

Outcomes of stent placement for hepatic venous outflow obstruction in liver transplantation

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Introduction

- Hepatic venous outflow obstruction (HVOO) after liver transplantation is a graft-threatening condition.
- HVOO that does not improve after balloon angioplasty should be treated with a stent.
- Our study aimed to evaluate the effectiveness of stents in hepatic vein stenosis that develops after liver transplantation.
- This study was not supported by any funding.

Method

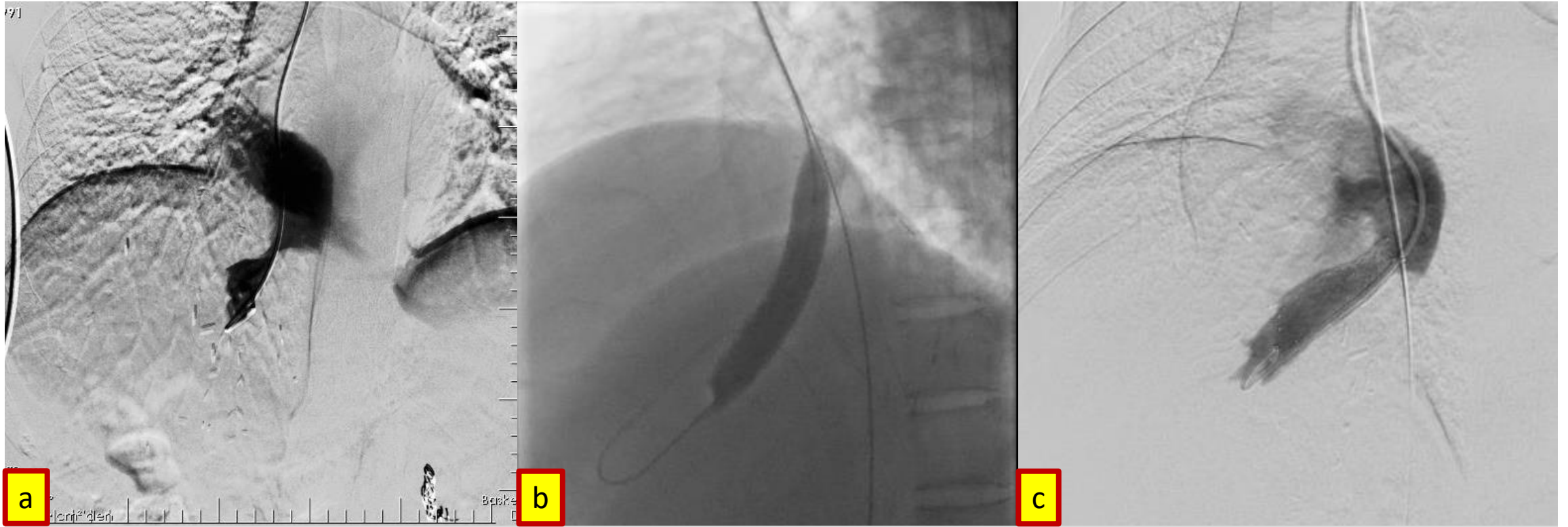
- Between August 2011 and January 2024, 11 patients who had liver transplantation and had stenosis in the hepatic vein and had stent placement were included in the study retrospectively.
- Demographic data of the patients, number of stents, procedure success, and complication rate were evaluated.

Results

- 11 patients were enrolled in this study (63.6% females and 36.4% males; mean age: 31 years; range: 1–62 years).
- When examining donor types, among the 11 patients, 2 had deceased donors, while 9 underwent living liver transplantation.
- Among these 9 patients who underwent living liver transplantation, 5 received a right lobe graft and 4 received a left lobe graft.
- A total of 14 stents were placed, a single stent in eight patients and two stents in three patients.
- The median days of interval between transplantation and stent placement was 8 days.
- The median follow-up period was 427 days. There were no major complications. Technical success was 100%.

Conclusion

- Hepatic vein stenting is a safe and effective treatment method for patients who develop HVOO after liver transplantation.
- As interventional radiology techniques continue to advance, the ability to promptly and accurately address HVOO will enhance the long-term success of liver transplantation.



31-year-old male patient. There is stenosis in the hepatic vein of the right lobe graft (a), a balloon expandable stent was placed for this stenosis (b), and the hepatic vein calibration after the stent appears normal (c)