

Lucia C. O'Byrne

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LSU Health Sciences Center, New Orleans, LA

Mentor: Hector Ferral, MD
LSUHSC, Department of Radiology

TIPS in a patient with sarcoidosis and associated portal hypertension

Background: Hepatic involvement is identified in up to 50–80% of patients with systemic sarcoidosis, but it is usually clinically silent.¹ Only a small percentage of patients develop clinically significant liver disease, with portal hypertension reported in 3-18% of those with longstanding hepatic sarcoidosis.¹ There is limited evidence guiding management of portal hypertension in sarcoidosis, particularly regarding the use of transjugular intrahepatic portosystemic shunt (TIPS). Published experience includes only a small number of patients, with mixed and often poor outcomes.²⁻⁴

Case Presentation: We report a 54-year-old female with a history of systemic sarcoidosis and concern for hepatic involvement who developed portal hypertension complicated by variceal bleeding requiring banding. Despite a lack of bleeding since that episode, she was referred for a TIPS work-up to address the underlying issue of portal hypertension. Following the TIPS procedure, the patient displayed improved pressure gradient and no significant hepatic encephalopathy.

Discussion: Reports describing TIPS in patients with sarcoidosis remain exceedingly limited. In the largest published case series of portal hypertension due to sarcoidosis, only two of 12 patients underwent TIPS.² Both patients ultimately died, one from infection and the other from gastrointestinal bleeding.² An additional case report described TIPS which failed to adequately control the patient's ascites, followed by orthotopic liver transplantation.³ A separate series evaluating TIPS for noncirrhotic portal hypertension included three patients with sarcoidosis treated for ascites or variceal bleeding.⁴ One patient developed early post-TIPS hepatic encephalopathy, and the other two patients died.⁴ Collectively, these reports provide little evidence to guide treatment or predict clinical outcomes. This case contributes additional experience regarding the use of TIPS in managing portal hypertension associated with sarcoidosis.

Conclusion: Clinicians should consider hepatic involvement in patients with systemic sarcoidosis who develop otherwise unexplained portal hypertension. Given the scarcity of published accounts, additional reports are needed to better define the indications, efficacy, and outcomes of TIPS in this rare clinical scenario.

1. Tadros M, et al. *Hepatic Sarcoidosis*. Journal of Clinical and Translational Hepatology. 2013;1(2):87-93. doi:10.14218/JCTH.2013.00016.
2. Fauter M, et al. *Hepatic sarcoidosis with symptomatic portal hypertension: A report of 12 cases with review of the literature*. Frontiers in Medicine. 2022;9:995042. doi:10.3389/fmed.2022.995042.
3. Cengiz C, et al. *Recurrent hepatic sarcoidosis post-liver transplantation manifesting with severe hypercalcemia: A case report and review of the literature*. Liver Transpl. 2005;11(12):1611-4. doi:10.1002/lt.20626.
4. Regnault D, et al. *Ten-year experience of transjugular intrahepatic portosystemic shunt for noncirrhotic portal hypertension*. Eur J Gastroenterol Hepatol. 2018;30(5):557-562. doi:10.1097/MEG.0000000000001067.