

4CPS-050 ANALYSIS OF ANTIBIOTIC ADMINISTRATION IN SURGICAL PROPHYLAXIS

4CPS-051 ABSTRACT WITHDRAWN

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Background Antibiotic prophylaxis (AP) plays an important role in the reduction of a surgical site infection.

Purpose The aim of this study was to analyse the AP in surgical procedures at the hospital in the context of hospital internal standard (IS) and research on available work concerning AP.

Material and methods A cross-sectional observational study ran from January 2018 to March 2018 in all of the surgical departments at the hospital. The study included patients aged ≥ 18 years who underwent surgery in a defined period (5 days) and gave their consent to the study. Initially, a research of published studies and guidelines concerning AP (ROAP) was carried out. Subsequently, a form for perioperative AP record was prepared (collected data: patient gender and identification, type and duration of the surgical performance, date of surgery, choice of antibiotic (ATB), ATB dose, total number of doses, route of administration and time of administration). Afterwards, the medical documentation was used to collect the data of patient characteristics and to complete information about AP and a surgical procedure. Finally, a risk index was used for individual infection risk, which calculates risk from three different parameters. Data from the study were compared with both the ROAP and hospital IS. The data were processed using descriptive statistics.

Results One-hundred and ninety-seven patients (103 men and 94 women) with an average age 56.5 ± 15.72 attended the study. Forty-nine (24.9%) patients underwent the orthopaedic procedure. One-hundred and twenty-five (63.5%) patients received AP, 11 (8.8%) patients without prophylaxis should have received AP and, in contrast, for 14 (11.2%) patients AP was indicated excessively. Cefazolin was administered in 52% of operations. The choice of ATB did not correspond in 20.0% to hospital IS and in 22.4% to ROAP. The dosage of ATB did not correlate in 20.0% with hospital IS and in 67.2% with ROAP.

Conclusion Some shortcomings in the real performance of AP and in hospital IS have been identified. These included the time of the first dose administration, disregard for the patient's weight in ATB dose selection and multiple dose AP in surgical procedures with low risk.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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