

# Hepatic Artery Anomalies: Anatomy Review

## To the Editors:

We read with interest the letter to the editors published in *Liver Transplantation* describing an aberrant right hepatic artery.<sup>1</sup> In this letter, the authors properly emphasize the importance of liver transplantation in the study of the hepatic vascular anatomy. They report and define as previously not described an anomaly of the hepatic artery observed in four procurements performed by their group. In those cases, an aberrant right accessory hepatic artery was originating from the celiac trunk.

Recently our group published in the journal *Clinical Transplantation* an article reporting on a series of hepatic artery anomalies, the second largest collection of hepatic artery anatomic variations ever described in the English literature.<sup>2</sup> In our study, an aberrant right hepatic artery was described as branching off from the celiac axis (as described by Tzimas et al<sup>1</sup>) in three of the 701 reported cases (0.43%). The overall incidence of hepatic artery anomalies in the study was 42.2%, illustrating a total of 14 previously unreported arterial anomalies of the hepatic artery.

This anatomic update can be useful for transplant and general surgeons, as well as vascular radiologists. General surgeons operating in the right upper quadrant can be confronted with a variety of combinations of arterial blood supply to the liver, which requires a thorough knowledge of different anatomical patterns. This is also vital for the donor surgeon, who must preserve the branches of the arterial supply to the liver, especially because these vessels are end arteries.

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## References

1. Tzimas GN, Barkun JST, Metrakos P, Tchervenkos JI. Aberrant right hepatic artery: A mockery. *Liver Transpl* 2002;8:411.
2. Gruttadauria S, Scotti Foglieni C, Doria C, Luca A, Lauro A, Marino IR. The hepatic artery in liver transplantation and surgery: Vascular anomalies in 701 cases. *Clin Transpl* 2001;15:359-363.

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