Research news in brief

- **Which observed behaviours may reassure physicians that a child is not septic?**

- **30-year trends in asthma and the trends in relation to hospitalization and mortality**

General Practitioners

General Practice Research Review Issue 70 with Professor Gerard Gill

Which observed behaviours may reassure physicians that a child is not septic?

Authors: Snelson E & Ramlakhan S

Summary: This study gathered international expert opinion on the presenting features that would make clinicians rule out sepsis in an unwell child. The investigators undertook a modified two-round Delphi study, where clinicians were asked for features they believed were indicators of wellness in an ill child. 195 clinicians (mostly physicians) who routinely assessed unwell children and had been doing so for most of their careers were interviewed. Over 90% of respondents rated age-appropriate verbalisation, playing, smiling and activity as an indication that a child was unlikely to have sepsis. More than 70% of respondents agreed that eating, spontaneous interaction and normal movement were positive signs, but consolability and showing fear of the clinician were not considered to be adequately reassuring. There was a wide range of opinion on how reassuring the use of an electronic device was thought to be.

Comment: All of us fear missing a septic child. I have twice in my life seen the consequences of others having done so. This is the opinion of a series of international paediatric experts on the clinical markers of sepsis. Normal behaviours are felt to have a high degree of reliability in ruling out sepsis.

Reference: Arch Dis Child 2018;103(9):864-67
https://www.researchreview.com.au/au/Clinical-Area/General-Medicine/General-Practice/General-Practice-Research-Review,-Issue-70.aspx

Specialists, RMOs / SMOs / VMOs

Respiratory Research Review Issue 74 with Conjoint Professor Peter Wark

30-year trends in asthma and the trends in relation to hospitalization and mortality

Authors: Pelkonen MK et al.

Summary: These researchers examined trends in asthma prevalence during the 30-year period from 1982 to 2012 in Finland and they also assessed concurrent hospitalisations and mortality. Data were obtained from 7 cross-sectional risk factor

population surveys conducted every 5 years, involving a total of 54,320 subjects aged 25–74 years. Each survey required participants to complete a standardised questionnaire on self-reported asthma, smoking habits and other risk factors, as well as clinical measurements. Asthma prevalence increased during the 30-year study period, particularly amongst women. Compared with non-asthmatics, asthmatics had significantly higher all-cause hospitalisations, respiratory causes, cardiovascular causes and lung cancer. Mean yearly hospital days decreased in the 5-year periods after each survey, particularly amongst asthmatics: yearly all-cause hospital days decreased in the asthmatics from 4.45 (between 1982 and 1987) to 1.11 (between 2012 and 2015); the corresponding decrease in non-asthmatics was from 1.77 to 0.60 ($p<0.001$). Similarly, between 1982 and 2015, COPD hospitalisations fell by a greater extent amongst asthmatics than amongst non-asthmatics. Generally, all-cause mortality decreased between 1982 and 2015, although asthmatics had higher all-cause mortality, respiratory mortality and lung cancer mortality, compared with non-asthmatics.

Comment: This is an interesting observational study of adult asthmatic cohorts examined between 1982 and 2015. Despite the increase seen in asthma prevalence, there has been a very clear improvement in outcomes; with reduced hospitalisations and reduced mortality. It reflects the success seen with asthma treatments, especially in these important epidemiological outcomes. Unfortunately, despite our ability to effectively manage the majority of asthmatics, we are still unable to reduce its prevalence.

Reference: Respir Med. 2018;142:29-35
https://www.researchreview.com.au/au/Clinical-Area/Internal-Medicine/Respiratory/Respiratory/Respiratory-Research-Review,-Issue-74.aspx