EVALUATION OF PRESCRIPTION ADEQUACY TO THE ANTIBIOTHERAPY PROTOCOL IN INTRA-ABDOMINAL INFECTION IN A REGIONAL HOSPITAL.

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BACKGROUND AND IMPORTANCE

The global increase in antimicrobial resistance, makes it necessary to establish local protocols for the empirical treatment of the different syndromes in hospitals in order to preserve and optimise the use of antibiotics as much as possible.

AIM AND OBJECTIVES

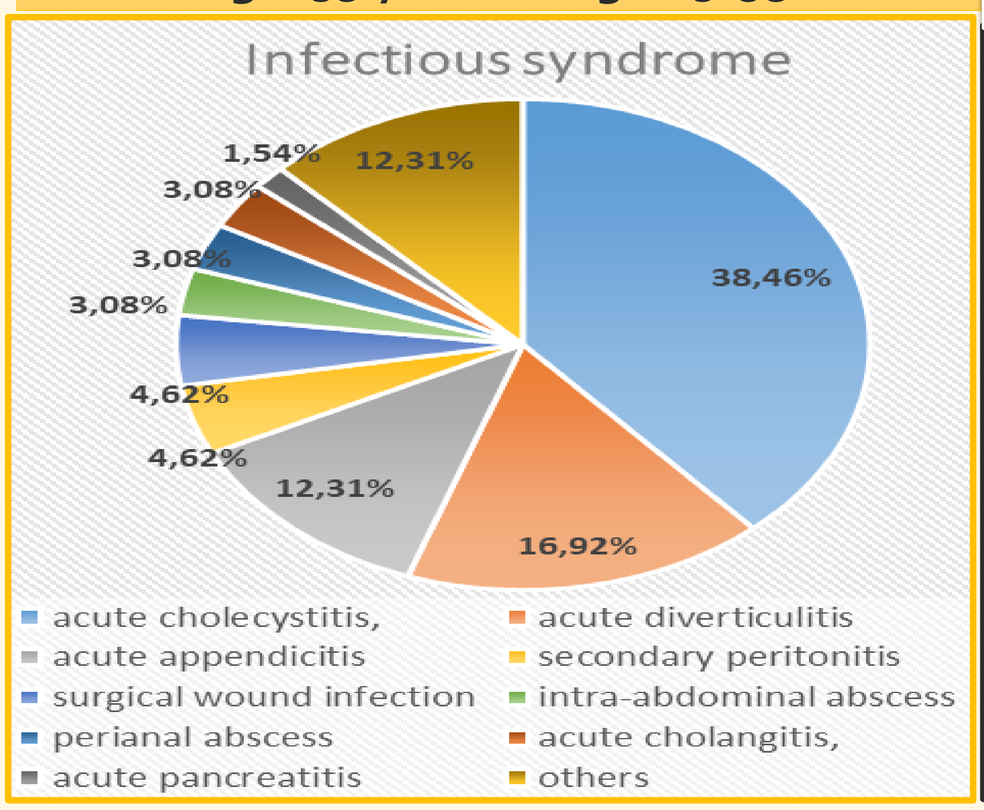
To assess the adequacy of the prescription and the degree of compliance with the "protocol of antibiotherapy in intra-abdominal infection (PIAI)" in a regional hospital.

MATERIAL AND METHODS

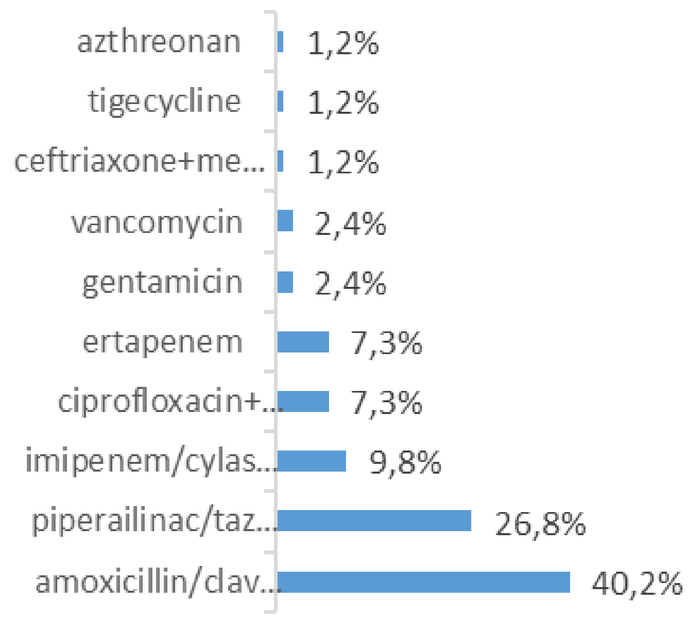
- **Retrospective and observational study** including patients with abdominal infection treated with antibiotics during may-december 2019.
- Patients with antibiotic prophylaxis were excluded. In February 2019 the PIAI was approved.
- The **variables included were**: age, sex, type of infectious syndrome, prescribed antibiotic, type of therapy (empirical/targeted), need for adjustment to renal function and samples collected for microbiological cultures (MC).
- Three **criteria were established for non-compliance with protocol**: indication, dose and duration. Were also recorded: patients with unsuitability prescriptions, reason for non-compliance, pharmaceutical interventions. When the protocol were breached, the pharmacist notificated the doctor through an electronic prescription alert system.

RESULTS

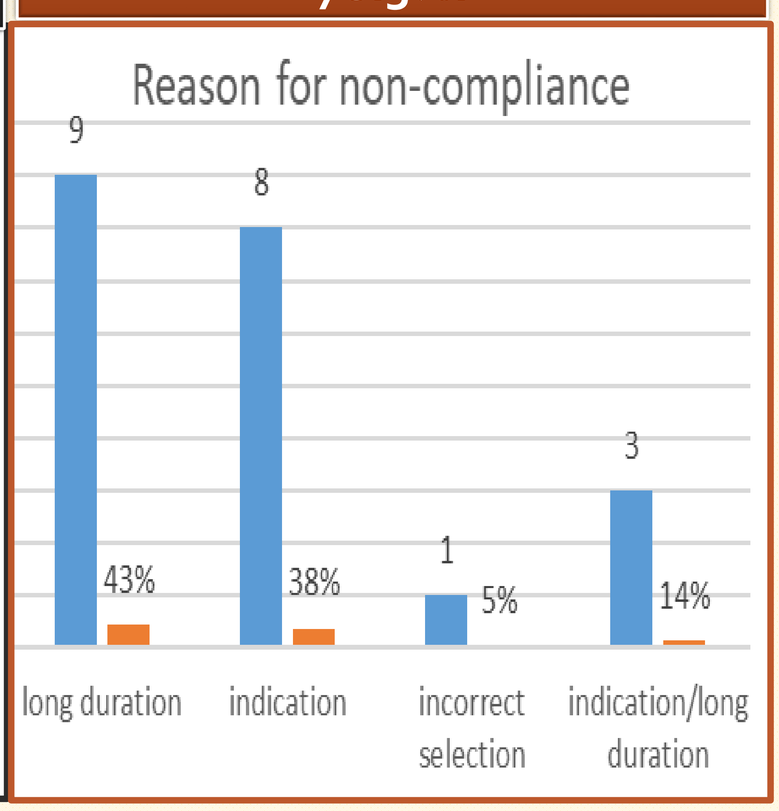
65 patients were included (50.8% male) median age: 59 years (range:19-95).



82 antibiotics were prescribed



The degree of adequacy was 76.3%.



- **One patient required adjustment to renal function.**
- **The average duration of treatment was 7.82 days (SD:4.87).**
- **87.7% of patients received empirical treatment and samples were collected for MC in 17 patients.**

- ✓ **21 pharmaceutical recommendations were recorded.**
- ✓ **The predominant infectious syndromes in protocol breaches were: 41.2% acute cholecystitis and 29.4% acute diverticulitis.**
- ✓ **Distribution of unsuitable antibiotics was: piperacillin/tazobactam 41.2%; amoxicillin/clavulanic 23.5%; ciprofloxacin +metronidazole 17.6%; imipenem/cylastine 11.8% and Ertapenem 5.9%.**

CONCLUSIONES

The adequacy of the prescription to protocol is good. Excessive duration and selection of antibiotics are the main causes of non-adequacy. Pharmaceutical validation is essential to promote optimization and rational use of antibiotics in hospitals. Subsequent and periodic studies are needed to monitor adequacy time.

without conflict of interest