



# Hydrocephalus experience at a major neurosurgical referral center in Ghana

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## INTRODUCTION

Hydrocephalus is the most common pediatric neurosurgical disease with a disproportionately high burden in Sub-Saharan Africa (SSA).

### Study Objective

This study aims to determine the epidemiology and treatment of pediatric hydrocephalus at a major neurosurgical referral center in Ghana.

## METHODS

- This is a retrospective study of pediatric patients between 0-20 years treated for hydrocephalus at Komfo Anokye Teaching Hospital (KATH), Kumasi-Ghana
- A descriptive analysis of study variables was completed.

### Study variables:

- Demographics
- Etiology

## RESULTS

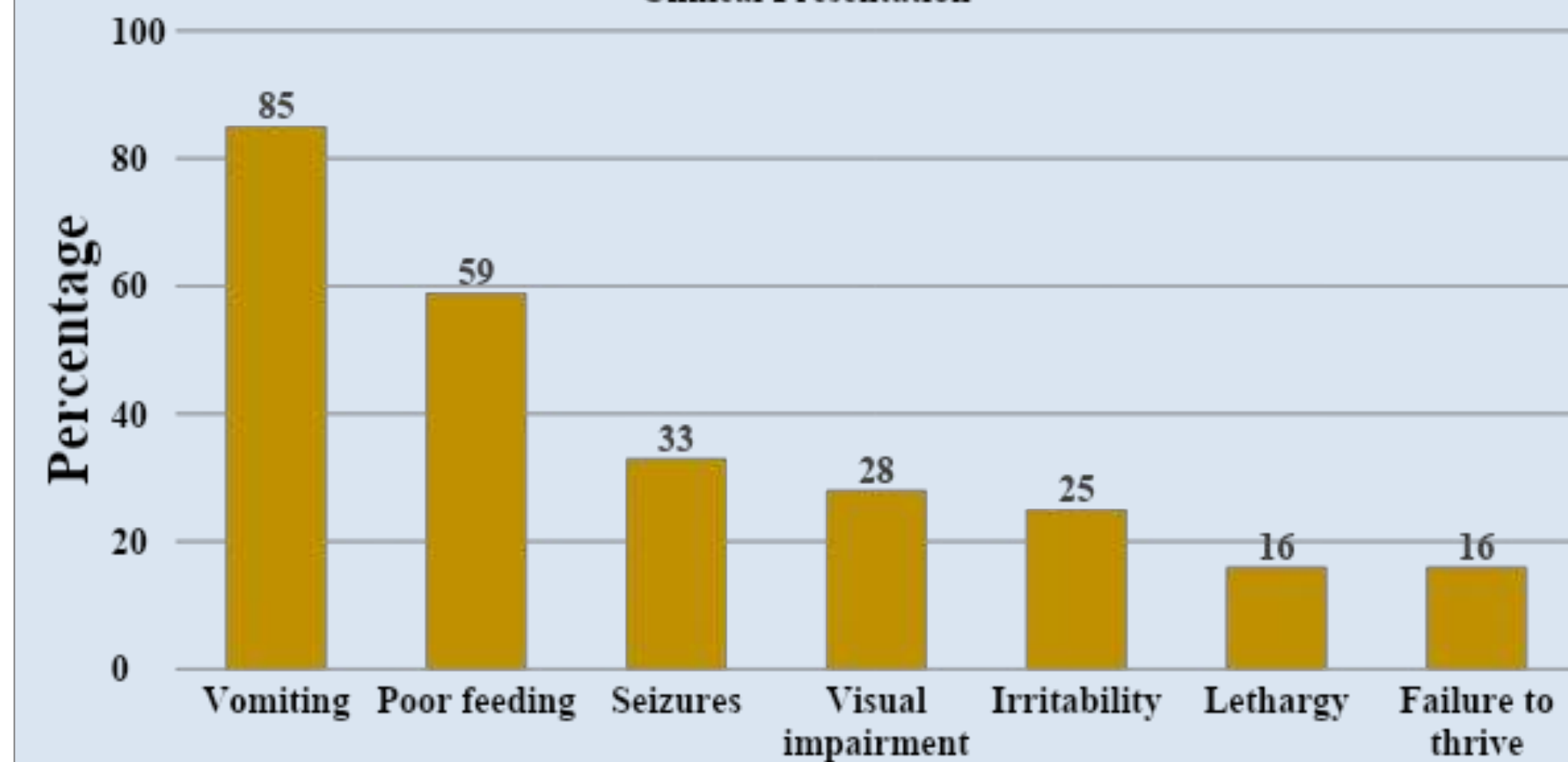
- 231 patients were included in the study.
- 51% Female, 49% Male
- Median age at presentation was 6.5 months (IQR 0.9, 33.0)
- 172 patients received surgical management
- Median time from presentation to surgical management was 17 days (IQR 2, 48)

## REFERENCES

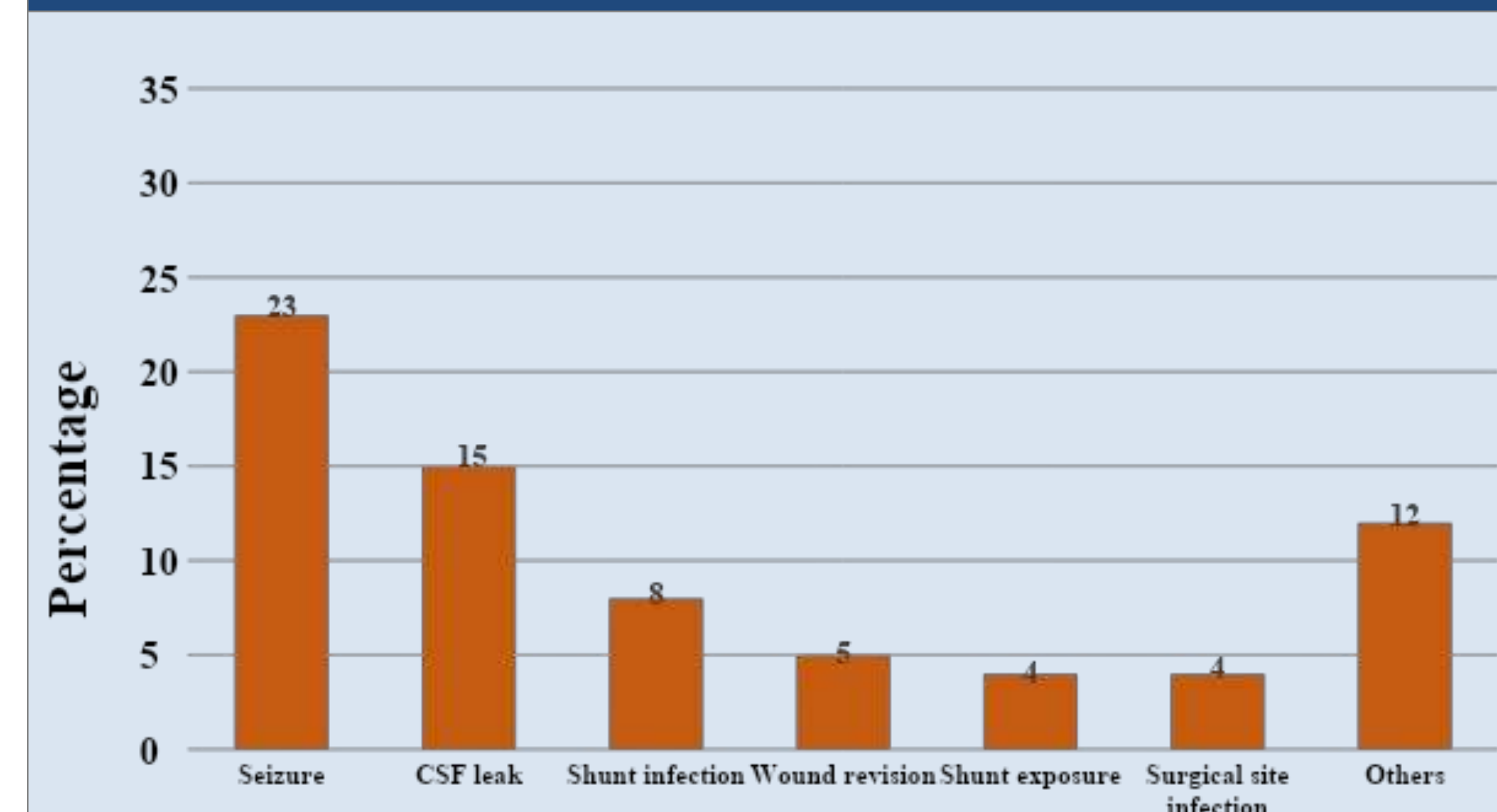
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## RESULTS

### Clinical Presentation

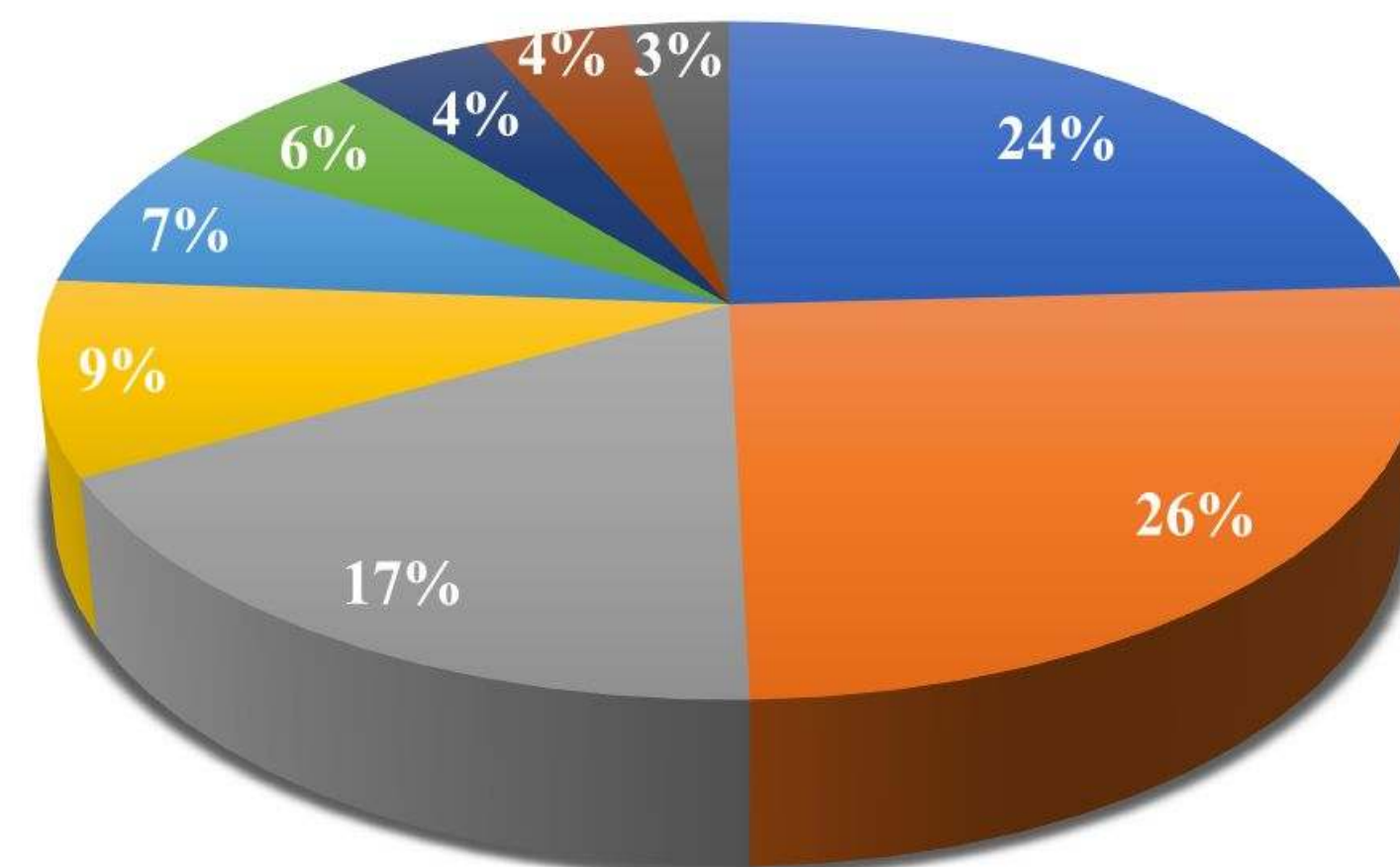


## RESULTS



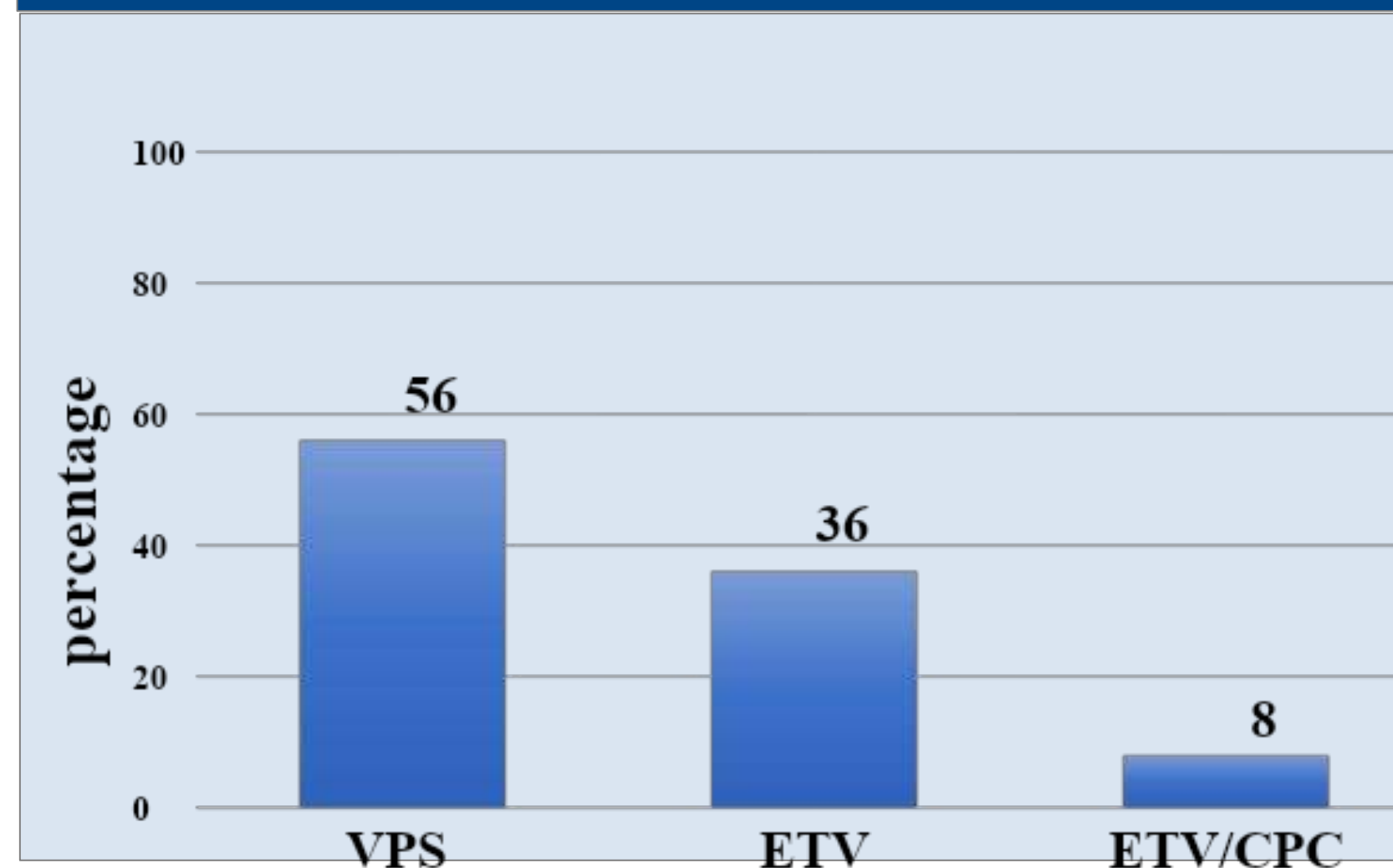
## RESULTS

### Etiology of Hydrocephalus



- Unspecified
- Post infectious
- Spina-bifida
- Encephalocele
- Tumors
- Dandy-Walker complex
- Aqueductal stenosis
- Congenital
- Others

## RESULTS



## CONCLUSION

- This study characterizes the NTD population presenting to a major hospital in Ghana.
- Improvements in early access to care and timely surgical intervention are needed to improve outcomes in this vulnerable patient population.
- More robust and long-term follow-up is essential to understanding this population.

## RESULTS

- Median post-operative length of stay was 7 days (IQR 5, 13)
- 1.7% Surgical mortality
- 15.4% Hospital readmission rate
- 5.8% Treatment failure rate
- Median follow-up duration for 69 patients: 3.7 months (IQR, 1.6, 8.3).
  - 84% alive
  - 16% dead