News roundup

Statins may reduce risk of Alzheimer's disease

Patients taking the statin class of cholesterol lowering drugs may also reduce their risk of developing Alzheimer's disease, according to a new study in the (Archives of Neurology 2000; 57:1439-43).

Led by Dr Benjamin Wolozin of Loyola University Medical Center in Maywood, Illinois, and Paul Rousseau of the Carl T Hayden Veteran Affairs Medical Center in Phoenix, Arizona, the researchers conducted a multicentre, cross sectional analysis that examined the relation between treatment with statins and the diagnosis of probable Alzheimer's disease.

The researchers focused on three statins-lovastatin, pravastatin, and simvastatin. They reported that patients receiving lovastatin or pravastatin-but not simvastatin-had a 70% lower prevalence of Alzheimer's disease than a control group, representing the entire patient population aged 60 and older. Deborah Josefson San Francisco

"Designer baby" cures sister

Tests in the United States on 6 year old Molly Nash, who received an umbilical cord blood transplant from her newborn brother, Adam, have shown that she is carrying bone marrow cells from her sibling.

The results of the bone marrow aspiration came three weeks after specialist Dr John Wagner at the University of Minnesota carried out the transplant to treat Molly's Fanconi's anaemia.

The transplant triggered controversy because it was the first time preimplantation genetic diagnosis has been used for the express purpose of ensuring a perfect stem cell donor.

"Molly's blood counts have steadily increased over the past week, indicating bone marrow recovery," said Dr Wagner. "The tests over the last few days show that there is donor cell engraft-



Molly Nash

ment and that the cellularity of the bone marrow is phenomenal. What we know for sure is that for the first time in years, Molly is making neutrophils and

Roger Dobson Abergavenny

Greenpeace acts on life threatening poisons in Gujarat

More than 200 victims of industrial pollution and activists from the international environmental group Greenpeace staged a sitin last week inside a common effluent treatment plant at Vapi industrial estate in the western Indian state of Gujarat.

The protesting Greenpeace activists chained themselves to the valves controlling the discharge of waste water from the plant into the Damanganga River.

Sampling of treated waste water and sediments conducted last year and this month has confirmed that the plant continues to discharge dangerous levels of toxic metals, including mercury, lead, cadmium, chromium, copper, and highly poisonous hexachlorobenzene and polychlorinated biphenyls into the river, said Greenpeace.

According to Greenpeace, the treatment plants were promoted by the Gujarat government and the World Bank as a

solution to the aggravating pollution problem in Gujarat. Greenpeace had declared south Gujarat's industrial corridor a "global toxic hotspot" during direct action at the same plant last year.

Rohit Sharma Mumbai

Researchers able to check chromosome numbers in embryos

Researchers are on the way to improving the rate of successful pregnancies from assisted reproductive technology with the development of a technique that has allowed them, for the first time, to check the number of chromosomes in virtually every cell of a test tube embryo.

Full chromosomal analysis has previously been impossible because techniques limited analysis to only a small number of chromosomes in each cell. In most studies only five of the 24 different types of chromosome have been tested.

The new technique, published this week, combines whole genome amplification (increasing the amount of DNA to provide adequate quantities for analysis) with comparative genomic hybridisation (checking test cell chromosomes against normal chromosomes) (Molecular Human Reproduction 2000:6:1055-62).

Susan Mayor London

Early exposure to cows' milk raises risk of diabetes in high risk children

The controversial link between drinking cows' milk during infancy and the risk of developing diabetes may have been strengthened by a new study that has found that exposure early in life to cows' milk may increase the lifetime risk of developing diabetes in high risk

All the infants included in the

study had a first degree relative with type 1 diabetes and therefore were at an increased genetic risk of developing the disease (Diabetes 2000;49:1657-65).

After correcting for differences in the timing of the introduction of supplemental milk between the randomisation groups, researchers found that at the age of 3 months, both cellular and humoral responses to bovine insulin were higher in infants exposed to cows' milk than in infants fully breast fed. IgG antibodies to bovine insulin were also higher in infants who received cows' milk than in infants who received formula at 3 months of age.

Scott Gottlieb New York

Transplanted cells revive heart muscle

Cells taken from a patient's thigh and injected into his myocardium have revived areas that had been damaged by necrosis, and improved cardiac function.



Professor Philippe Menasché

The research team, coordinated by Professor Philippe Menasché, heart surgeon at the Bichat Hospital in Paris, has worked for four years to develop this form of cellular therapy. In this first trial on a human patient, Professor Menasché sees the potential for the therapy to be a valuable adjunct to heart surgery.

The cells were myoblasts, cultured from quiescent cells taken under local anaesthesia from the patient's quadriceps muscle, and capable of developing into functional heart muscle