Atrial fibrillation increases risk of dementia...

Atrial fibrillation (AF) is associated with faster cognitive decline and an increased risk of dementia, especially in women, *Neurology* reports.

Researchers from Sweden enrolled 2,685 people without dementia with an average age of 73 years. Of these, 9.1 per cent had AF at baseline. During the nine-year follow-up, 11.4 per cent developed AF and 14.9 per cent developed dementia.

The researchers could not distinguish between AF subtypes and might have missed asymptomatic AF. Nevertheless, AF was significantly associated with a faster annual decline in scores on the Mini-Mental State Examination, a 40 per cent increased risk of dementia from any cause and an 88 per cent increased risk of vascular and mixed dementia. The 33 per cent increase in the risk of Alzheimer's disease was not statistically significant.

Women with AF were 46 per cent more likely to develop dementia than those without the arrhythmia. The 27 per cent increase in men was not statistically significant.

"Compromised blood flow caused by atrial fibrillation may affect the brain in a number of ways," says study author Chengxuan Qiu of the Karolinska Institute and Stockholm University. "We know as people age, the chance of developing atrial fibrillation increases, as does the chance of developing dementia.

"Our research showed a clear link between the two and found that taking blood thinners may actually decrease the risk of dementia."

Based on an average follow-up of six years, AF patients who used anticoagulants were 60 per cent less likely to develop dementia. The 84 per cent increased risk in those who used antiplatelets was not statistically significant. Assuming a cause and effect relationship, using anticoagulant drugs to treat all people with AF would have prevented approximately 54 per cent of the dementia cases.

"Additional efforts should be made to increase the use of blood thinners among older people with atrial fibrillation," Dr Qiu adds. (doi:10.1212/WNL.0000000000006456)

...while AEDs increase stroke risk in AD

People with Alzheimer's disease (AD) seem especially prone to seizures. Now, a Finnish study reports that antiepileptic drugs (AEDs) may increase the risk of stroke in people with AD.

The study enrolled 5,617 AD patients taking AEDs and the same number of matched control AD patients. Compared with controls, AD patients on AEDs were 37 per cent more likely to experience a stroke.

AED use was associated with a 34 and 44 per cent increase in the risk of ischaemic and haemorrhagic strokes.

Stroke risk more than doubled during the first 90 days (adjusted hazard ratio 2.36) of AED use. The risk associated with older drugs (e.g. carbamazepine, phenobarbital, phenytoin and primidone) did not differ to that associated with newer AEDs.

"The pathological changes in Alzheimer's disease may increase susceptibility to the adverse events of AEDs," the authors concluded. "Careful clinical consideration is needed before prescribing them to a person with Alzheimer's." (*J Am Heart Assoc* 2018; 7:e009742)

Notifiable disease rates cause concern

Data from Public Health England (PHE) highlights the burden imposed by statutory notifiable diseases.

In the year up to October 22, 2018, PHE received reports of 2,778 cases of measles, 6,942 cases of mumps and 308 cases of rubella. In addition, there were 32,968 cases of scarlet fever, 11,044 cases of food poisoning, 5,176 cases of tuberculosis and 2,797 cases of whooping cough.

Other diseases reported included anthrax (one case), leprosy (four cases), cholera (15), diphtheria (19), malaria (188) and Legionnaire's disease (225).

ACE inhibitors linked to lung cancer?

Using angiotensin converting enzyme (ACE) inhibitors is associated with an increased risk of lung cancer, especially among people taking the drugs for more than five years, according to a new study in the *BMJ*.

Researchers followed 992,061 UK patients starting treatment with antihypertensives for a mean of 6.4 years. Over this time, 7,952 people developed lung cancer. After adjusting for confounders, using ACE inhibitors was associated with a 14 per cent increase in the risk of lung cancer compared with angiotensin receptor blockers (1.6 and 1.2 per 1,000 person years respectively).

Lung cancer risk rose from a non-significant 10 per cent increase in those who used

ACE inhibitors for five years or less compared with angiotensin receptor blockers, to 22 per cent between five and 10 years and 31 per cent with more than 10 years of use. The latter two increases were significant.

The authors comment that while the associations were "modest", ACE inhibitors account for about 32 per cent of the 70.1 million antihypertensives dispensed each year in the UK, "thus, small relative effects could translate into large absolute numbers of patients at risk for lung cancer". They suggest replicating the results, particularly in patients taking ACE inhibitors for longer.

The authors add that the link is "biologically plausible". ACE inhibitors result in the accumulation of bradykinin and substance P in the lung. Lung cancers and several other malignant tissues seem to express bradykinin receptors. Indeed, bradykinin may directly stimulate growth of lung cancer and promote angiogenesis. Substance P is also expressed in lung cancer and is associated with tumour proliferation and angiogenesis. (*BMJ* 2018; 363:k4209)

New drug for eosinophilic oesophagitis

Eosinophilic oesophagitis, an inflammatory condition that is probably caused by food allergies or other environmental triggers, can be misdiagnosed as gastro-oesophageal reflux disease. In adults, for example, symptoms include dysphagia, bolus obstruction and chest pain that is related to swallowing, heartburn and regurgitation.

Recently Dr Falk Pharma UK launched Jorveza, an orodispersible tablet containing budesonide which, the company says, "is specifically designed to deliver directly to the inflammation within the oesophageal mucosa". The company describes Jorveza as "the first globally licensed drug" approved for eosinophilic oesophagitis.

Biosimilar launched

Samsung Bioepis recently launched Imraldi, an adalimumab biosimilar referencing Humira. Imraldi is approved in the European Union for 13 conditions including rheumatoid arthritis, juvenile idiopathic arthritis, axial spondyloarthritis, psoriatic arthritis, psoriasis, hidradenitis suppurativa and Crohn's disease.

Rosacea and coffee link

Research involving 82,737 women in the US suggests that coffee reduces the risk of developing rosacea.

Women in the highest quintile of caffeine intake (at least 411mg a day) were found to be 24 per cent less likely to develop rosacea than those in the lowest quintile (less than 46mg a day). Rosacea risk was 23 per cent lower in women who had at least four servings of caffeinated coffee a day than those who drank less than one serving a month.

Clinical Soundbites

Our Clinical Soundbites series is designed to equip pharmacists with brief information on specific patient groups. When treatments are mentioned, an assumption is made that there are no contra-indications to their use.

THIS MONTH: MORPHINE IN PALLIATIVE CARE

Pain management in palliative care may involve opioids, with morphine considered the most useful drug in this class. It is important to remember that analgesics are more effective at preventing pain than relieving it, so morphine should be given regularly and not withheld due to fears of dependence.

The initial dose of morphine is dependent on several factors, including pain severity, previous medication used and renal impairment, but generally 30mg orally four-hourly (or 100mg m/r bd) is adequate for most patients. Rescue doses should be given for breakthrough pain and 30 minutes before an activity that causes pain, such as changing wound dressings. The dose should be one-tenth to one-sixth of the regular 24-hour dose, repeated anything from every hour to every four hours as needed. If rescue analgesia is needed twice daily or more, overall pain management needs addressing.

DOSE INCREASES

Morphine should not be increased by more than one-third to one-half of the total daily dose every 24 hours, and consideration should be given to the use of adjuvants. Once pain is controlled, patients can be switched to modified release preparations at the same total 24-hour dose. Laxatives should be provided and the patient monitored for efficacy and side-effects, particularly constipation, nausea and vomiting.

Information can be accessed in the BNF under the heading 'Prescribing in palliative care' or at medicinescomplete.com.