Copyright Medinews (Cardiology) Limited Reproduction Prohibited

News

New NICE guidance on VTE prevention

The National Institute for Health and Clinical Excellence (NICE) has issued new guidance on the prevention of venous thromboembolism (VTE) in patients admitted to hospital.

NICE calculates that an estimated 25,000 people who are admitted to hospital die from preventable VTE each year. The NICE guideline, jointly developed with the National Clinical Guideline Centre for Acute and Chronic Conditions, recommends that all patients should be assessed for risk of developing blood clots on admission to hospital, and then given preventative treatment that suits their individual needs. Options include anticoagulant drugs such as heparin, anti-embolism stockings and foot impulse or pneumatic devices. This advice covers all patients admitted to hospital – including those having day-case procedures – and not just those patients having surgery.

The guideline gives recommendations on how to assess if patients are at risk of developing VTE, and their risk of bleeding before anticoagulant drug treatments are used. This includes considering if patients are likely to have reduced mobility for three or more days, the type of procedure they are being admitted for, the age of patients and any pre-existing conditions. Specific recommendations are given for women who are pregnant or have given birth within the previous six weeks.

The guidance includes mention of the new oral anticoagulants – rivaroxaban and dabigatran – which have recently been approved for use in hip- and knee-replacement surgery patients. It says: "There are important changes expected in anticoagulation if the oral agents recently licensed or currently undergoing evaluation prove to be safe and consistently effective". It adds: "If during the lifetime of this guideline they fulfill the hope that many doctors have for them, they will simplify practice that at present relies on daily injections of an anticoagulant".

Commenting on the new guidance, Dr Fergus Macbeth, Clinical Director at NICE, said: "There is a real clinical need for this guideline. It has been reported that measures to prevent VTE in hospital patients are used inconsistently, and in many cases patients at significant risk of developing a blood clot don't get any preventative treatment at all."

Professor Ian Gilmore, President of the Royal College of Physicians, added: "Patients may not always have symptoms to give a warning - but occasionally VTE can cause pain and swelling in the leg. The importance of assessing patients on admission, not a day or so afterwards, is raised, along with the need to re-assess patients within 24 hours of admission and whenever the clinical situation changes".

The NICE guideline, "Reducing the risk of venous thromboembolism in patients admitted to hospital", is available at www.nice.org.uk/CG92 .

NICE preliminary hearing negative on new antiarrhythmic

The National Institute for Health and Clinical Excellence (NICE) has issued a draft guidance on the new anti-arrhythmic drug, dronedarone, saying it does not recommend its use to treat atrial fibrillation (AF), because "it is less effective and costs considerably more than existing treatments". It is estimated that dronedarone costs around £2.25 per day compared with about £0.05 for amiodarone.

But UK cardiologists and arrhythmia patient/professional groups, led by the Atrial Fibrillation Association and Heart Rhythm UK, have been petitioning to have this draft recommendation overturned. A second NICE meeting on dronedarone was held at the end of February to consider all the comments that have been received, and a final guidance is expected in the next few weeks.

As part of the campaign to allow dronedarone to be available for NHS prescription, more than 100 doctors have signed an open letter to NICE setting out reasons why the drug is needed. A Parliamentary Stakeholder Investigation on the issue has been held and a Parliament Early Day Motion has also been drawn up and signed by several MPs.

The motion sets forth that "dronedarone is a first-in-class antiarrhythmic drug and the only antiarrhythmic medication known to improve long-term cardiac health in AF patients" and that "many people with AF who currently struggle to manage the condition would benefit from access to this treatment, and its use would yield considerable cost savings in the longer term through reduced hospital admissions and reduced incidence of stroke".

Copyright Medinews (Cardiology) Limited Reproduction Prohibited

Copyright Medinews (Cardiology) Limited Reproduction Prohibited

What is the best blood sugar level in diabetics? –New UK data

A new UK study has suggested that both very low and very high blood sugar levels in type 2 diabetes are associated with increased all-cause mortality and cardiac events.

These findings are in line with those of the US ACCORD trial which was stopped early because of an increased risk of death in type 2 diabetes patients who underwent intensive blood glucose lowering compared with conventional therapy.

In the new UK study, published recently in *The Lancet* (Lancet 2010;**375**:481–9), the lowest death and event rates were seen at an HbA_{1c} level of 7.5%.

The new data come from studying around 48,000 type 2 diabetes patients aged 50 or over who are included in the UK General Practice Research Database. These patients had either had their treatment intensified from oral monotherapy to combination therapy with oral blood glucose lowering agents, or had changed to regimens that included insulin.

Results showed that compared with the HbA_{1c} decile with the lowest hazard (median HbA_{1c} 7.5%), the adjusted hazard ratio for all-cause mortality in the lowest HbA_{1c} decile (median 6.4%) was 1.52 and in the highest HbA_{1c} decile (median 10.5%) was 1.79.

The 10% of patients with lowest HbA_{1c} values (<6.7%) had a higher death rate than all but those in the top 10%, who had an HbA_{1c} of 9.9% or higher. Cardiovascular disease was also more frequent in this low-HbA_{1c} group than in any other decile.

Mortality was three times higher in patients who had severe hypoglycemia than in those who did not have severe hypoglycemia, suggesting that the increase in mortality in the low sugar decile could have been related to hypoglycemia, the researchers suggest.

In addition, mortality was higher in patients treated with insulin versus those given combination oral agents. "These data imply for oral combination therapy that a wide HbA_{1c} range is safe with respect to all-cause mortality and large-vessel events, but for insulin-based therapy, a more narrow range might be desirable," the authors write.

An accompanying editorial, says that individualisation of therapy is key, requiring differing recommendations according to the patient. It adds that intensive treatment seems to be more beneficial for cardiovascular outcomes for those who are younger than 60 years, with a short duration of diabetes and absence of microvascular and macrovascular disease.

Hormone replacement therapy and heart disease risk in younger women

Among recently menopausal women, hormone replacement therapy (HRT) with both oestrogen and progestin, showed a slight non-significant increase in risk of coronary heart disease within the first few years of use in a new analysis of the Women's Health Initiative (WHI).

The increase in risk of around 29% during the first two years of use, disappeared after six years of use, and with longer use there appeared to be a possible cardioprotective effect of HRT.

The researchers say the results should not affect current recommendations for women to take HRT, if required, to relieve menopausal symptoms, but to use it at the lowest dose and for the shortest time possible. The analysis is published in the February 16th issue of the *Annals of Internal Medicine* (*Ann Intern Med* 2010;**152**:211–17).

The results of this new WHI analysis appear to be in conflict with a recent statement from the International Menopause Society and the European Society of Cardiology, which says there is a trend that HRT is cardioprotective in younger women. (*Climacteric* 2009;**12**:368–77).

Statins appear to increase risk of diabetes

A new meta-analysis has suggested that use of statins slightly increases the risk of developing diabetes. The analysis – published in the February 27th issue of *The Lancet*, (*Lancet* 2010;**375**:735-42) – was led by researchers at the University of Glasgow.

They note that trials of statin therapy have had conflicting findings on the risk of development of diabetes. They therefore performed a meta-analysis of published and unpublished data to look at this issue further. They included 13 statin trials with 91,140 participants in total, of whom 4,278 had diabetes during a mean of four years. Treatment of 255 patients with statins for four years resulted in one extra case of diabetes.

They conclude that the risk of developing diabetes with statin therapy is low both in absolute terms and when compared with the reduction in coronary events, and that "Clinical practice in patients with moderate or high cardiovascular risk or existing cardiovascular disease should not change". The researchers say the mechanism behind this effect remains a mystery.

An accompanying editorial in *The Lancet*, says the finding is "paradoxical" given the benefit of statins in reducing cardiovascular events in patients with known diabetes. But it adds that "it seems reasonable to add glucose to the list of tests to monitor in older patients who are on statins".

Copyright Medinews (Cardiology) Limited Reproduction Prohibited

Cardiovascular services in London – the case for change

A document outlining how London's acute and complex cardiovascular services are currently provided and broad principles for how things could be improved, *Cardiovascular services in London: the case for change*, has now been published.

This document has been produced by Commissioning Support for London, an organisation established by the capital's 31 primary care trusts (PCTs), in response to Lord Darzi's 2007 report which found that while there is excellence in healthcare in London, this excellence is not provided equally across the capital.

The cardiovascular project has been split into three areas of work each with key objectives:

- Vascular services – specialist and emergency vascular services
- Cardiac surgery – all cardiac surgery, except paediatrics and transplants
- Cardiology – emergency and complex interventional cardiology procedures.

The project is clinically-led and each area of work has a nominated clinical lead supported by a clinical expert panel, and has also been advised by a patient panel.

The *Case for change* document says the initiative addresses longer than necessary waiting times for surgery, lengths of stays in hospital, and quality of care.

Specific issues mentioned that need to be addressed include:

Abdominal aortic aneurysm repair: new figures showing that UK patients have significantly worse mortality rates following abdominal aortic aneurysm repair than other leading European countries. They are also less likely to be treated using new technology and have the longest hospital stays.

Delays for non-elective cardiac surgery: the best healthcare systems in the world have a total pathway for non-elective cardiac surgery (from decision to operation to leaving hospital after surgery) of around two weeks. In London this can take up to almost three times as long (52 days). This delay puts patients at risk from suffering a venous thrombo-embolism, having a cardiac event or acquiring a hospital infection. To begin improving the situation in London, a total pathway length of no more than three weeks is recommended.

Reducing the length of stay: there is a dramatic variation in the length of stay in hospital following cardiac and vascular surgery, depending on which hospital undertakes the surgery. Standardised processes are needed to ensure patients return home when they are clinically ready. If every unit matched the best length of stay, there would be huge benefits for patients, as well as cost savings and efficiency gains.

Aortic dissection: although the number of patients suffering life-threatening aortic dissection in London every year is small, they suffer high mortality rates with many people never even reaching a hospital. To save more lives, patients need prompt treatment by a specialist

surgeon and the London cardiac community needs to come together to provide an out-of-hours emergency service.

Transfer and referral between hospitals: in some parts of London, the total pathway length for patients undergoing non-elective percutaneous coronary intervention (PCI) is more than 10 days. Considering that most patients recover within a couple of days of the procedure, this is far too long.

ICD and CRT devices: compared with the rest of Europe, the UK implants fewer implantable cardioverter deribrillators (ICDs), cardiac resynchronisation therapy (CRT) devices, and pacemakers and performs fewer ablations, leading to considerable unmet demand in the population. More patients need to be identified for these procedures through improved training and networking, and they must be treated in experienced units that demonstrate the highest quality care.

New technology: greater planning for the introduction of new technology with a clearly communicated plan for roll out is needed, initially concentrating expertise in a small number of sites.

Improving academia: the level of research output in London needs to be improved, and the high level of cardiac surgery performed in London, with a wide variety of cases and research laboratories available, offers an ideal opportunity for research.

New roles: training for cardiac surgeons must evolve and there is scope to develop new roles, such as surgical care practitioners.

The *Case for change* document can be viewed in detail at the Healthcare for London website: www.healthcareforlondon.nhs.uk.

Copyright Medinews (Cardiology) Limited Reproduction Prohibited