

SURGERY

Acute appendicitis—antibiotics versus appendicectomy

Antibiotic therapy is a safe first-line option for patients with acute appendicitis and a valid alternative to surgery, Hansson and colleagues report.

In some studies, appendicectomy is associated with a high rate of surgery-related complications. Furthermore, as co-researcher Kent Lundholm of the Sahlgrenska University Hospital in Sweden explains, another trial reported “...men aged 50 years with signs of acute appendicitis could be treated conservatively with antibiotics.” These results led Hansson *et al.* to compare the outcomes of surgery versus treatment with antibiotics in unselected patients with acute appendicitis.

369 consecutive patients at three Swedish hospitals were assigned to either treatment with antibiotics (202 patients) or appendicectomy (167); however, 96 patients assigned to antibiotic therapy

underwent surgery as patients or surgeons could change the allocation according to personal preference or medical judgement.

Antibiotic treatment cured 85% of all patients versus 89.2% for surgery. Minor complications were similar for both groups, whereas “...surgery was associated with [a threefold increase in] serious complications,” Lundholm adds.

The researchers conclude that the benefits of antibiotic therapy over surgery—namely a reduced risk of major complications—outweigh concerns of antibiotic resistance or environmental burden.

Lisa Richards

Original article Hansson, J. *et al.* Randomized clinical trial of antibiotic therapy versus appendicectomy as primary treatment of acute appendicitis in unselected patients. *Br. J. Surg.* **96**, 473–481 (2009).