

Risk Factors Leading Management for Rectus Sheath Hematomas

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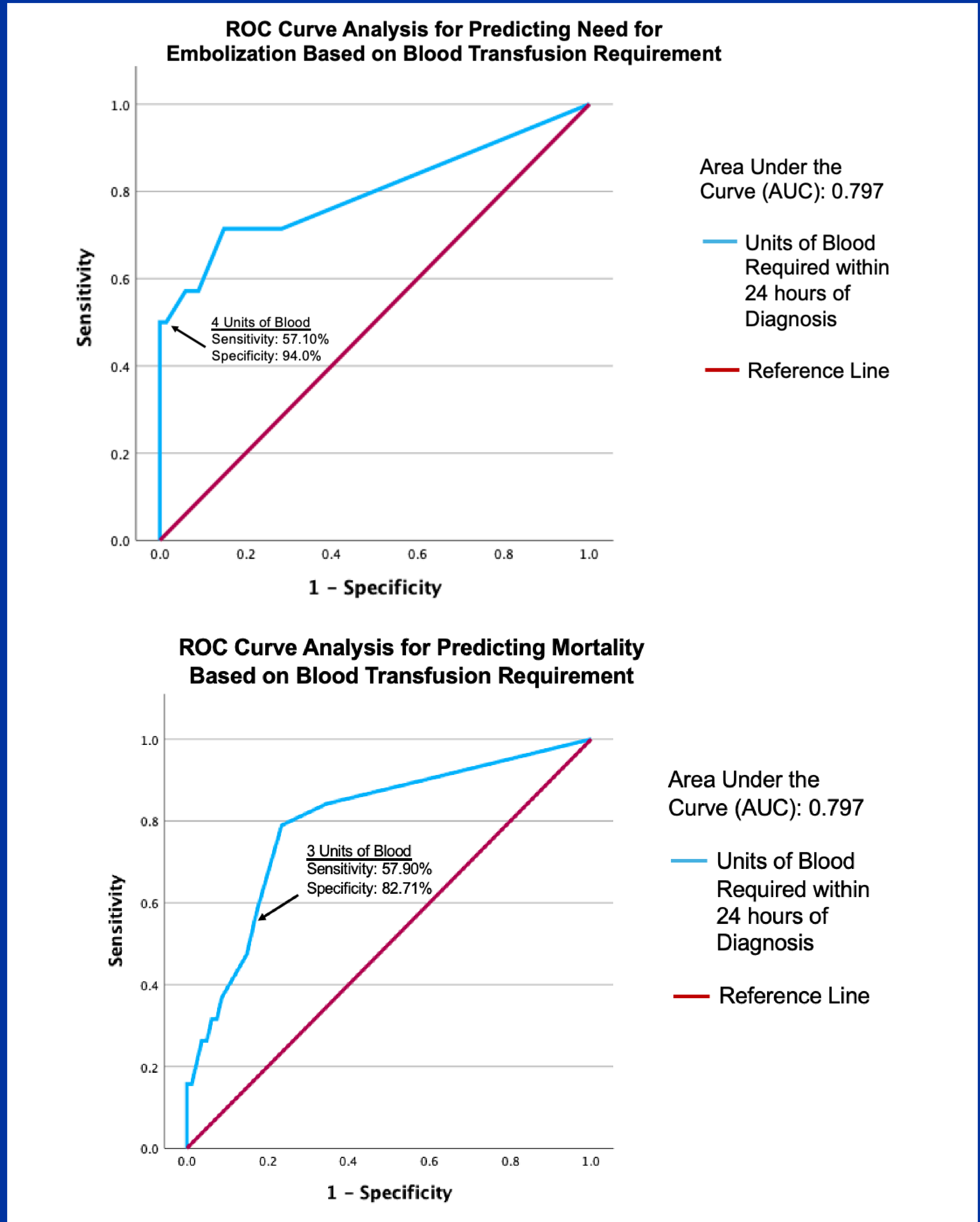
INTRODUCTION

- Treatment protocols for rectus sheath hematoma (RSH) are not well-defined, with IR embolization typically reserved for cases showing active extravasation on imaging.
- However, many patients present without active arterial bleeding.

METHODS

1. A retrospective analysis was conducted on one hundred patients diagnosed with RSH via CT from January 2021
2. Data on demographics, BMI, medical history, anticoagulation use, and hematoma size were extracted from EMR and PACS.
3. Statistical analysis was performed using chi-squared tests ($p < 0.05$ indicating significance), logistic regression, and receiver operating characteristic (ROC) curve analyses using SPSS software.

- Requiring 4+ units of blood within 24 hours was a strong predictor of embolization.
- A transfusion threshold of 3 units was associated with a 50% mortality rate.
- Cirrhotic patients had increased mortality but did not undergo more interventions.



RESULTS

Risk Factor	Embolization Rate	P-value
Active Extravasation on CT	42.11%	0.0001
Transfusion Requirement	19.67%	0.04

Risk Factor	Mortality Rate	P-value
Cirrhosis	46.15%	0.007
Active Extravasation on CT	42.11%	0.004
Transfusion Requirement	31.15%	0.0001

DISCUSSION

Requiring four units of blood within 24 hours of diagnosis on CT strongly predicted the need for embolization, while three units indicated a higher risk of mortality, emphasizing the need for additional predictors to guide timely intervention.

