Paracetamol may be linked to asthma in some children

Children who take paracetamol during their first 2 years of life may be at a higher risk of developing asthma by the age of 18, especially if they have a particular genetic makeup, according to research led by the University of Melbourne and presented at the international congress of the European Respiratory Society in Paris. The investigators analysed data for 620 children who had been followed from birth to 18 years of age as part of the Melbourne Atopy Cohort Study. The children had been recruited to the study before birth because they were considered to be at high risk of an allergy-related disease because at least one family member (mother, father or sibling) had a self-reported allergic disease (asthma, eczema, hay fever, or a severe food allergy). After their birth, a research nurse rang the family every 4 weeks during the first 15 months, and then at 18 months and at 2 years to ask how many days in the preceding weeks had the child had been given paracetamol. When the children were 18 years old, a blood or saliva sample was collected and tested for variants of the glutathione *S*-transferase genes, *GSTT1*, *GSTM1* and *GSTP1*. They were also assessed for asthma, and a spirometry test undertaken. One variant of the *GSTP1* gene, *GSTP1* Ile/Ile, was associated with a higher risk of developing asthma. "Our findings provide more evidence that paracetamol use in infancy may have an adverse effect on respiratory health for children with particular genetic profiles and could be a possible cause of asthma. There is mounting evidence that the GST superfamily of genes, including three major classes — *GSTM1*, *GSTT1* and *GSTP1* — are associated with various diseases, including cancers, asthma, atherosclerosis, allergies, Alzheimer's and Parkinson's disease. Our study adds to this body of evidence," the authors noted.

https://erscongress.org/
https://academic.oup.com/ije/article/46/1/25/2617155

An aspirin a day won't help you live longer

A major 7-year Australian trial published in the *New England Journal of Medicine* found that taking daily aspirin did not prolong life free of disability, nor did it significantly reduce the risk of a first heart attack or stroke. The ASPREE (ASPirin in Reducing Events in the Elderly) trial, including more than 19 000 participants in Australia and the United States, is the largest and most comprehensive study to examine whether the many millions of older people around the world who take low dose aspirin (100 mg) to preserve good health are receiving any benefit. According to principal investigator Professor John McNeil, head of the Monash University Department of Epidemiology and Preventive Medicine, the results of the trial mean that global guidelines on the use of aspirin for preventing common ageing-related conditions need to be re-examined. ASPREE also found that the rate of major haemorrhage was higher for aspirin-takers than for those receiving placebo (8.6 *v* 6.2 events per 1000 person-years; hazard ratio, 1.38; 95% CI, 1.18–1.62). Bleeding is recognised as a side effect of aspirin, particularly in older people. "It means millions of healthy older people around the world who are taking low dose aspirin without a medical reason, may be doing so unnecessarily, because the study showed no overall benefit to offset the risk of bleeding." Professor McNeil said all patients should follow the advice of their doctor about their daily use of aspirin. He cautioned that the results do not apply to those with existing conditions such as a previous heart attack, angina or stroke, for whom aspirin is a valuable preventive drug.

https://www.nejm.org/doi/full/10.1056/NEJMoa1805819

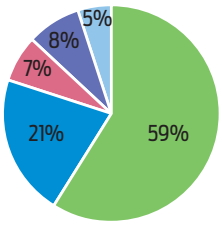
Cate Swannell doi: 10.5694/mja18.n1510

MJA InSight Poll

Hospitals should be run by doctors, not bureaucrats

Total votes = 170

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree



Take part in next week's poll on: www.mja.com.au/insight

MJA Podcasts

Dr Maryam Mozooni is a Research Fellow at the University of Western Australia. She discusses the influence of maternal migration and ethnic origin on stillbirth rates in WA, to accompany her co-authored research published online on 8 October 2018.

Dr Adam Walczak is Youth Cancer Trials and Clinical Trials Manager with CanTeen Australia. He talks about improving outcomes for low survival cancers in adolescents and young adults, to accompany his co-authored perspective published in this issue.

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OCTOBER

15 Podcast with Dr Adam Walczak, Youth Cancer Services and Clinical Trials Manager with CanTeen

8 *Research*: Stillbirth in Western Australia, 2005–2013: the influence of maternal migration and ethnic origin
Mozooni et al; doi: 10.5694/mja18.00362

8 Podcast with Dr Maryam Mozooni, Research Fellow at the University of Western Australia

8 *Research letter*: Unintended and unwanted pregnancy in Australia: a cross-sectional, national random telephone survey of prevalence and outcomes
Taft et al; doi: 10.5694/mja17.01094

8 *Narrative review*: Community-acquired acute meningitis and encephalitis: a narrative review
Beaman et al; doi: 10.5694/mja17.01073

1 Podcast with Professor Helena Teede, Executive Director of the National Health and Medical Research Council Centre for Research Excellence in Polycystic Ovary Syndrome, and Associate Professor Jacqueline Boyle, a Senior Research Fellow

1 Podcast with Dr Peter Lazzarini, Principal Research Fellow at Queensland University of Technology and Metro North Hospital and Health Service, Brisbane

SEPTEMBER

24 *Research*: Coordinated care for patients with cirrhosis: fewer liver-related emergency admissions and improved survival
Ramachandran et al; doi: 10.5694/mja17.01164

24 *Meta-analysis*: *Helicobacter pylori* infection and the risk of upper gastrointestinal bleeding in low dose aspirin users: a systematic review and meta-analysis
Ng and Yeomans; doi: 10.5694/mja17.01274

24 Podcast with Dr Justin Ng, resident at Peninsula Health, Frankston

24 *Research*: Surveillance improves survival of patients with hepatocellular carcinoma: a prospective population-based study
Hong et al; doi: 10.5694/mja18.00373

24 Podcast with Dr Thai Hong, gastroenterologist at St Vincent's Hospital, Melbourne

17 Podcast with Professor Jeremy Chapman, Director of Renal Medicine at Westmead Hospital, Sydney

17 Podcast with Professor Louise Baur, Head of Child and Adolescent Health at Sydney Medical School

10 *Perspective*: All colonoscopies are not created equal: why Australia now has a clinical care standard for colonoscopy
Duggan et al; doi: 10.5694/mja18.00556

10 Podcast with Dr Anne Duggan, senior medical advisor to the Australian Commission on Safety and Quality in Health Care

10 *Research*: Sepsis incidence and mortality are underestimated in Australian intensive care unit administrative data
Heldens et al; doi: 10.5694/mja18.00168

10 Podcast with Professor Simon Finfer, critical care senior staff specialist at Royal North Shore Hospital, and Director of Intensive Care at the Sydney Adventist Hospital

10 *Perspective*: The rising health, social and economic costs of Australia's ageing prisoner population
Ginnivan et al; doi: 10.5694/mja18.00266

3 *Perspective*: Improving drug allergy management in Australia: education is key
Lucas; doi: 10.5694/mja18.00467