

Antibiotic prophylaxis in elective colorectal surgery

ABSTRACT

Background: Antibiotics are often administered in elective colorectal surgery to prevent wound infection. The tendency for surgeons to prolong the administration of prophylactic antibiotic therapy in the postoperative period is a well-known fact. The aim of this study was to elucidate the pattern of prophylactic antibiotic utilization in elective colorectal surgery and to determine if evidence-based medicine is employed in relation to this practice. **Methods:** A cross-sectional study encompassing general surgeons performing elective colorectal surgery was performed. Questionnaires were distributed to 144 surgeons (national, academic and private health care). Questions pertaining to the type, timing and duration of antibiotic administration were asked. The prevalence of wound infection audit rate and whether or not there were specific guidelines related to antibiotic administration were also determined. **Results:** The response rate obtained was 67% (n = 96). Although evidence from the current medical literature and recommended national guidelines support the use of single-dose prophylactic antibiotics, 72% of the respondents used more than a single dose. Forty surgeons (42%) claimed that their prescribing practice was supported by the medical literature, 31 respondents (32%) based their practice on hospital guidelines and personal preference was cited as a reason by 21 surgeons (22%). The remaining four respondents (4%) used a similar scheduling policy to that practiced by their colleagues in relation to antibiotic administration. There was no significant difference in antibiotic dose scheduling between national, private and university academic institutions ($P = 0.85$). **Conclusions:** These results suggest that a significant proportion of surgeons administer excessive and unnecessary doses of antibiotics in elective colorectal surgery. Further studies are required to uncover the reasons but lack of appropriate guidelines and failure to exercise evidence-based medicine are major factors that account for this practice.

Keyword: Antibiotic prophylaxis; Colorectal surgery; Elective; Postoperative