



HEART DISEASE IN THE ELDERLY

What's new?

As the leading cause of mortality amongst those aged over 75 years, cardiovascular diseases will be the focus of presentations at the 2009 World Congress of Gerontology and Geriatrics held under the auspices of the IAGG (International Association of Gerontology and Geriatrics).

Olivier Hanon, Professor of Geriatrics at Hôpital Broca (Paris), is giving an update on current challenges in the management of heart disease, and new therapeutic approaches in these diseases which remain difficult to treat in the elderly. **In advance, he tells us about the major areas to be covered by these presentations.**

What we need to know...

- In France, cancer has become the leading cause of mortality in the general population, but **coronary disease (myocardial infarction) remains the leading cause of mortality amongst men aged over 75 years**, followed by stroke and cardiac failure. **In elderly women, stroke is the leading cause of mortality**, followed by myocardial infarction and cardiac failure.
- The prevalence of myocardial infarction is **20% amongst people over 80**. The older the patient, the more severe is the infarction. In the absence of intervention, the **30-day mortality rates reach around 30%**.
- **Hypertension** is the major risk factor for cardiovascular diseases in the elderly, followed by diabetes. **It reduces life expectancy by seven years. 70% of people over the age of 80 years suffer from hypertension, and only 30% of them achieve their blood pressure targets.**
- **Treating hypertension in octogenarians reduces the risk of death by 21%, the risk of stroke by 30% and the risk of cardiac failure by 64%.**

- **Atrial fibrillation** is the most common type of arrhythmia. It affects **10% of people over 80 and 20% of people aged 90 and over.**
- **10% of the population over the age of 80 years suffer from cardiac failure.** This figure can reach 30% in care homes, and one in two people may be admitted to hospital again after 6 months.

The **clinical picture** of major cardiovascular diseases is often **different in the elderly.** For example, the signs of an infarction are severe chest pain in a young person while the elderly experience stomach aches, nausea or vomiting.

Apart from diagnosis, **one of the major difficulties in treating heart disease** in the elderly lies in the fact that management must **take account of all the conditions (comorbidities)** that affect the patient, and **the possible adverse effects of drugs.** The difficulty consists in properly assessing the risk/benefit ratio of treatments, their efficacy and safety. Should hypertension be treated in the elderly? And in particular, are not hypotension-related risks more severe than the expected benefits? Should anticoagulants be given to prevent the risks of stroke, although they may increase the risk of bleeding? Are drugs that are effective in younger people as effective and well-tolerated as in the elderly? All these issues lie at the heart of the therapeutic strategies that will be discussed during the congress.

Hypertension: yes, the elderly should be treated

Numerous presentations will be devoted to the **usefulness of managing hypertension.**

Today, only 30% of people over 80 are treated effectively for their hypertension. Even very recently, doubts remained as to the value of management, numerous practitioners preferring not to treat for fear of the harmful effects of antihypertensive drugs.

However, recent data have shown that it is critical to treat hypertension in the elderly. The proven benefits can now be measured in terms of reducing mortality and the risks of stroke, cardiac failure and dementia.

The HYVET study, the results of which will be presented during the congress, has shown the value of treating hypertension. For the first time, a study has demonstrated a **21% reduction in mortality amongst people over 80, a 30% reduction in the risk of stroke and a 64% reduction in the risk of cardiac failure.**

The management of hypertension is particularly critical because apart from the risks of the cardiovascular disease it implies, hypertension also gives rise to cerebral complications and cognitive disorders. It is a predisposing factor for vascular dementia and Alzheimer's disease. Since there are no curative treatment for these brain diseases, prevention is even more important. **The treatment of hypertension has been demonstrated to reduce the risk of developing dementia by 50%.**

So we should treat hypertension in the elderly, but how? Discussions will focus on the therapeutic strategies and drugs that can be used without causing any drops in blood pressure and that are well tolerated.

A new group of medicines, renin inhibitors, will be on the Congress agenda, with presentations and discussions on the efficacy and safety of treatments. A new renin

inhibitor has shown encouraging results, with a proven drop in blood pressure and few adverse effects (AGELESS study). Other studies, including the APOLLO study, are ongoing to determine the value of these new medicines with respect to reducing mortality rates.

The introduction of new compounds to treat atrial fibrillation

Atrial fibrillation affects 6.8 million people in Europe and the USA, nearly 600,000 of them in France. Its prevalence is 0.5% in the 50-59 year age group and 8.8% in the 80-89 year age group. It is associated with **a doubling of mortality and a 2- to 7-fold increase in cardiac failure episodes**. It is also a major risk factor for stroke (causing about 15% of cases) and is the cause of 70% of cardiac arrests.

Two types of drug are available to treat this condition: **anti-arrhythmic agents**, which are not always effective, and **anticoagulants**, which are very effective in preventing stroke but in the elderly involve risks of cerebral or gastrointestinal haemorrhage that increase in an age-dependent manner. **Assessment of the risk/benefit ratio of anticoagulants**, which lead to 17,000 hospitalisations each year in France, **will be one of the major themes regarding management** of this disease. Little progress has been achieved in this therapeutic field over the past twenty years, so the **long-awaited introduction of new compounds is highly newsworthy**:

- a **new anti-arrhythmic agent**, Dronedarone, which has demonstrated a 25% reduction in mortality in patients with arrhythmia (ATHENA study);
- and **new anticoagulants**, the potential value of which is that they involve fewer risks of haemorrhage and require less monitoring of coagulation rates (RELY study).

New therapeutic strategies for cardiac failure

Poorly understood, cardiac failure in the elderly will be one of the major public health issues for this century. This trend results from the increase in life expectancy. Progress achieved in managing coronary disease (angioplasty) and hypertension have markedly reduced mortality rates, but promote the late onset of cardiac failure, thus explaining the increase in the number of patients affected and their age. The 2- and 5-year mortality rates amongst patients with cardiac failure are 60% and 75%, respectively.

Reference is made to cardiac failure when the heart can no longer properly play his role as a pump, and the body's oxygen supplies are no longer sufficient. **A particular feature of this disease is that it markedly affects quality of life**. Its treatment aims to prolong and improve patient survival, to reduce the symptoms and frequency of hospitalisations and, if possible, to slow the course of the disease.

Therapeutic strategies for cardiac failure will be the subject of many presentations. Much progress has been achieved in this field, and a whole range of new drugs have now enhanced the therapeutic armamentarium. Previously, treatment was based on the use of diuretics in order to eliminate excess water and salt and to facilitate cardiac work. These agents are still used, but they are now combined with another group of medicine, the angiotensin-converting enzyme inhibitors (ACE inhibitors), that prevent the constriction of vessels and whose usefulness has been demonstrated in numerous international studies.

Used at doses adjusted to renal function in the elderly, **beta blockers**, previously not prescribed because they slow the heart rate, **have now proven their efficacy in this population**. A **European study** conducted by the European Societies of Cardiology and Geriatrics **on the management of cardiac failure subjects over 80** in nearly 10,000 patients, showed that these medicines – very little used in 2000 – are now used in **nearly 60% of cases**.

Nevertheless, they may in turn face competition within the next few years from new drugs that are active on other vasoconstrictor systems, or enhance the action of endogenous vasodilators present naturally in the body.

Advances in the management of infarction

The leading cause of mortality in men and ranking second in women, infarction is a very common condition that affects about 20% of people over 80 years of age. **The advances in its management using angioplasty** have enabled a marked reduction in mortality.

These **strategies are now proposed to elderly patients**, including new stents, and have demonstrated spectacular benefits, although access remains difficult in developing countries. This new method for the management of infarction in the elderly has given rise to guidelines that will be circulated during the congress.

Much progress has also been achieved as far as antithrombotic and platelet anti-aggregant agents are concerned. Because of the bleeding risk, their value and their concomitant use in the elderly are a controversial subject that will be covered in several presentations. Finally, other topics include the management of dependence related to the hemiplegic after-effects of stroke, or diabetes treatment, etc.

Presentations you should not miss...

Symposia

Monday July 6 – 3.45 p.m. – 5.15 p.m. – Room Maillot

SB6 058 - HEART FAILURE IN THE VERY ELDERLY - Chair: Olivier Hanon (Paris, France)

- SB6 058-1 - SPECIFICITIES OF THE DIAGNOSTIC OF HEART FAILURE IN THE VERY ELDERLY - R. HOBBS - Department of Primary Care and General Practice, Primary Care Clinical Sciences Building (Birmingham, United Kingdom)

- SB6 058-2 COMORBIDITIES AND HEART FAILURE IN THE VERY ELDERLY - O. HANON - Department of geriatrics (Paris, France)

- SB6 058-3 SPECIFICITIES OF THE TREATMENT OF HEART FAILURE IN THE VERY ELDERLY - R. ISNARD - Pitié Salpêtrière (Paris, France)

- SB6 058-4 THERAPEUTIC EDUCATION FOR HEART FAILURE: A NECESSITY IN THE ELDERLY - Y. JUILLIÈRE - Department of cardiology (Nancy, France)

Wednesday July 9 – 10.30 a.m. – 12.00 p.m. – Amphithéâtre Bordeaux

SB 183 – HYPERTENSION IN VERY ELDERLY HYPERTENSIVE PATIENTS: LESSONS FROM THE HYVET STUDY - Chairs: F. Forette (Paris, France), Christopher BULPITT (London, United Kingdom)

SB8 183-1 - WHY THE INTEREST IN HYPERTENSION IN VERY ELDERLY PATIENTS? - O. HANON (Paris, France)

SB8 183-2 - Major benefits observed with hypertension management in very elderly patients – N. Beckett (London, United Kingdom)

SB8 183-3 - Additional benefits beyond cardiovascular event – R. Peters (London, United Kingdom)

SB8 183-4 - IMPACT OF HYVET ON THE MANAGEMENT OF VERY ELDERLY HYPERTENSIVE PATIENTS - B. WILLIAMS - University of Leicester (Leicester, United Kingdom)

Satellite symposium: SANOFI EUROPE - SHEDDING NEW LIGHT ON MANAGING ELDERLY PATIENTS WITH ATRIAL FIBRILLATION - F. FORETTE – Broca, La Rochefoucauld, La Collegiale (Paris, France) – Athena study – Dronedarone