Previous psychiatric hospitalization increases risk of death in patients admitted with chest pains

New research from Scotland (Gillies et al, 2011) has shown that the rate of death in men and women hospitalized for chest pain unrelated to heart disease is higher in those with a history of psychiatric illness than without.

The study found the death rate 1 year after hospitalization for non-cardiac chest pain was higher in men and women with a previous psychiatric hospitalization than without, with cardiovascular disease causing the majority of deaths among men and women with previous psychiatric hospitalization.

Dr Michelle Gillies, Clinical Lecturer in Epidemiology at the University of Glasgow, said: 'We found that men and women with a prior psychiatric hospitalization were younger, more socioeconomically deprived and more likely to be suffering from diabetes or hypertension than those without a prior psychiatric hospitalization. Even after adjusting for these differences we found that the rate of death at 1 year from any cause and from cardiovascular disease was higher in men and women with a previous psychiatric hospitalization than without, with the excess risk being greatest in younger patients.'

Using routinely collected hospital admission data from the Scottish NHS the researchers identified over 150 000 men and women, without existing heart disease, hospitalized for the first time for non-cardiac chest pain between 1991 and 2006. Of these, 3514 (4.4%) men and 3136 (3.9%) women had a previous psychiatric hospitalization in the preceding 10 years.

One year after hospital discharge for non-cardiac chest pain, there were more deaths among patients with a previous psychiatric hospitalization than those without: 6.3% *vs* 4.3% respectively in men, and 5.3% *vs* 3.6% in women. Cardiovascular disease was the most frequent cause of death, accounting for 28.2% and 44.1% of all deaths in men and women respectively who had a previous psychiatric hospitalization.

Dr Gillies said: 'Our findings are consistent with previous studies that have shown that patients with psychiatric illness have a greater risk of heart-related problems and are at a greater risk of death than the general population. ... A hospitalization for chest pain is a valuable opportunity to engage this difficult-to-reach population, assess cardiovascular risk and intervene to reduce risk.'

Gillies M, Jhund PS, MacTeague K, MacIntyre P, Allardyce J, Batty GD, MacIntyre K (2011) Prior psychiatric hospitalization is associated with excess mortality in patients hospitalized with non-cardiac chest pain: a data linkage study based on the full Scottish population (1991–2006). *Eur Heart J* Dec 1 [Epub ahead of print]

Fewer major cardiovascular events in type 2 diabetes with sitagliptin than with a sulphonylurea

A new pooled analysis presented at the International Diabetes Federation 21st World Diabetes Congress in Dubai demonstrated that people with type 2 diabetes taking sitagliptin (Januvia) experienced a lower incidence of major cardiovascular events compared to those treated with a sulphonylurea.

The analysis looked at cardiovascular safety data from three previously published randomized, blinded clinical studies, which included people with type 2 diabetes randomized to receive sitagliptin 100 mg/day (n=1226) or an sulphonylurea (n=1225) as monotherapy, or as add on to metformin.

There were no reports of major cardiovascular events (ischaemic events or cardiovascular death) in the sitagliptin arm and 11 reports of patients experiencing at least one major cardiovascular event in the sulphonylurea group.

The incidence rate for reported major cardiovascular events was 0/100 patient years in the sitagliptin group (0 events) and 0.9/100 patient years in the sulphonylurea group (11 events, between-group difference -0.9, 95% confidence interval = -1.6 to -0.5). For cardiovascular-related death, the incidence rate was 0/100 patient years (0 deaths) with sitagliptin, and 0.4/100 patient years (five deaths) with sulphonylurea = -0.4 (95% confidence interval =-0.9 to -0.1).

Goldstein BJ, Engel SS, Golm GT, Davies MJ, Kaufman KD (2011) Cardiovascular safety of sitagliptin versus a sulphonylurea in patients with type 2 diabetes mellitus: a pooled analysis. Abstract presented at the International Diabetes Federation 21st World Diabetes Congress, Dubai: 4–8 December

Breast cancer test spares nearly half of women from chemotherapy

Study results presented at the San Antonio Breast Cancer Symposium show that 46% of patients who were initially offered chemotherapy and hormone therapy were spared chemotherapy after review of the Recurrence Score provided by the Oncotype DX test.

Enzyme may help reduce low-density lipoprotein levels

Scientists from the University of Leicester and University of California Los Angeles found an enzyme called IDOL alters the low-density lipoprotein receptor's ability to bind with low-density lipoprotein cholesterol. Drugs targeting IDOL could help receptors to lower circulating cholesterol levels.

Progression-free survival increased for multiple myeloma

Data presented at the American Society of Hematology showed a median progression-free survival of 31 months for newly diagnosed multiple myeloma patients, 75 years or younger, receiving continuous lenalidomide therapy *vs* 12 months for patients who received no lenalidomide treatment (P<0.001).