

Clinical shorts

Risk factors for dying from imported malaria:

Most travellers from the United Kingdom who acquire malaria are of African descent and visiting friends and relatives in endemic areas. However, the risks of dying from acquired malaria are highest in older people, tourists and those who present for medical care in areas where malaria is not usually seen, say the authors of a 20-year observational study. Data in the national Malaria Reference Laboratory from over 25 000 patients with *Plasmodium falciparum* infection were included in the study. Between 1987 and 2006, 184 of these patients died from malaria infection. Mortality increased with age (adjusted odds ratio [OR] 10.68, 95% confidence interval [CI] 6.4 to 17.8 in those over 65 years, compared with 18- to 35-year-olds) and being a tourist (adjusted OR 8.2, 95% CI 5.1 to 13.3, compared with those visiting friends and relatives). The risk of mortality was highest if the patient sought medical care in a UK region where malaria is rarely seen (adjusted OR 18.2, 95% CI 8.6 to 38.3). Of those who died, about 21% died at home or in the ambulance, indicating a delay in seeking care. See *BMJ* 2012;344:e2116 doi: 10.1136/bmj.e2116.



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Antibiotics for treating uncomplicated acute appendicitis:

Antibiotics are safe and effective as primary treatment for acute uncomplicated appendicitis. This is the conclusion of a meta-analysis comparing antibiotic treatment to appendectomy in patients with uncomplicated appendicitis (i.e., without local or contained perforation with appendicular abscess or mass). Four randomized controlled trials with 900 patients were included in the analysis. The risk of complications, such as perforation, gangrenous appendicitis and peritonitis, was significantly lower with antibiotic treatment (risk ratio 0.61, 95% confidence interval 0.40 to 0.92) compared with appendectomy. No significant differences were seen in length of stay or treatment efficacy. Readmissions for recurrence of symptoms were more common (about one in five) in the antibiotic group. All but three (65/68) who were readmitted underwent appendectomy; 19% of those who had surgery had complicated appendicitis. See *BMJ* 2012;344:e2156 doi:10.1136/bmj.e2156.

Bariatric surgery or medical therapy for type 2 diabetes:

In severely obese patients with type 2 diabetes, bariatric surgery may be more effective than conventional medical therapy in controlling hyperglycemia. In this non-blinded, controlled single-centre trial, 60 patients between the ages of 30 and 60 years with a body mass index (BMI) of 35 or more and at least five years with diabetes were randomized to receive conventional medical therapy or bariatric surgery (Roux-en-Y gastric bypass or biliopancreatic diversion). Conventional medical therapy included treatment by a multidisciplinary team, individualized diet and exercise programs, and optimized medications. At two years, diabetes remission (i.e., fasting glucose < 5.6 mmol/L and glycated

hemoglobin < 6.5% without pharmacologic therapy) occurred in 75% of those undergoing gastric bypass and 95% of those undergoing biliopancreatic diversion. No patients in the medical therapy group experienced diabetes remission. The preoperative BMI, duration of diabetes, sex, age and weight changes were not predictors of diabetes remission. See *N Engl J Med* 2012; 10.1056/NEJMoa1200111.

Transcatheter valve replacement for severe inoperable aortic stenosis:

For selected patients with severe aortic stenosis who are not surgical candidates, transcatheter replacement of the aortic valve reduces the rates of death and admission to hospital, and improves symptoms at two years. In this multicentre trial, 358 patients with severe aortic stenosis who were considered unsuitable candidates for surgery for anatomic or clinical factors were randomized to receive transfemoral transcatheter replacement or standard therapy (which could include balloon aortic valvuloplasty). At two years, the rate of death in the standard-therapy group was 68.0%, compared with 43.3% in the valve replacement group ($p < 0.001$). Those in the valve replacement group, compared with those receiving standard therapy, were more likely to be asymptomatic or to have mild symptoms (83.1% v. 42.5%, $p < 0.001$) and were admitted to hospital less frequently (35.0% v. 72.5%, $p < 0.001$). The rate of stroke was higher in the valve replacement group (13.8% v. 5.5%, $p = 0.01$) at two years. Other major complications (e.g., myocardial infarction, bleeding) were similar in both groups. See *N Engl J Med* 2012; 10.1056/NEJMoa1202277.

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