COX 2 inhibitors might be useful in cancer prevention

Scott Gottlieb *New York*

Scientists have discovered that patients with familial adenomatous polyposis (a condition associated with a 100% lifetime risk of colon cancer) who underwent six months of treatment with the COX 2 inhibitor celecoxib, had a 28% reduction in the number of adenomatous polyps.

The lead author, Dr Gideon Steinbach, associate internist at MD Anderson Cancer Center in Houston, presented the findings at the American College of Gastroenterology's 64th annual scientific meeting in Phoenix. He said that the study of 77 patients with familial adenomatous polyposis was "more than three times larger than any of the previous trials," adding that for the first time "it demonstrated the efficacy of Cox 2 inhibition in reducing or controlling colorectal adenomas."

Dr Steinbach said that in addition to reducing the number of polyps, the treatment also resulted in a 30% reduction in polyp burden, which is analogous to reductions in tumour size used in the study of other cancers.

Familial adenomatous polyposis is a rare genetic disease that accounts for about 1% of all colorectal cancers. The disease causes hundreds of polyps to form in the colon, usually in people aged 12-16 years. If the polyps remain untreated, patients usually develop cancer of the colon before they are 50.

There is no drug for the condition; the only treatment is surgical removal of the colon and rectum.

In the study, patients were randomised to receive 100 mg celecoxib twice daily, 400 mg celecoxib twice daily, or a placebo. All of the patients in the study had clinical familial adenomatous polyposis. Physicians, who were blinded to the treatment, assessed the results by videotaped endoscopies.

Last month, the pharmaceutical firm G D Searle, manufacturer of celecoxib, obtained "priority review" status from the US Food and Drug Administration to get familial adenomatous polyposis listed as an indication for the drug. The administration is expected to rule on that application by the end of March next year.

Celecoxib, which is marketed under the brand name Celebrex, was approved for treatment of arthritis less than a year ago. The drug has been well received, mainly because it does not cause gastric ulcerations.

Merck, maker of the rofecoxib (Vioxx), another COX 2 inhibitor approved for arthritis, is also sponsoring clinical trials of its drug for the treatment of familial adenomatous polyposis.

A study published last month in *JAMA* (1999;282:1254) found that the COX 2 enzyme is particularly evident in aggressive colorectal tumours and correlates with a reduced survival. Greater production of the enzyme was related to lymph node metastasis. □

Furby not guilty as "charged"

Greg Basky *Saskatoon Canada*

It seems now that Furby, last Christmas's "must have" stuffed toy with a computer chip inside, which was vilified for interfering with medical equipment, does not affect medical machinery after all.

An investigation by Health Canada (the government's health ministry), published recently in the *Canadian Medical Association Journal* (1999;161:971), revealed that the electric and magnetic fields given off by the ear wiggling, eye blinking, fuzzy creature are about 70 times weaker than those emitted by a digital telephone and are "very unlikely" to affect the performance of medical devices, say the study's authors.

The furry furore started last January, when Canadian media outlets jumped on reports that the Royal Hospital for Sick Children in Glasgow, Scotland, had apparently banned the toy from its intensive care unit.

In response to media coverage and calls from biomedical engineers, researchers in Health Canada's Medical Devices Bureau measured the effect of Furby on 10 devices made before 1993 and known to be vulnerable to interference from cellular phones. These included incubators, automatic external defibrillators, syringe pumps, infusion pumps, electrocardiogram monitors, ventilators, renal dialysis machines, and pacemakers.

Furby was given a clean bill of electromagnetic health, as it did not adversely affect the functioning of any of the devices tested at any distance. While the chattering creature did generate electric and magnetic fields in its active mode (it awakens from hibernation in response to sound and light), these were too weak to pose any threat to hospital equipment.

Dr Kok-Swang Tan of Health Canada admits that during testing he did get some "strange looks from colleagues who wondered why I was playing with a Furby in front of medical devices." □

AP PHOTO/DAMIAN DOVARGANES

Furby: innocent of all charges of interference

Europe should give Alzheimer's disease higher priority

Rory Watson *Brussels*

Health authorities across the European Union must give a higher priority to people with dementia, according to the conclusions of a new transnational study funded by the European Commission.

The study, coordinated by the charity Alzheimer Scotland–Action on Dementia and by Susan Tester, a senior lecturer in social policy at the University of Stirling in Scotland, examined the quality of institutional care being provided in the United Kingdom, the Netherlands, Italy, and Spain.

It concluded that despite advances in recent years, institutional care for people with dementia "remains an underdeveloped area of policy" even though the illness is now the fourth largest public health problem in Europe after stroke, heart disease, and cancer.

The authors warn that pressure on facilities will inevitably become even greater owing to ageing populations, and they point out that the number of people with dementia is projected to rise to 6 million by 2020 (compared with 3.5 million now).

"We have two messages. All European countries will have to do something to improve the quality of long term care for people suffering from dementia, and some, such as Italy and Spain, will have to start providing more residential care as they have so little at the moment," explained Jim Jackson, the executive director of Alzheimer Scotland–Action on Dementia.

The study found that there were more institutional places in the United Kingdom and the Netherlands than in Spain and Italy. But it emphasised that all four countries must develop care planning systems and improve training for care workers. □

The Quality Challenge: Caring for People with Dementia in Residential Institutions in Europe is available from Alzheimer Scotland–Action on Dementia, Edinburgh (tel 0131 243 1453; alzheimer@alzscot.org).