



December 2002

## NEWS BRIEFS from the ASPIRIN FOUNDATION

### **Aspirin may block some side effects of cancer treatment**

Aspirin may reduce some of the serious side effects of the anticancer drug cisplatin, according to research at the Albert Einstein College of Medicine in New York (*Laboratory Investigation* 2002;82:585-96; <http://labinvest.uscapjournals.org>).

Cisplatin is a highly effective treatment for cancers affecting the lung, stomach or bladder, but it can cause serious side effects including hearing loss and kidney damage. The New York team speculated that aspirin might protect against these effects following reports that it reduced hearing damage caused by a group of powerful antibiotics known as the aminoglycosides.

In experiments in animal models, they found that cisplatin reduced the threshold of hearing at 16 and 24 kHz by 20 dB. Treatment with salicylate (the drug to which aspirin is converted in the body) reduced the hearing loss to only 5 dB and also prevented much of the damage to the sensitive outer hair cells of the cochlea (inner ear). Furthermore, they found that salicylate reduced markers of impaired kidney function (plasma blood urea nitrogen and creatinine), suggesting that it may also help to prevent toxicity to the kidney. The animals had been implanted with highly invasive breast cancer cells; salicylate did not reduce the actions of cisplatin against these cells, showing that the effectiveness of the anticancer drug was undiminished.

The investigators concluded that, if these experiments are supported by clinical experience, 'administration of salicylate may become the basis of an effective therapeutic intervention against the ototoxic [hearing damage] and nephrotoxic [kidney damage]

side effects associated with cisplatin therapy'.

### **Aspirin advised for women taking breast cancer drug**

Women taking the drug tamoxifen may need to take aspirin to reduce the risk of blood clots on long-haul flights or during surgery, according to a report in the *Daily Telegraph* (13th September 2002).

The advice was given by Professor Jack Cuzick, of London's Cancer Research UK, who was lead investigator in a recent major trial of tamoxifen (*Lancet* 2002;360:817-24; [www.thelancet.com](http://www.thelancet.com)). The study showed that women at increased risk of breast cancer who had been taking tamoxifen for 5 years faced a 2.5-fold increase in the risk of thrombosis. 'Thromboembolism is the most important complication of tamoxifen use, and every effort should be taken to reduce this risk' the study concluded.

Professor Cuzick emphasised that the benefits of tamoxifen far outweighed the risks - it reduced the risk of breast cancer by nearly a third - but he said that tamoxifen should be temporarily stopped and 'appropriate antithrombotic measures' taken during and after major surgery or periods of immobilisation.

### **Aspirin protection against Alzheimer's confirmed**

US investigators have found more evidence that long-term use of aspirin or other non-steroidal anti-inflammatory drugs (NSAIDs) is associated with a lower risk of developing Alzheimer's disease (*Neurology* 2002;59:880-6; [www.neurology.org](http://www.neurology.org)).

Examining health records for 3,277 people aged over 65 involved in the long-term Cache County study, they identified 104 who had developed Alzheimer's disease since 1995/96. Analysing the medicines they used, the investigators found that any use of aspirin or NSAIDs was associated with a slightly reduced risk of Alzheimer's disease. Closer inspection revealed that the risk diminished as the duration of aspirin/NSAID use increased. For people reporting at least 2 years' use of aspirin or an NSAID, the risk of developing Alzheimer's disease was only 45% of that among non-users. No other medicines were associated with this protective effect, the investigators note.

Doctors have warned that there is still not enough evidence to show that healthy people should take aspirin to reduce their risk of developing Alzheimer's disease. Clinical trials are now being carried out to determine the risks and benefits of this strategy.

### **Aspirin in cancer - evidence summarised**

The potential effects of aspirin against common cancers has been summarised in *Community Pharmacy (October 2002:28-9)*. The review notes that over 30 studies have been published of the use of aspirin in patients with colorectal cancer: long-term use of aspirin is associated with a 40% reduction in the risk of developing this disease and a clinical trial is now underway in the United States to determine whether treatment with aspirin will reduce progression in people who already have colorectal cancer.

Epidemiological studies have also linked aspirin use with a reduced incidence of oesophageal cancer and stomach cancer but the evidence is contradictory on whether aspirin may reduce the risk of other cancers. Researchers point out that it is too soon to suggest that taking aspirin will reduce the risk of certain cancers because there is still no definitive proof of cause and effect. Several clinical trials are now being carried out to clarify the possible link.

### **Take aspirin to prevent DVT in cars, says TV doc**

People embarking on a long car journey should consider taking a prophylactic aspirin, Consultant Cardiologist Dr Michael Flather has warned.

Speaking on BBC Breakfast TV (*August 8th, 2002*), Dr Flather was commenting on a report by the RAC that motorists are, like air travellers, at risk of thrombosis from periods of prolonged immobility. He said that a journey of 6 to 8 hours could increase the risk of deep vein thrombosis, particularly among people at increased risk such as the elderly, those who are overweight or who smoke, or who have a predisposing medical condition.

He urged car travellers to take frequent breaks and get out to stretch their legs. They should also use such opportunities to have a drink of water to ensure they remain well hydrated. Dr Flather was careful to suggest that viewers should take aspirin after seeking medical advice. 'I think if you are worried I think it's sensible to consult your doctor, but taking a simple aspirin will reduce your risk dramatically', he said.

### **Web site explains DVT risk**

Information about travel-related deep vein thrombosis (DVT) and how to avoid it is available on the internet. [www.aviation-health.org](http://www.aviation-health.org), the website of the Aviation Health Foundation, lists risk factors for thrombosis, including some specific to air travel, and offers several suggestions to reduce the risk. In addition to low-dose aspirin (100 - 150 mg on the day before and for three days after a long haul flight), travellers should consider keeping their thighs clear of the edge of the seat, in-flight exercises, maintaining adequate hydration, wearing support stockings and a brisk walk before take-off.

People with a medical condition which may predispose to DVT should consult their GP and those at increased risk may be prescribed low molecular-weight heparin to reduce the risk of clotting.