

Liver Infarction Following TIPS With a PTFE-Covered Stent: Is the Covering the Cause?

To the Editor:

Bureau et al. recently reported two cases of liver infarction following TIPS performed with PTFE-covered stents.¹ They speculated that segmental liver infarction in these two cases, as evidenced clinically by transient right upper quadrant pain and radiologically by the development of a wedged-shaped hypodensity in the liver, was caused by occlusion of the hepatic vein by the PTFE-covered stent. In their discussion, the investigators stated that segmental liver ischemia after TIPS is "a complication that has never been described with bare metal TIPS."

We disagree. Segmental liver infarction is an uncommon but well-recognized complication of bare metal TIPS. Several published case reports have documented this complication.^{2,3} Moreover, hepatic infarction is listed as an expected complication of TIPS in the 2001 Quality Improvement Guidelines for TIPS issued by the SIR standards of practice committee.⁴

The cause of post-TIPS liver infarction is not known. Several investigators have suggested that it is due to hepatic arterial injury occurring at the time of the procedure.^{5,6} Infarction due to acute occlusion of a single hepatic vein seems a less likely cause of segmental liver ischemia. Bureau et al. stated that the infarcts in their two patients occurred "in the territory of the hepatic vein in which the TIPS was implanted." This is also, however, the approximate distribution of the segmental hepatic artery through which the TIPS passes.

As we enter a new era of covered-stent TIPS we are sure to see new complications. However, it is important to remember that not all uncommon complications of TIPS are new and not all are attributable to this new device.

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