ANTIBIOTIC STEWARDSHIP PROGRAMME PHARMACEUTICAL INTERVENTIONS AMONG PATIENTS ADMITTED TO A SEPTIC TRAUMATOLOGY UNIT

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BACKGROUND
Osteoarthritis infections involve a challenging management and require a multidisciplinary team involved. In addition, patients affected nowadays are older, with elevated comorbidity and polypharmacy, which increases the risk of adverse effects and interactions with antimicrobial therapy. Therefore, it is essential to incorporate a clinical pharmacist in Antibiotic Stewardship Programs (ASP), in order to optimize safety and efficiency of treatment.

OBJECTIVES
To analyze Pharmacists’ Interventions within the ASP (PI-ASP) conducted on septic patients from the Septic Traumatology Unit (STU).

MATERIAL AND METHODS
Prospective observational study in a university hospital. All PI-ASP from ASP group sessions were collected and recorded. The group was created in October 2020 and is currently constituted by specialists from Traumatology, Infectious Diseases, Pharmacy, Microbiology, Nursery and Clinical Analysis departments. Sessions are held weekly, with the aim of optimizing surgical and antimicrobial therapy for STU patients.

RESULTS
A total of 39 sessions have been completed, with a weekly average of 12.2 patients discussed and 10.3 PI performed. In total, 403 interventions have been executed: 336 (83.4%) connected to the use of antimicrobials (considered PI-ASP).

Most frequent PI-ASP within each antimicrobial family
- **β-lactams and carbapenems**
  - 38.8% Dose increase or perfusion extension
- **Colistin**
  - 62.5% Renal function monitoring
- **Glycopeptides**
  - 52.6% Pharmacokinetics monitoring
- **Lipopeptides**
  - 65.5% Analytics monitoring
- **Oxazolidinones**
  - 34.8% Antimicrobial replacement
- **Quinolones and rifampicin**
  - 45.3% Pharmacotherapeutic interactions detection
- **Pharmacotherapeutic follow-up**
  - 21.0%

CONCLUSIONS
- Most of PI-ASP registered have been performed on antimicrobials against Gram-positive microorganisms, mainly recommending pharmacokinetics monitoring to ensure appropriate therapeutic levels and conducting analytics follow-up for detection of potential adverse effects.
- PI-ASP are essential to optimize therapeutic regimen of β-lactams and carbapenems, as well as to detect interactions between quinolones and/or rifampicin with the concomitant chronic treatment of STU-admitted patients.

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