

Reviewer #1:

Scientific Quality: Grade B (Very good)

Language Quality: Grade A (Priority publishing)

Conclusion: Minor revision

Specific Comments to Authors: I congratulate the authors for their very important case report. Even though it is not a frequent clinical condition, it will serve to guide a corrective therapeutic approach or close to it. I just missed some information, they are: 1. What is the etiology of colitis? 2. Was type II diabetes compensating? 3. When the patient had a hemoglobin of 8.6g/dL, was gastric bleeding diagnosed? 4. Was a laboratory test performed for bilirubin and alkaline phosphatase? 5. How was the renal function of the patient before orthotopic liver transplantation?

1. What is the etiology of colitis?

We were able to collect more patient data that was not originally available in her transfer paperwork. It seems that her colitis was most likely acute ischemia in the setting of sepsis, hypotension, and bacteremia. She had a limited histopathological analysis (no gram staining) from her ulcerated lesions that did not reveal microorganisms and a negative GI pathogens panel PCR thus arguing against possible infectious colitis. We have updated this information in the manuscript and briefly mentioned the possible notion of a TIPS being seeded directly via portal vein translocation from an enteric source vs genitourinary versus biliary as the origin of the initial *E. coli* infection is unclear from the available local hospital records. It is important to note that initial diagnostic imaging for an occluded TIPS did not occur on initial presentation and that colitis was appreciated on imaging after her initial episode of *E. coli* bacteremia.

2. Was type II diabetes compensating?

Yes, A1c was 6.2 during time of illness. Updated manuscript with this information.

3. When the patient had a hemoglobin of 8.6g/dL, was gastric bleeding diagnosed

Patient with a baseline of ~9-10, with no signs or symptoms of melena, hematochezia, or hematemesis to suggest an upper GI bleed. She was found to have iron deficiency. This information was added to the manuscript.

4. Was a laboratory test performed for bilirubin and alkaline phosphatase How was the renal function of the patient before orthotopic liver transplantation?

-bilirubin and alkaline phosphatase were 0.5 mg/dL and 88 U/l, respectively. Updated manuscript with this information.

-liver function prior to OLT was poor with a Meld-Na score of 23. Updated manuscript with this information.

Reviewer #2:

Scientific Quality: Grade B (Very good)

Language Quality: Grade A (Priority publishing)

Conclusion: Accept (General priority)

Specific Comments to Authors: This is an interesting and rare case of infection of TIPSS due to multiple organisms in the setting of liver transplantation. I have some minor points: 1. Line 91 - Current UK TIPSS guidance by British Society of Gastroenterology does not recommend routine antibiotics. Only in complex cases. This should be mentioned and the BSG guidance cited. 2. Lines 12-124 - Was regrafting considered at this time point? Was anticoagulation considered? What type of TIPSS? Covered? How many stents and any overlapping? 3. Lines 149-150 - I think at this time point an echocardiogram should have been done as I believe the authors felt there was a low index of suspicion. I think this is a lesson learnt. The patient had septic emboli and was immunosuppressed. What more reason is needed for an echo? 4. Lines 157-158 - Was anticoagulation considered after this TIPSS revision?

1. Line 91 - Current UK TIPSS guidance by British Society of Gastroenterology does not recommend routine antibiotics. Only in complex cases. This should be mentioned and the BSG guidance cited.

The authors thank the reviewer for noting the British society's of gastroenterology guidelines regarding antibiotic prophylaxis in TIPS related procedures. The American Society of Interventional Radiology guidelines allow or encourage routine single dose antibiotic prophylaxis, hence the practice described in the report. The interventional author, who has created nearly 1000 shunts for 27 years has consistently used this practice, as was the case in this report as well. We have noted the different guideline recommendations in the revised manuscript.

2. Lines 12-124 - Was regrafting considered at this time point? Was anticoagulation considered? What type of TIPSS? Covered? How many stents and any overlapping?

-The authors reserve anticoagulation during TIPS, for hypercoagulable patients such as Budd Chiari patients, or portomesenteric thrombectomy/lysis cases, i.e. hypercoagulable patients. While the authors acknowledge that anticoagulation is more widely used in some countries with TIPS creation, e.g. in China, this is not at all routine practice in the US, Latin America, or Europe, nor for the authors excepting the cases noted above. This information was added to the manuscript.

-The original shunt was created using an ePTFE covered stentgraft, i.e. a Viatorr, 5 years prior to the described event. There was a coaxial uncovered stent, a Wallstent at its leading end; this had been placed to extend the intraportal leading end of the shunt into a larger caliber portal vein, as the originally entered portal vein was small in caliber and formed an inflow narrowing into the TIPS at the leading edge of the covered stentgraft. Those stents long preceded the current infectious events. This information was added to the manuscript.

3. Lines 149-150 - I think at this time point an echocardiogram should have been done as I believe the authors felt there was a low index of suspicion. I think this is a lesson learnt. The patient had septic emboli and was immunosuppressed. What more reason is needed for an echo?

We agree with this. We updated the manuscript to reflect the results of an echo obtained about a week prior, during her first episode of *E. coli* bacteremia, that did not show any obvious vegetations. During her second episode of recurrent *E. coli* bacteremia with noted septic pulmonary emboli it was felt that the source was likely from her infected TIPS and therefore a repeat TTE was not pursued. It is reassuring that subsequent TTEs also did not show signs of infective endocarditis.

4. Lines 157-158 - Was anticoagulation considered after this TIPSS revision?

The authors acknowledge the reviewer's point regarding the theoretic value of anticoagulation in this extraordinary case. Anticoagulation was not considered after the revision of the TIPS. Not using anticoagulation has been the longstanding (and thus validated) the practice of the operating interventional radiologist co-author. That author's practice is to reserve anticoagulation for hypercoagulable patients. This has been their practice employed in approximately 1000 shunt creations and over 600 revisions, over nearly 30 years. In this particular case, flow was brisk and the shunt was rendered 'clean' by thrombectomy and clot extraction, hence it was not considered. Reasoning for this was included in the manuscript.