

Maternal antibodies to dietary antigens and risk of non-affective psychosis in offspring

Babies born to women with sensitivity to gluten appear to be at increased risk of certain psychiatric disorders later in life, according to research by scientists at Karolinska Institutet in Sweden and the Johns Hopkins Children's Center in Baltimore (Karlsson et al, 2012).

The team's findings are based on examination of 764 birth records and neonatal blood samples of Swedes born between 1975 and 1985. Some 211 of them subsequently developed non-affective psychoses, such as schizophrenia and delusional disorders.

Using stored neonatal blood samples, the investigators measured levels of IgG anti-

bodies to milk and wheat – markers of immune system reaction triggered by the presence of certain proteins. Because a mother's antibodies cross the placenta during pregnancy to confer immunity to the baby, a newborn's elevated IgG levels are proof of protein sensitivity in the mother.

Children born to mothers with abnormally high levels of antibodies to the wheat protein gluten had nearly twice the risk of developing schizophrenia later in life than children who had normal levels of gluten antibodies. The link persisted even after accounting for other factors known to increase schizophrenia risk, including maternal age, gestational age,

mode of delivery and the mother's immigration status. The risk for psychiatric disorders was not increased among those with elevated levels of antibodies to milk protein.

'Our study is an illustrative example suggesting that a dietary sensitivity before birth could be a catalyst in the development of schizophrenia or a similar condition 25 years later,' said investigator Dr Robert Yolken, a neuro-virologist at Johns Hopkins Children's Center.

Karlsson H, Blomström A, Wicks S, Yang S, Yolken RH, Dalman C (2012) Maternal Antibodies to Dietary Antigens and Risk for Non-affective Psychosis in Offspring. *Am J Psychiatry* April 25 (Epub ahead of print)

A third of in-hospital cardiac arrests could have been prevented

Better assessment on hospital admission, and recognition and response when acutely ill patients deteriorate could have prevented cardiac arrest and subsequent resuscitation attempts in a third of cases, says the latest National Confidential Enquiry into Patient Outcome and Death report *Time to Intervene?*

Intrauterine devices 'most effective' emergency contraception

Intrauterine devices should be used routinely to provide emergency contraception according to a systematic review of data from the past 35 years. They had a failure rate of less than one per thousand and were more effective than the morning after pill.

Patients not aware research core to NHS

The results of a new survey, conducted by One Poll on behalf of the National Institute for Health Research Clinical Research Network, show that most people are not aware that research is a core part of the work of the NHS. The survey raises concerns that patients could be missing out on opportunities to take part in potentially beneficial clinical trials as a result.

Early hip fracture surgery improves survival

The mortality rate from neck of femur fractures is reduced when surgery is performed as early as possible, researchers reported at the 13th Congress of the European Federation of National Associations of Orthopaedics and Traumatology (EFORT) in Berlin.

The neck of femur fracture is a major life event for patients with osteoporosis because their survival is often affected by pre-existing comorbidities. The question over ideal timing for the required surgical intervention has not been answered with scientific certainty. But researchers from Leicester Royal Infirmary have now presented an answer.

'Expedient surgery is associated with a reduction in in-hospital mortality,' said study leaders Mr Chika Uzoigwe

and Mr Rory Middleton. Operating within the first 36 hours is advantageous in terms of reducing mortality. However, operating within 24 or even 12 hours is even more advantageous in terms of reducing the risk of in-hospital death. Age and the general condition of the patient also play a role.

The National Institute for Health and Clinical Excellence (NICE) recommends that surgery be performed on the day of hospital admission or the next day. Similarly, the German Society of Trauma Surgery advises surgical treatment within 24 hours and recommends longer optimization only if there is a severe underlying disease.

Data on 2056 patients who were treated for femoral neck fracture between 2008 and

2011 in the trauma and orthopaedic department of Leicester Royal Infirmary were evaluated. The analysis clearly showed that early surgery is the best option for a patient in terms of reducing their risk of death following surgery.

For those who were treated later than 36 hours after admission, the in-hospital mortality rose 1.58-fold. The lowest mortality was found if surgery was performed within 12 hours of admission. 'Prompt surgery leads to a reduction in in-hospital mortality,' the presenting author, Mr Henry Burnand, told the congress.

Middleton RG, Burnand HGF, Young PS, Bigsby E, Uzoigwe CE (2012) In Response to NICE - Early surgery in hip fracture patients improves survival. Abstract 1368. EFORT, Berlin: 23–25 May