

UTERINE ARTERY DOPPLER

Uterine artery Doppler ultrasonography appears to be a useful predictor of pre-eclampsia and intrauterine growth restriction, but is more accurate in predicting the former, according to a systematic review. Researchers identified 74 studies of pre-eclampsia and 61 studies of intrauterine growth restriction — a total of over 120 000 patients. When performed in the second trimester of pregnancy, uterine artery Doppler was found to be more accurate than in the first trimester. Pulsatility index, a measure of systolic and diastolic uterine artery blood flow, was the most useful of the Doppler indices for predicting pre-eclampsia.

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HOW OLD ARE YOUR LUNGS?

Telling smokers their “lung age” can significantly improve the probability that they will quit smoking, say British researchers. All 561 participants underwent spirometric assessment of lung function. They were then randomly assigned to two groups; the intervention group received their results in terms of “lung age” (the age of the average healthy individual who would perform similar to them on spirometry). The control group participants were given a raw figure for forced expiratory volume in 1 second (FEV₁). Cessation of smoking was the main outcome measure, and was verified using salivary cotinine testing after 12 months. The verified quit rate in the intervention group at 12 months was 13.6% compared with 6.4% in the control group. Interestingly, whether the lung age was normal or not did not affect the quit rate. The authors comment that the reasons people decide to quit smoking remain complex, but that this intervention appears promising and cost-effective.

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RHINOSINUSITIS — TO TREAT OR NOT TO TREAT ...

Common clinical signs and symptoms of rhinosinusitis do not necessarily help decide which patients will benefit from antibiotic therapy, according to the results of a recent meta-analysis. Researchers set out to assess if common clinical signs and symptoms of rhinosinusitis can distinguish between viral and bacterial forms, and thus identify those patients who would benefit from antibiotics. Signs and symptoms studied included duration and severity of symptoms, purulent nasal or pharyngeal discharge, facial pain, and the presence of pyrexia. Data from nine randomised controlled trials involving over 2500 adults with rhinosinusitis were analysed. The number needed to treat (NNT) with antibiotics to cure one additional patient with the disease was 15 people. Those with a purulent pharyngeal discharge took longer to cure, and this sign had some prognostic value, but eight patients with this sign still needed to be treated before one additional patient benefited (NNT=8). The authors conclude that common clinical signs and symptoms of rhinosinusitis did not seem to be able to identify the subgroup of patients who would benefit from antibiotic treatment. Antibiotics appear not to be justified even if symptoms are present for longer than 7–10 days. Only symptoms suggesting the presence of a serious complication warrant immediate antibiotic treatment.

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AUTISM — WHAT DO WE MEAN?

The diagnosis of autism is increasingly common, but the classification of autism and related disorders remains disputed and unclear, prompting Australian researchers to investigate the diagnostic labelling of autism spectrum disorders. They claim that current classification systems may allow children to satisfy the criteria for both autism and Asperger syndrome, leading to questions about the validity of each diagnostic label. The study included 348 children with one or more criteria for an autistic disorder according to the *Diagnostic and statistical manual of mental disorders* – 4th Edition (DSM-IV). Clinicians were asked to give a diagnostic label and complete the DSM-IV for each child. The agreement between diagnostic label and DSM-IV classifications was 97% for autism, but very low (27%) for Asperger syndrome and pervasive developmental disorder. The authors comment that although the use of the term “autism spectrum disorder” is widespread, the lack of specific current diagnostic criteria associated with the term may create problems in interpreting the child’s profile and needs.

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BEWARE THROMBOEMBOLISM IN PREGNANCY

The leading causes of maternal death in Australia are related to venous thromboembolism (VTE). Although infrequent, the mortality and morbidity associated with VTE are significant. In a retrospective study based in Victoria, Australian researchers analysed the records of women with confirmed VTE during pregnancy or the postpartum period. Identified risk factors were age over 30 years, obesity, a previous history of thromboembolism, and caesarean section. The overall rate of VTE was 1.14 per 1000 deliveries, with most cases occurring in the first trimester of pregnancy. The authors comment that the focus on prevention of VTE should shift to pregnancy, and not be confined to the postpartum period.

Aust N Z J Obstet Gynaecol 2008; 48: 44-49