increase the expression of Fas on the surface of lymphocytes. This causes a

greater proportion of lymphocytes to die, which in turn contributes to a state of immunosuppression.

Shi's team showed this by working first in vitro, using cells from the spleen of a mouse and human peripheral blood lymphocytes. They treated these cells with morphine and then exposed them to cells which expressed the FasL protein.

The researchers found that after two hours about 20-30% of the treated cells were dead. Without exposure to morphine, only about 5% of cells underwent apoptosis.

Using methods for staining the cell surface, Shi and colleagues showed that the increase in apoptosis was accompanied by an increase in the amount of Fas expressed on the cells. They confirmed that morphine was responsible for the increased expression of Fas by administer-

ing naloxone, an opiate antagonist. Naloxone blocked the opiate receptors and resulted in poor expression of Fas by the lymphocytes.

Next, Shi's team injected mice with morphine. They observed that Fas expression increased in vivo and, because FasL is naturally present on some cells in live animals, Fas mediated apoptosis occurred quickly. Within 24 hours the number of cells had decreased by 30%.

In some pathological conditions, such as HIV infection, T lymphocytes express more FasL. Shi speculated that his findings could explain why drug addicts who are infected with HIV seem to have a shorter time between becoming infected and developing full blown AIDS.

"If people with HIV take morphine, they could be speeding up the process of becoming immunosuppressed," said Shi.

The same might be true for people who take opiates for pain relief. "It might eventually be possible to develop a drug that blocks the induction of Fas," he said. □