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Declaration of interests

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Protean strictures: Shifting severity beneath the diagnostic façade



Dear Editor,

The recent review on the management of post-liver transplant biliary anastomosis by Bofill *et al.* in the journal provides a valuable overview of the topic [1]. However, an important clinical observation regarding the potential for an atypical presentation of post-anastomotic biliary strictures warrants further discussion.

While the authors note that asymptomatic elevations in liver enzymes, especially in a cholestatic pattern, may indicate a biliary stricture, clinicians should be aware of a more subtle phenotype. This phenotype can present with minimal or absent elevations in ALT, AST, alkaline phosphatase, and bilirubin. Additionally, imaging modalities like MRCP may fail to reveal significant biliary dilation due to artifacts from surgical materials.

In these cases, ERCP with active contrast injection has been observed to demonstrate near-complete anastomotic atresia (Fig. 1a), subsequently confirmed by cholangioscopy (Fig. 1b). Successful recanalization of the atretic area shows profound recipient bile duct dilation (Fig. 1c). This phenomenon has also been noted in post-surgical biliary strictures of other etiologies.

Several factors may contribute to this atypical presentation:

- **Donor liver resilience:** Donor liver hepato- and cholangiocytes may possess greater tolerance to early biliary obstruction, potentially masking standard diagnostic markers.
- **"Tipping point":** A critical threshold may exist where rapid hepatic injury occurs secondary to obstruction and associated inflammation.
- **Biliary system compliance:** Differences in compliance between the donor and recipient biliary systems, including bile duct size mismatch, could obscure typical imaging findings.

Given this insidious presentation, a low threshold for considering MRCP and/or ERCP in post-transplant patients is advisable, even in the absence of pronounced biochemical or imaging abnormalities. Early detection and intervention could potentially improve long-term graft function and patient outcomes.

This distinct phenotype underscores the complexity of post-liver transplant care and highlights the potential for delayed diagnosis and the need for a proactive management approach. Often, patients with this presentation may initially undergo investigations to rule out vascular compromise or graft rejection. However, minimally elevated liver enzymes remain unexplained, even without pronounced biochemical or imaging abnormalities. In that case, a low threshold for ERCP is warranted as stricture severity may be disproportionate to the degree of biochemical abnormality.

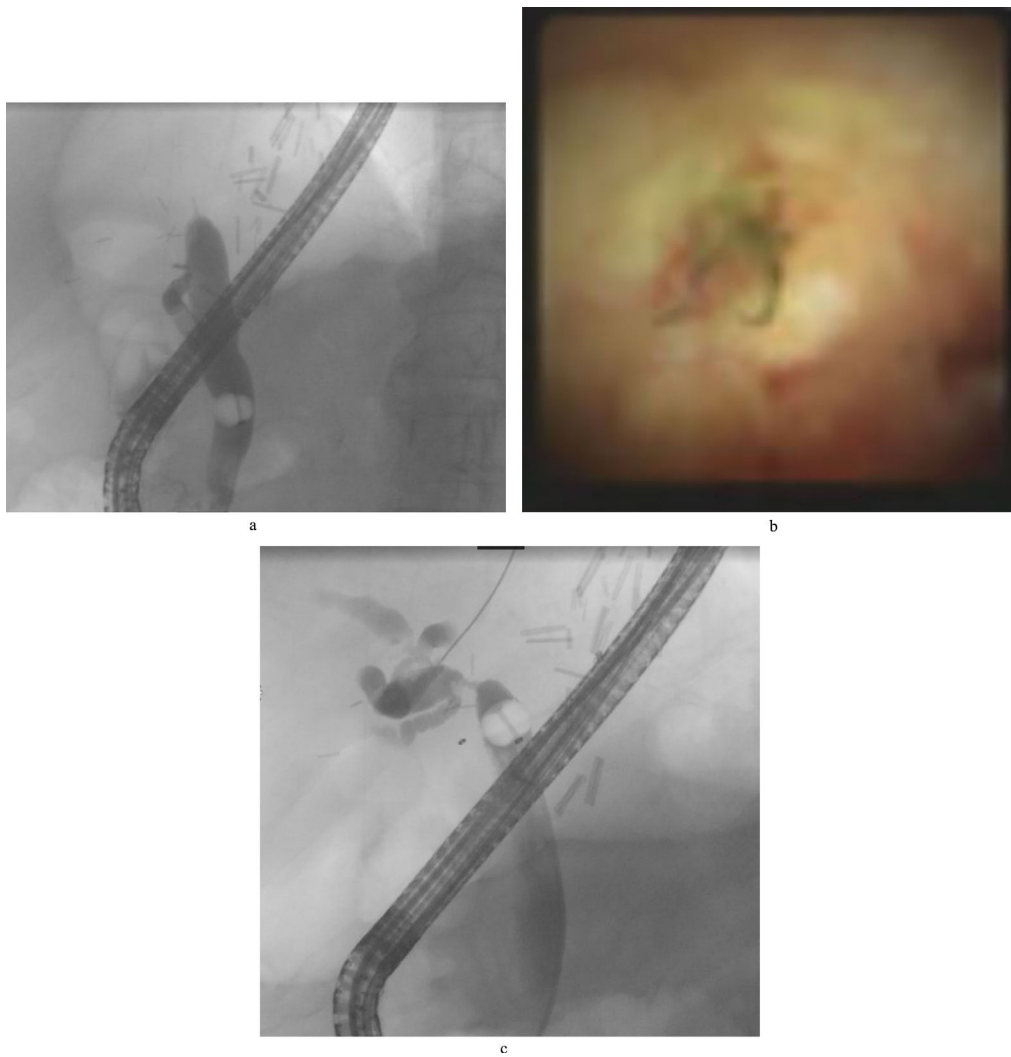


Fig. 1.

Declaration of interests

None.

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