Hospital admissions for allergies up nearly 8% in a year

NHS hospitals in England dealt with 20 320 admissions for allergies in the 12 months to February 2014. This represents a 7.7% increase from 18 860 for the previous 12 months, according to new figures from the Health and Social Care Information Centre.

The rate of admissions for allergies for both genders is highest in those aged 0–4 years and it is higher in males than in females in this age group.

The rate for both genders generally decreases with age with a higher rate of admissions in females than in males in older age bands.

The report also shows that 61.8% (12 560) of admissions as a result of allergic reactions were emergencies, a 6.2% increase (730) on the same period last year (11 830).

Nearly one in five (4070) admissions were for anaphylactic reactions, an increase of 9.9% (370) from the same period last year.

The Birmingham and the Black Country Area Team had the highest rate of admissions for anaphylactic reactions at 11.2 per 100 000 of the population, and Merseyside Area Team had the lowest at 5.1 per 100 000 of the population.

Kingsley Manning, Chair, Health and Social Care Information Centre, Leeds

Chair of the Health and Social Care Information Centre, Kingsley Manning said: '[This] provides fresh insight into hospital admissions for allergies, which have increased by almost 8% in the last year. In the 12 months to February, 61.8% of all allergy related hospital admissions were emergencies, a rise of just over 6%.

Mr Manning continued: 'This vital information on allergy admissions in England paints a clear picture for policy makers of the scale of hospital in patient care for these conditions.'

The report can be accessed at www.hscic.gov.uk/pubs/hes-apr13feb14

Comparing methods for screening for anxiety in epilepsy clinics

An abstract presented at the Joint Congress of European Neurology, Istanbul, by researchers from the UK, Turkey and Austria, has investigated whether screening tools used for depression could pick up anxiety as well. Up to 60% of people with epilepsy have psychiatric comorbidity including anxiety, but anxiety remains underrecognized in this group.

A total of 261 participants with a confirmed diagnosis of epilepsy were included. Neurological Disorders Depression Inventory for Epilepsy (NDDI-E) and Emotional Thermometers (ET) were used. Hospital Anxiety and Depression Scale-Anxiety (HADS-A) with a cut off for moderate and severe anxiety was used as the reference standard.

Patients with depression were excluded as multivariate regression analysis showed that depression was the only significant determinant of having anxiety in the group. Against HADS-A, NDDI-E T (0.874) and ET-7 (0.882) showed the highest level of accuracy in recognizing anxiety, and ET4 had the highest negative predictive value (0.968).

The authors concluded that reliable screening for moderate to severe anxiety in people with epilepsy without depression is feasible with conventional and visual analogue tools. The cut-off values for anxiety are different from those for depression in both tests. They recommend that these tests should be used as initial screening tools to rule out patients who are unlikely to have anxiety.

Gur Ozmen S, Cock HR, Agrawal N, von Oertzen TJ (2014) Screening for anxiety in epilepsy clinics. A comparison of conventional and visual-analog methods. Abstract presented at Joint Congress of European Neurology, Istanbul: OS3208

Decline in eGFR and subsequent risk of end-stage renal disease and mortality

The established chronic kidney disease progression end point of end-stage renal disease or a doubling of serum creatinine concentration (corresponding to a change in estimated glomerular filtration rate (eGFR) of -57% or greater) is a late event.

A meta-analysis aimed to characterize the association of decline in eGFR with subsequent progression to end-stage renal disease. Because most people with chronic kidney disease die before reaching end-stage renal disease, mortality risk also was investigated.

Individual meta-analysis of 1.7 million participants was undertaken. There were 12 344 end-stage renal disease events and 223 944 deaths from 35 cohorts in the CKD Prognosis Consortium (Coresh et al, 2014) with a repeated measure of serum creatinine concentration over 1–3 years and outcome data.

Adjusted hazard ratios of end-stage renal disease and mortality were higher with larger eGFR decline. Declines in eGFR smaller than a doubling of serum creatinine concentration were more common and were strongly and consistently associated with the risk of end-stage renal disease and mortality.

This supports consideration of lesser declines in eGFR (such as a 30% reduction over 2 years) as an alternative end point for progression of chronic kidney disease.

Coresh J, Turin TC, Matsushita K et al for the CKD Prognosis Consortium (2014) Decline in estimated glomerular filtration rate and subsequent risk of end-stage renal disease and mortality. *JAMA* doi: 10.1001/jama.2014.6634 (Epub ahead of print)

Ruxolitinib data show promise for patients with polycythemia vera

Polycythemia vera is a chronic, incurable blood cancer with limited treatment options. If uncontrolled, polycythemia vera can cause serious cardiovascular complications, such as stroke and heart attack. Patients with polycythemia vera also face debilitating symptoms that can have a significant impact on their daily life.

In a late breaking abstract presentation of data from the phase III RESPONSE trial, at the European Hematology Association Congress in Milan, 77% of patients treated with ruxolitinib achieved control of red cell numbers (without the need for phlebotomy) or spleen volume reduction of ≥35% compared to 20% of patients who were treated with best available therapy.

A significantly greater proportion of patients achieved the composite primary end point of control of red cell numbers and spleen volume reduction when treated with ruxolitinib compared to best available therapy (21% *vs* 1%, $P<0.0001$).

In the study, 49% of patients treated with ruxolitinib had their polycythemia vera symptom burden reduced by at least 50% compared to 5% on best available therapy. Ruxolitinib was well tolerated and adverse events were consistent with those seen in previous studies.

Commenting on the results, lead author Dr Alessandro M. Vannucchi, from the Department of Experimental and Clinical Medicine, University of Florence, said: 'Ruxolitinib may be a well tolerated and effective novel therapeutic agent for this category of patients with high-risk polycythemia vera who are intolerant or refractory to hydroxyurea.'

This reinforces the potential of ruxolitinib to become an important new option for patients with polycythemia vera that is not adequately managed with existing therapies.

Dr Alessandro Vannucchi, Associate Professor of Hematology, Department of Experimental and Clinical Medicine University of Florence, Florence, Italy

Goserelin may reduce risk of early menopause in young women with breast cancer

A phase 3 multicentre clinical trial (Moore et al, 2014) has found that the risk of early menopause in young women being treated for breast cancer can be significantly reduced by adding goserelin to chemotherapy. Women who took goserelin and wanted to have children were more likely to get pregnant and deliver a healthy baby.

Premenopausal women, younger than 50 years of age, who had oestrogen and progesterone receptor negative early-stage breast cancer were randomly assigned to receive standard chemotherapy (131 patients) or chemotherapy plus goserelin (126 patients).

After 2 years, 45% of women receiving standard chemotherapy had stopped menstruating or had elevated levels of follicle-stimulating hormone, while this was seen in only 20% of women receiving goserelin. The pregnancy rate was nearly twice as high in the goserelin group (21% *vs* 11%).

After 4 years, 89% of patients who received goserelin showed no signs or symptoms of cancer, compared with 78% of those receiving standard chemotherapy. Overall survival at 4 years was 92% in the goserelin group and 82% in the standard chemotherapy group.

'In addition to reducing the risk of early menopause..., goserelin was very safe and may even improve survival,' said senior author Dr Kathy Albain, of Loyola University Medical Center, 'I think these findings are going to change our clinical practice.'

Moore CFH, Unger JM, Phillips K-A et al (2014) Phase III trial (Prevention of Early Menopause Study [POEMS]-SWOG S0230) of LHRH analog during chemotherapy (CT) to reduce ovarian failure in early-stage, hormone receptor-negative breast cancer: An international Intergroup trial of SWOG, IBCSG, ECOG, and CALGB (Alliance). *J Clin Oncol* **32**(5s): (suppl; abstr LBA505)

HPV vaccine approved for prevention of anal cancer

Gardasil has been approved by the European Commission for the prevention of anal precancerous lesions and anal cancers causally related to certain oncogenic human papillomavirus (HPV) types in both men and women.

CQC 'no excuse' for problems with transition from child to adult services

As part of a national report into transition from child to adult services (www.cqc.org.uk/ctas), the Care Quality Commission (CQC) has highlighted problems with the transition process. Some children's services stop before their equivalent adult services have started, and families are confused and distressed by the lack of information and support given to them.

Topical alprostadil cream available for erectile dysfunction

The first topical cream approved for the treatment of erectile dysfunction in men over the age of 18 years, Vitaros (topical alprostadil cream) is available for prescription in the UK in a single use, disposable applicator.

Smokers and passive smokers more likely to have hearing loss

Giving up or reducing smoking and avoiding passive exposure to tobacco smoke may reduce an individual's risk of hearing loss, finds a large population-based cross-sectional study (Dawes et al, 2014).

Dr Piers Dawes, Lecturer in Audiology, University of Manchester, Manchester

The researchers found that current smokers have 15.1% higher odds of hearing loss than non-smokers (odds ratio = 1.15, 95% confidence interval = 1.09–1.21). Passive smoking also increased the likelihood of hearing loss by 28% (odds ratio = 1.28, 95% confidence interval = 1.21–1.35).

But ex-smokers had a slightly reduced risk of going deaf – which may be because once they quit they adopt a more healthy life style overall.

Researchers looked at 164 770 UK adults aged 40 to 69 years of age who took hearing tests between 2007 and 2010 when they joined UK Biobank, a national project to improve health.

Dr Piers Dawes, from the Centre for Human Communication and Deafness at The University of Manchester, who led the research, said: 'Given around 20% of the UK population smoke and up to 60% in some countries, smoking may represent a significant cause of hearing loss worldwide.

'We found the more packets you smoke per week and the longer you smoke, the greater the risk you will damage your hearing.'

The link between smoking and hearing loss is still unclear but many smokers also often had heart disease.

Dr Dawes added: 'We are not sure if toxins in tobacco smoke affect hearing directly, or whether smoking-related cardiovascular disease causes microvascular changes that impact on hearing, or both.'

The increased risk among passive smokers – higher than that for smokers – could be because smokers were compared to both complete non-smokers and passive non-smokers but passive smokers were only compared to non-smokers.

The study also found that those who consume alcohol were less likely to have a hearing loss than lifetime teetotalers, irrespective of the level of alcohol consumption.

Dawes P, Cruickshanks KJ, Moore DR, Edmondson-Jones M, McCormack A, Fortnum H, Munro KJ (2014) Cigarette smoking, passive smoking, alcohol consumption, and hearing loss. *J Assoc Res Otolaryngol* May 28 (Epub ahead of print)

Mothers of women with PCOS have increased risk of early death

Mothers of daughters with polycystic ovary syndrome (PCOS) have a significantly increased risk of death, particularly if they also have diabetes, when compared to the general population, according to new research (Louwers et al, 2014).

The Dutch study compared death rates of mothers and fathers of 958 daughters with PCOS with rates in the general Dutch population. The researchers found that mothers aged over 60 years had a risk of death that was one-and-a-half times greater than that of the general population. When compared with a control group of women with type 2 diabetes from the general population, diabetic mothers of daughters with PCOS had a two-fold increased risk of death.

The researchers thought that the susceptibility to type 2 diabetes might explain an important part of the cardiovascular complications seen among patients with PCOS and their parents, especially as PCOS is often passed down the generations. So they set out to discover whether PCOS was associated with an increased risk of death in parents.

Patients were asked to complete questionnaires about their parents' medical histories when they were diagnosed with PCOS. The researchers obtained birth and death dates from a nationwide database of all people registered as living in The Netherlands. Mortality data for 946 mothers and 902 fathers of PCOS daughters was compared with the mortality rates of the general Dutch population and with the mortality rates of a control group of the population consisting of 1353 men and women diagnosed with type 2 diabetes.

'This is the first study to observe this excess risk of death in mothers of patients who have been diagnosed with PCOS, which is the most common hormone-related disease in women of reproductive age,' said Dr Yvonne Louwers, first author of the study and a resident doctor in the Department of Obstetrics and Gynecology at Erasmus MC University Medical Center, Rotterdam, The Netherlands.

She continued: 'Our findings justify the active screening of mothers of women with PCOS so that timely preventive and therapeutic measures can be taken. Although our study was based on questionnaires and retrospective data, and prospective, long-term follow-up studies are needed, the excess mortality risk is just too high for us to wait patiently for the results of these follow-up studies before taking action to help reduce the risk of deaths in these mothers.'

The researchers say that the study does not provide insight into the biological mechanisms that may play a role in the increased risk of death, and further studies will be needed to understand this.

As the parents in their study are relatively young, with an average age of 63 years, Dr Louwers and her colleagues have embarked on a prospective long-term follow-up study of patients and their parents who have been diagnosed with PCOS at their clinic and who have reached perimenopausal and postmenopausal ages.

Louwers YV, Roest-Schalken ME, Kleefstra N et al (2014) Excess mortality in mothers of patients with polycystic ovary syndrome. *Hum Reprod* doi:10.1093/humrep/deu107 (Epub ahead of print)