found significant associations between temperature and the rates of admission for stroke and acute myocardial infarction but not venous thromboembolism.

Roger Dobson *Aberavenny*

EU proposes changes to working time directive

Some of the time that doctors spend on-call in hospitals would not be considered part of their working week under draft legislation tabled by the European Commission.

The proposed changes to the European Union's existing working time directive, which sets an average weekly maximum of 48 hours, have been largely prompted by two far reaching court judgments (*BMJ* 2000;321:918 and 2003;327:640).

In both rulings the European Court of Justice stipulated that periods that health professionals spend at their place of employment had to be considered as working time, even if they were resting. The judges' verdicts had major implications for health services and prompted warnings that tens of thousands of extra medical staff would have to be recruited.

The commission has now proposed that on-call time at the place of employment should be divided into two categories: "on-call time" and "inactive part of on-call time." Under the second category, when an individual is resting, sleeping, or generally inactive this would not be considered "working time" unless otherwise stipulated by national law or by a collective agreement.

Rory Watson *Brussels*

Live birth reported after ovarian tissue transplant

The first live birth to a woman after an ovarian tissue transplantation was reported last week.

Ouarda Touriat, a 32 year old Belgian, gave birth to a 3.7 kg healthy baby girl at Cliniques Universitaires Saint-Luc, Brussels, Belgium (report published early online at www.thelancet.com (24

September)). In 1997, at the age of 25, she was given a diagnosis of advanced (stage IV) Hodgkin's lymphoma. Before her course of chemotherapy was started, five biopsy samples (12-15 mm long and 5 mm wide) were taken laparoscopically from her left ovarian cortex and cryopreserved in liquid nitrogen at a temperature of almost -200°C. However, her ovaries were left in place in case they recovered their function after chemotherapy.

After a year of cancer treatment Ms Touriat was diagnosed with premature ovarian failure. And in January 2001 she stopped hormone replacement therapy because she wanted to get pregnant.

In February 2003 Ms Touriat had a large strip and 35 small cubes of the ovarian tissue transplanted laparoscopically into a small groove that had been created in the peritoneum near the fimbria on the right side. Five months later her menstrual cycle was restored and in January 2004 Ms Touriat conceived naturally.

Debashis Singh *London*

Court strikes down "Terri's law"

In a landmark decision Florida's highest court unanimously ruled on 23 September that the so called "Terri's law" was unconstitutional. That law was enacted as an emergency by the state legislature and signed by Governor Jeb Bush in October 2003 to enforce the reinsertion of a feeding tube in Mrs Terri Schiavo, who had been in a persistent vegetative state since her cardiac arrest in 1990 (*BMJ* 2003;327:949 and 2003;327:1010).

Michael Schiavo had won several court battles to remove the tube and allow his wife to die. Although she had left no written instructions her husband said she had told him in conversations that she would not want to be kept alive artificially.

The seven member Supreme Court unanimously ruled that Governor Bush violated the constitutional tenet of separation of powers when he signed a law to keep Mrs Schiavo alive against her husband's wishes.

Fred Charatan *Florida*

Walking protects elderly people from dementia, studies show

Janice Hopkins Tanne *New York*

Two American studies published in *JAMA* show that ordinary, frequent walking protects elderly men and women from dementia and cognitive decline.

One study, of men only (*JAMA* 2004;292:1447), was an offshoot of the Honolulu heart programme, which began following 8006 men of Japanese ancestry on the Hawaiian island of Oahu in 1965 to 1968 for development of cardiovascular disease. It was designed in a similar way to the Framingham study in Massachusetts.

The new study excluded men who had dementia or conditions such as stroke or Parkinson's disease that impaired their ability to walk. From 1991 to 1999 it followed 2257 retired men aged 71 to 93. The cognitive abilities screening instrument, a measure of intellectual function, was used to screen the men. As part of the study the participants had comprehensive examinations that took four to six hours. They completed a cognitive abilities test at baseline and at two follow ups, in 1994-6 and 1997-9.

Lead author Dr Robert Abbott, of the University of Virginia Health System, told the *BMJ* that Oahu was a "perfect laboratory" for this study. The participants lived in a mild climate with little seasonal variation where outdoor activity was always possible and in communities where walking to local shops, restaurants, friends' homes, or facilities was easy. "We

focused on what typical walking behaviour was on a typical day. We think it represented lifelong behaviour," Dr Abbott said.

Men who walked the least (less than 0.4 km, or a quarter of a mile a day) had almost twice (1.8 times) the excess risk of dementia than men who walked more than 3.2 km (2 miles) a day.

The second study, from the nurses health study at the Harvard School of Public Health in Boston, showed that women aged over 70 who had high levels of physical activity did better on cognitive performance tests and showed less cognitive decline than women who were less active (*JAMA* 2004;292:1454). The researchers conducted questionnaires and telephone interviews every two years to test cognition, verbal memory, category fluency, and attention of 18 000 women aged 71 to 81. The nurses health study began in 1978.

"We found a 20% lower risk of cognitive impairment for women in the highest quintile of activity," the authors write. Women who performed the equivalent of walking at an easy pace for at least 1.5 hours a week had better levels of cognitive performance than those who walked less than 40 minutes a week.

Both studies conclude that long term, regular physical activity, including walking, is associated with better cognitive function and less cognitive decline in elderly participants. □

Regular walking protects elderly people from cognitive decline