

Antimicrobial prophylaxis effective for colorectal surgery

Clinical question	How effective is antimicrobial prophylaxis for the prevention of postoperative surgical wound infection (SWI) in patients undergoing colorectal surgery?
Bottom line	Antibiotics delivered orally and intravenously prior to colorectal surgery reduce the risk of postoperative SWI by at least 75%. No statistically significant differences were shown when comparing short and long term duration of prophylaxis, or single versus multiple dose antibiotics. Established gold standard regimens were as effective as other antibiotic choices.
Caveat	The antibiotic(s) given must cover both aerobic and anaerobic bacteria. Further research is required to establish the optimal timing and duration of dosing, and frequency of longer term adverse effects, such as <i>Clostridium difficile</i> pseudomembranous colitis.
Context	Abdominal SWI in patients having operations on the large intestine occurs in about 40% of patients if antibiotics are not given. This risk can be greatly diminished by the administration of antibiotics prophylactically before surgery.
Cochrane Systematic Review	Nelson RL et al. Antimicrobial prophylaxis for colorectal surgery. Cochrane Reviews 2009. Issue 1. Article No. CD001181. DOI:10.1002/14651858.CD001181.pub3. This review contains 182 studies involving 30,880 participants, and 50 different antibiotics, including 17 cephalosporins.
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[References]

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