Readmission Rate of Congestive Heart Failure Patients Prescribed Torsemide Versus Furosemide
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Introduction
Furosemide is more commonly used in patients with congestive heart failure (CHF) despite the fact that Torsemide has better bioavailability and longer half-life than furosemide and they both now have comparable costs.

Previous research studies had suggested that Torsemide is advantageous over Furosemide in:
• Improving functional status
• Reducing cardiac mortality
• Decreasing hospitalization rates
• Reducing overall health care expenditure per patient

However, the results were conflicting. The primary endpoint of our study is to compare CHF readmission rates in patients who were discharged with Torsemide versus Furosemide.

Materials and Methods

Null hypothesis: There are no differences in the readmission rate between patients who were discharged with Torsemide versus Furosemide.

Design: A retrospective observation study - chart review

Population: 431 patients with the admitting diagnosis of CHF at Abington Hospital from 2016-2019

Inclusion Criteria: Patients who are 18 years old and above and discharged on either Torsemide or Furosemide. The baseline characteristics including age, sex, demographics, comorbidities between the Torsemide and Furosemide groups were similar.

Outcome: Readmission rate within 30 days and after 30 days of the initial admission with CHF diagnosis

Statistical Analysis: The alpha value was set at 0.05. A Chi-square test was used for data analysis

Results

54 patients were readmitted within one year of the initial admission date due to CHF exacerbation.
• 42 were discharged on Furosemide
  • 29 (60.4%) returned within 30 days of the initial admission
  • 13 (27.1%) returned after 30 days (p=0.553)
• 12 were discharged on Torsemide
  • 6 (50.0%) returned within 30 days of the initial admission
  • 6 (50.0%) returned after 30 days (p=0.553)

Our study showed that there were no significant differences in the immediate readmission rates between the groups.

Although findings are not statistically significant, patients who were discharged on Furosemide seemed to have a higher readmission rate within 30 days of discharge when compared to patients discharged on Torsemide.

Conclusion
Larger prospective trials are needed to further investigate the readmission rate of Torsemide vs Furosemide.

References