SUBCUTANEOUS FUROSEMIDE INFUSION USING ELASTOMERIC INFUSION PUMPS IN A TERTIARY HOSPITAL

1Martínez Pradeda A, 1Feijoo Vilanova P, 1Fernandez Oliveira C, 1García Queiruga M, 1Feal Cortizas B, 1Mauriz Montero MJ, 1Luaces Rodríguez A, 1Rotea Salvo S, 1Giménez Arufe V, 1Martín Herranz MI.

*Servicio de Farmacia. Complexo Hospitalario Universitario de A Coruña (CHUAC), SERGAS.

Background and importance
Furosemide subcutaneous administration has been proposed as a useful alternative for congestive heart failure (CHF) management in outpatients. Comparing with intravenous infusion of furosemide, subcutaneous infusion is supposed to increase diuresis using lower furosemide doses, reduce hospital stays and minimize re-entry rates.

Aim and objectives
Describe furosemide subcutaneous infusion by portable pumps (FPP) use in a tertiary hospital

Methods
Retrospective study.
Patients treated with FPP in 2020-2021.

Portable pumps features
Infusion flow 0,5 mL/h.
Length of infusion: 7 days/pump
Formulation pH=8,7 .
Stability: 84 days protected from light and at room temperature.

Collected variables
Demographics.
Diagnosis and clinical results.
Efficacy variables: NT-proBNP, body weight and plasma sodium descents.
Safety variables: changes in glomerular filtration (estimated by CKD-EPI).

Results
Demographic
- 31 Patients: 19 males.
- Average age 69 years.

Safety and efficacy results

Treatment experiences
- 46 FPP for 31 patients.
- Medium length of treatment: 10 (5-28 days).
- All 31 prescribed for descompensated CHF:
  - 2 after heart transplantation.
  - 1 due to transthyretin amyloidosis.
- 30/31 received 120 mg of furosemide/day (10mg/mL).
- 1/31 received 80 mg of furosemide/day (6,6 mg/mL).
- 0/31 experienced local infection, rash irritation or flow problems.

Conclusion
FPP let patients improve some CHF measures outside the hospital. Our study supports their use, being safe and effective in some measures.

Pharmacist have a key role by checking the dose, ensuring physical-chemical stability and sterile conditions in preparation, and instructing patients in the use of FPP.

4CPS-081 ATC code: 3. Literature reviews - Contact: alejandro.martinez.pradeda@sergas.es