Abstract 4CPS-249 Table 1

	Ceftazidime–avibactam	Ceftolozane–tazobactam
Patients (n)	24	16
Demographic variables		
Age (median (IQR)) (years)	68.5 (63.5–75)	67 (57.5–73.7)
Sex (men) (%)	58.3	56.2
Type of infection (%)		
cUTIs	12.5	0
cIAIs	41.7	31.25
CAP and VABP	20.8	37.5
Bacteraemia	12.5	25
Other	12.5	6.25
Microorganisms isolated (%)	100	93.75
<i>P aeruginosa</i> multiresistant	20.8	68.7
<i>K pneumoniae</i>	70.8	0
<i>E coli</i> BLEE	4.2	12.5
Other	4.2	12.5
Duration of treatment (median (IQR)) (days)	11.5 (6.5–16.5)	12.5 (8–17.75)

Aim and objectives To evaluate the use of ceftazidime–avibactam and ceftolozane–tazobactam in a Spanish general hospital (400 beds).

Material and methods A prospective descriptive study was carried out from October 2016 to September 2020 including all patients treated with ceftazidime–avibactam and ceftolozane–tazobactam at the hospital. Variables collected were demographic (age/sex) and clinical (type of infection, microorganism isolated, duration of treatment, dose administered, prescriber clinical service and antibiotic tested in the antibiogram).

Results 40 patients were included and the results are shown in table 1.

The most common dosage of ceftazidime–avibactam was 2 g every 8 hours. The prescribing clinical services were 33.3% general surgery (GS), 20.8% intensive care unit (ICU), 12.5% haematology, 8.3% oncology and 25.1% other. For ceftolozane–tazobactam, the most common dosage was 1 g every 8 hours, and the prescribing clinical services were 68.75% ICU, 12.5% internal medicine, 12.5% haematology and 6.25% GS.

Both antibiotics were susceptible in 75% of patients. Clinical and microbiological resolution of the infection was 75% for ceftazidime–avibactam and 70% for ceftolozane–tazobactam. 17.5% of patients died during hospitalisation because of their clinical situation.

Conclusion and relevance

- Both patient populations were demographically similar but the use of ceftazidime–avibactam was more frequent.
- cIAIs and pneumonias were the most common infections treated. Mostly, ceftazidime–avibactam was used for carbapenemase producing *K pneumoniae* and ceftolozane–tazobactam for *P aeruginosa* multiresistant.
- ICU and general surgery were the most experienced clinical services.
- Both antibiotics were tested in the antibiogram in most cases.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-250 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 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 This was a retrospective observational study including patients with abdominal infection treated with antibiotics from May to 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 the protocol: indication, dose and duration. We also recorded: patients with unsuitable prescriptions, reason for non-compliance and pharmaceutical interventions. When the protocol was breached, the pharmacist notified the doctor through an electronic prescription alert system.

Results 65 patients were included (50.8% men) with a median age of 59 years (range 19–95). 38.46% had acute cholecystitis, 16.92% acute diverticulitis, 12.31% acute appendicitis, 4.62% secondary peritonitis, 4.62% surgical wound infection, 3.08% intra-abdominal abscess, 3.08% perianal abscess, 3.08% acute cholangitis, 1.54% acute pancreatitis and 12% other infections.

82 antibiotics were prescribed (amoxicillin/clavulanic 40.2%, piperacillin/tazobactam 26.8%, imipenem/cylastine 9.8%, ertapenem 7.3%, ciprofloxacin+metronidazole 7.3%, and other antibiotics 8.6%). 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.

The degree of adequacy was 76.3%. 21 cases of inadequacy were identified (long duration=9, incorrect selection=8, incorrect dose=1). 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%.

Conclusion and relevance The adequacy of the prescription to protocol was good. Excessive duration and selection of antibiotics were the main causes of inadequacy. Pharmaceutical validation is essential to promote optimisation and rational use of antibiotics in hospitals. Subsequent and periodic studies are needed to monitor adequacy time.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest