

Appropriate antibiotic administration in elective surgical procedures: still missing the message

ABSTRACT

Objective: The aim of this study was to determine the appropriateness of antibiotic prophylaxis in selected elective surgical procedures in a tertiary referral centre. **Methods:** A cross-sectional study using retrospective data from January 2000 to May 2002 was performed pertaining to elective colorectal surgery, cholecystectomy and inguinal hernia repairs. Appropriateness of antibiotic administration was determined based on compliance with national and internationally accepted guidelines on prophylactic antibiotic prescribing policy. A single dose or omission of antibiotic administration was judged appropriate for cholecystectomy and inguinal hernia repair, while up to 24 hours' dosing was considered appropriate practice for colorectal surgery. **Results:** Of 419 cases, there were 55 (13.1%) colorectal procedures, 97 (23.2%) cholecystectomies and 267 (63.7%) inguinal hernia repairs. Antibiotics were administered in a total of 306 (73%) cases, with single-dose prophylaxis in only 125 (41%) of these. Prophylaxis was inappropriately prolonged in 80%, 52% and 31% of colorectal, cholecystectomy and inguinal hernia cases, respectively. The corresponding mean duration of antibiotic administration was 2.4 ± 2.2 , 1.6 ± 1.8 and 1.1 ± 1.3 days, respectively. **Conclusion:** Antibiotic prophylaxis in elective surgery continues to be administered haphazardly. This study supports close surveillance of antibiotic utilization by a dedicated team, perhaps consisting of microbiologists or pharmacists, to minimize inappropriate administration.

Keyword: Antibiotic prophylaxis; Elective surgery