

## Masala

### *Aspirin for the prevention of pre-eclampsia*

Researchers in Europe undertook a double-blind, placebo-controlled trial to assess the role of aspirin in the prevention of pre-eclampsia. They assigned 1776 women with singleton pregnancies who were at high risk for pre-eclampsia to either aspirin in a dose of 150 mg per day or placebo starting between 11 and 14 weeks of gestation till 36 weeks of gestation. The drug was well tolerated and compliance was good with nearly 80% of participants taking 85% or more of the assigned number of tablets. Preterm pre-eclampsia occurred in 1.6% of those assigned to aspirin and in 4.3% of those assigned to placebo—a relative risk reduction of 62% (*N Engl J Med* 2017;**377**:613–22).

### *Laparoscopic adjustable gastric banding falling out of favour*

One of the procedures used for bariatric surgery, laparoscopic adjustable gastric banding (LAGB), offers the advantage of reversibility. Researchers in the USA examined the prevalence and outcomes of primary LAGB implantation compared to revision/explantation using data from the University Health System Consortium database from 2007 to 2015 consisting of 28 202 patients who underwent this procedure. From 2010 onwards, there was a steady decline in the use of the procedure. During this period, 12 517 patients underwent LAGB explantation. By 2013, the number of explantations exceeded the number of implantations. It was also found that explantation/revision procedures were associated with a longer mean length of stay, higher morbidity and more intensive care unit admissions compared with primary LAGB implantation. From 2013 onwards, laparoscopic sleeve gastrectomy became the dominant procedure for bariatric surgery (*J Am Coll Surg* 2017 Jul 25. doi: 10.1016/j.jamcollsurg.2017.06.015. [Epub ahead of print]).

### *Predicting the likelihood of pulmonary embolism: The YEARS algorithm*

Researchers in the Netherlands applied the YEARS clinical decision rule—a modified version of the established Wells' rule—to patients suspected to have pulmonary embolism (PE). The YEARS rule has three items: clinical signs of deep vein thrombosis, haemoptysis, and whether PE is the most likely diagnosis, along with D-dimer concentrations. Patients underwent a CT pulmonary angiogram (CTPA) only if they had one or more YEARS items present with a D-dimer concentration of >500 ng/ml or none of the YEARS items with a D-dimer concentration of >1000 ng/ml. In all other patients, PE was considered excluded. Of 3465 patients included in the study, PE was diagnosed in 13%. Of 2946 patients in whom PE was ruled out by the YEARS rule, only 0.61% had a venous thromboembolic event over the next three months. Compared to the use of Wells' rule with D-dimer levels, the YEARS rule led to 14% fewer CTPAs (*Lancet* 2017; **390**:289–97).

### *Time trends in euthanasia in the Netherlands*

A questionnaire-based study compared end-of-life decision-making practices in the Netherlands between 1990 and 2015. The number of patients was 5197 in 1990 and 7761 in 2015. An end-of-life decision had preceded dying in 39% of patients in 1990 and 58% in 2015. Similarly, in 1990, 1.7% of all deaths resulted from euthanasia; in 2015, this had increased to 4.5%.

In 1990, 0.8% of patients died without a request to end their life; in 2015, this had fallen to 0.3% of individuals. Morphine was used to palliate symptoms at the end of life in 36% of deaths in 2015 and in 19% in 1990. Of all patients who received physician assistance in dying, 92% had a serious somatic disease, 14% had multiple health problems related to old age, 3% each had early-stage dementia and a psychiatric illness (*N Engl J Med* 2017;**377**:492–4).

### *Coffee intake and mortality*

In a subset of 521 330 participants enrolled in the prospective cohort study EPIC (European Prospective Investigation into Cancer and Nutrition) across 10 European nations, researchers assessed the relationship between coffee consumption and mortality. During a mean follow-up of 16.4 years, there were 41 693 deaths. Participants in the highest quartile of coffee consumption had 12% lower all-cause mortality compared with non-consumers. Mortality from digestive diseases was nearly 60% lower among men and 40% lower among women. Among women, coffee consumption reduced mortality due to circulatory diseases by 22% and due to cerebrovascular diseases by 30%. Time to reach for that steaming cup of coffee (*Ann Intern Med* 2017;**167**:236–47)!

### *Neurodevelopmental outcomes in preterm children*

From France come data on the neurodevelopmental outcomes of preterm children from two population-based cohort studies—EPIPAGE (epidemiological study of very premature infants) and EPIPAGE-2. The authors also compared these outcomes with those of a similar cohort of children studied in 1997. A total of 5567 neonates born alive at 22–34 weeks' gestation in 2011 were evaluated at 2 years of corrected age. Survival at 2 years for those born at 22–26 weeks' gestation was 51.7%, at 27–31 weeks' gestation 93.1% and at 32–34 weeks' gestation 98.6%. The overall rate of cerebral palsy at 24–26, 27–31 and 32–34 weeks' gestation was 6.9%, 4.3% and 1.0%, respectively. The proportion of children with a neurodevelopmental score result below threshold at 24–26, 27–31 and 32–34 weeks' gestation was 50.2%, 40.7% and 36.2%, respectively. Survival without severe or moderate neuromotor or sensory disabilities among live births increased from 45.5% in 1997 to 62.3% in 2011 at 25–26 weeks' gestation, but no change was observed at 22–24 weeks' gestation (*BMJ* 2017;**358**:j3448).

### *Intelligent children live longer!*

A large, prospective cohort study in Scotland, the Scottish Mental Survey of 1947, enrolled children born in 1936, who were given a standardized test of intelligence quotient (IQ) in 1947. Participants included 33 536 men and 32 229 women. The cause of death in individuals in this cohort was established till 2015 using National Health Service death records. Childhood IQ scores were found to be inversely related to all major causes of death. This association was strongest for respiratory disease followed by coronary artery disease and then for stroke. Similarly, children with higher IQ had a lower risk for death from injury, smoking-related cancers and dementia. These relationships appeared to be stronger for women than for men. Smarter children seem to make for healthier adults (*BMJ* 2017;**357**:j2708)!