Almost half of severe chronic heart failure patients have high angiotensin II levels despite long-term angiotensin-converting enzyme inhibition

Forty-five percent of chronic heart failure (NYHA class III and IV) patients had increased plasma angiotensin II values independent of serum angiotensin-converting enzyme (ACE) activity, even in the presence of long-term therapy with ACE-inhibitors.

A group of Dutch researchers studied 99 subjects with severe (NYHA class III and IV) stable chronic heart failure on long-term ACE-inhibitor treatment. The patients had a mean left ventricular ejection fraction of 28 ± 10%. Other than ACE-inhibitors, 49% were on spironolactone, 71% on beta-blockers and 93% on diuretics; none of them used angiotensin receptor blockers. Forty-five percent of the patients had an angiotensin II plasma concentration higher than 16 pmol/l, and spironolactone use was an independent predictor of augmented plasma angiotensin II values. Spironolactone users had significantly higher levels of plasma active renin protein and of aldosterone. Plasma angiotensin II concentration was independent of serum ACE activity, but positively correlated with plasma aldosterone, plasma angiotensin I and active renin. An association was found between the use of spironolactone and angiotensin II, active renin protein and aldosterone levels, and no association was found between angiotensin II levels and serum ACE activity, or dose or duration of ACE-inhibitor use. The data included in the paper suggest that escape from ACE is mainly caused by a mechanism possibly including the decrease of angiotensin II inhibitory activity on renin together with a positive feedback action on renin of enhanced aldosterone concentration.

Van de Wal RM, Plokker HW, Lok DJ, et al. Determinants of increased angiotensin II levels in severe chronic heart failure patients despite ACE inhibition. *Int J Cardiol* 2006; 106: 367-72.

Barriers to the policy of discussing the opportunity of resuscitation with acutely ill patients

Approximately half the patients admitted to hospital are not able to take part in discussions regarding resuscitation within 24 h of their admission, and the majority of the others choose not to participate in such discussions.

In order to verify if acute patients admitted to hospital are willing to participate in discussions regarding their (possible) resuscitation, a group of British researchers planned and carried out a prospective, cross sectional study of a successive cohort of patients. Three hundred and seventy-four adults were involved; among them, 74 agreed to take part in the study and to provide complete data. Among the remaining subjects admitted to hospital, 189 could not be involved because of practical reasons, whereas 111 refused to take part in the study. Eighty-eight percent of the 74 participating patients reported having no, or little, previous knowledge of the topic. With regard to these same patients who consented to take part in the study, 96% understood well the information leaflet provided by the researchers, 77.8% preferred resuscitation decisions to be discussed with them, and 77.5% did not mind discussing resuscitation within 24 h of their admission. The authors concluded that approximately half the patients admitted to hospital are not able to take part in discussions regarding resuscitation within 24 h of their admission, and the majority of the others chose not to participate in such discussions. Among the patients consenting to take part, the majority of them did not mind discussing resuscitation. Physicians should concentrate on the practical and logistic barriers to the implementation of a policy of resuscitation discussion with acutely ill patients admitted to hospital so as to include as high a number of patients as possible in their decisions.

Fidler H, Thompson C, Freeman A, Hogan D, Walker G, Weinman J. Barriers to implementing a policy not to attempt resuscitation in acute medical admissions: prospective, cross sectional study of a successive cohort. *BMJ* 2006; 332: 461-2.

Concepts and phrases used by Russian family physicians in structured interviews indicate the necessity for them to have appropriate education tools in the context of behavioural medicine

Recently the Russian Federation acknowledged family medicine as a specialty, but Russian family physicians evidence an incomplete preparation with regard to psychosocial and behavioural approaches.

A group of US researchers interviewed 10 Russian family doctors with the objective of evaluating their experience, their preparation and their perception with regard to the practice of behavioural medicine and psychosocial methods. Only recently has the Russian Federation acknowledged family medicine as a specialty, but Russian physicians lack a specific preparation regarding behavioural methods. In this qualitative study, the evaluation of the phrases and concepts adopted by Russian family doctors highlighted five important issues that the doctors themselves retained basic features or necessities in the practice of behavioural/psychosocial medicine methods, and precisely the understanding of elements limiting the practice of behavioural medicine, the need for behavioural medicine services, features of the physician-doctor relationship related to behavioural

medicine, the physician's role strain, experience and intuition. The authors of this study conclude that the key elements emerging from the interviews of the Russian physicians underline the benefit that they would derive from a post-graduate specific curriculum focussing on psychosocial approaches and behavioural medicine.

Buyck D, Floyd M, Tudiver F, McGrady L, Journagin A, Kishenko S. Behavioural medicine in Russian family medicine. *Patient Educ Couns* 2005; 59: 205-11.

A low-fat diet cannot prevent cardiovascular diseases in adult and elderly women

A randomised controlled clinical trial has shown that a dietary pattern with a reduced fat intake and an increased content of fruit, vegetables and grains cannot significantly reduce the risk of cardiac and cerebrovascular disease in postmenopausal women.

To test the hypothesis that a dietary intervention consisting in a low-fat diet with a high content of fruit, vegetables and grains could significantly reduce the risk of cardiac and cerebrovascular disease in postmenopausal women, a randomised controlled clinical trial was designed and conducted on 48 835 female subjects. The women, aged 50 to 79 years, enrolled in the Women's Health Initiative Randomized Controlled Dietary Modification Trial, were randomly assigned to an intervention (40%) or to a comparison group (60%). The intervention consisted in effecting a behaviour modification through group and individual sessions aimed at reducing total fat intake to 20% calories and at increasing the intake of fruit/vegetables from 3.6 (at the beginning of the study) to 5 servings a day and grains from 4.7 (at the beginning of the study) to at least 6 servings a day. After 6 years, comparing the intervention group with the control group, fat intake resulted reduced to 28.8% of total caloric intake, while the mean increase in fruit/vegetable consumption was 1.1 servings a day and the mean increase in grain consumption was 0.5 servings a day. The objectives of the study were not achieved and the dietary intervention of this study was not able to significantly reduce the risk of coronary heart disease and stroke in postmenopausal women; only moderate effects on cardiovascular risk factors were obtained. In the light of these considerations, more intensive and targeted dietary interventions are likely to be needed, furthermore in combination with other appropriate lifestyle modifications.

Howard BV, Van Horn L, Hsia J, et al. Low-fat dietary pattern and risk of cardiovascular disease: the Women's Health Initiative Randomized Controlled Dietary Modification Trial. *JAMA* 2006; 295: 655-66.

Applicability to primary care of national clinical guidelines on blood pressure lowering for people with stroke: cross sectional study

The study compares the characteristics of patients with cerebrovascular disease in primary care with those of the participants in the PROGRESS trial, on which British guidelines for blood pressure lowering are based. Important differences exist between the PROGRESS trial participants and a typical primary care stroke population, which undermine the applicability of the trial's findings.

The study is based on a cross sectional survey of patients with confirmed stroke or transient ischaemic attack who live in south Birmingham, England. Seven general practices were recruited. The participants were all patients with a validate history of stroke (n = 413) or transient ischaemic attack (n = 107). Some patients' characteristics were considered: age, sex, time since last cerebrovascular event, blood pressure, and whether receiving antihypertensive treatment. The results show that patients were 12 years older than the participants in PROGRESS and twice as likely to be women. The median time that elapsed since their cerebrovascular event was 2.5 years, compared with 8 months in PROGRESS. The systolic blood pressure of 315 (61%) patients was > 140 mmHg, and for 399 (77%) it was > 130 mmHg. One hundred and forty-seven (28%) patients were receiving a thiazide diuretic, and 136 (26%) were receiving an angiotensin-converting enzyme inhibitor.

According to the authors, research in appropriate and representative populations is specially designed needed before the national and international guidelines are implemented in primary care.

Mant J, McManus RJ, Hare R. Applicability to primary care of national clinical guidelines on blood pressure lowering for people with stroke: cross sectional study. *BMJ* 2006; 332: 635-7.

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