

INTRAVENOUS PERFUSION OF CEFTOLOZANE-TAZOBACTAM USING ELASTOMERIC INFUSION PUMPS

Rotea-Salvo S, García-Queiruga M, Feal-Cortizas B, Fernández -Oliveira C, Giménez-Arufe V, Martín-Herranz I. Servicio de Farmacia. Instituto de Investigación Biomédica de A Coruña (INIBIC), Complejo Hospitalario Universitario de A Coruña (CHUAC), Sergas. Universidade da Coruña (UDC). As Xubias, 84. 15006 A Coruña, Spain.

Background and Importance

❖ Ceftolozane-tazobactam intravenous administration infusion using portable elastomeric infusion pumps (EIP) is useful especially in patients infected with resistant bacteria.

Aim and Objectives

❖ To describe ceftolozane-tazobactam infusion using EIP(CT-EIP) and analyze healthcare cost avoided versus hospital admission.

Materials and Methods

- *Retrospective study* included all patients treated with CT-EIP between January 2017-October 2019.
- *Data sources:* Electronic medical record.
- **For economic valuation** have been considered:
 - ✓ Costs of the EIP → €25.63 for the 240ml/24-hour devices (needed 1/day).
€15.40 for the 100ml/30min devices (needed 3/day).
 - ✓ Nursing working time needed for preparation → €15.81/hour (a nurse prepares an average of 10 EIP/hour).
 - ✓ Cost of hospital at home care unit (HHU) → a day at HHU costs €80.70.
 - ✓ Cost per hospital admission day is €528.95.



Results

10 Patients

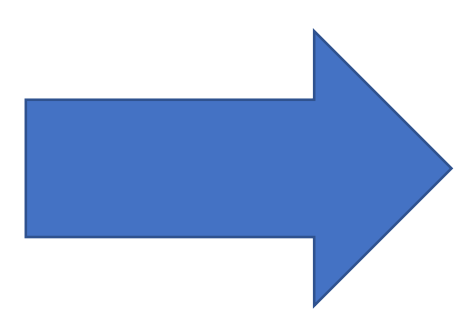
- 5 males
- 5 females
- Mean Age: 58.1 years (range 19-90 years)
- 8/10 patients treated with concomitant antibiotic
- 7/10 patients managed by HHU

Indication of treatment	
Hospital acquired neumonia	6
Off-label situations	2
Severe abdominal infections	1
Severe urinary infection	1

Microorganism isolated
P. Aeruginosa 10/10
S. Aureus 2/10
E. Coli 1/10

✓ Successful evolution in 5 patients
X 5 Patients were exitus due to other severe pathologies

220 CT-EIP prepared



Treatment duration: 13 days (range 7-29)

Avoided estimated cost: €55,856.26.

Conclusion and Relevance

- ✓ CT-EIP was a cost-effective alternative
- ✓ Which enabled patients to stay at home,
- ✓ Avoiding unnecessary hospital admission and improving their quality of life.

