

Short Report

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Median arcuate ligament syndrome and liver transplantation

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Background

Arcuate ligament syndrome results from the compression of the celiac artery by the diaphragmatic fibers. It is asymptomatic in most cases and has an incidence of 2 to 24% of the population. In liver transplantation, it has great relevance, since it can be related to various postoperative complications.

Case presentation

We present the case of a woman who required an urgent hepatic transplant because a fulminant hepatitis by HBV. The arcuate ligament was identified during the pre-transplant tests. Intraoperatively, the release of the arcuate ligament was performed and the implant continued with regularity. The Doppler ultrasound showed good flows and the postoperative period passed without events.

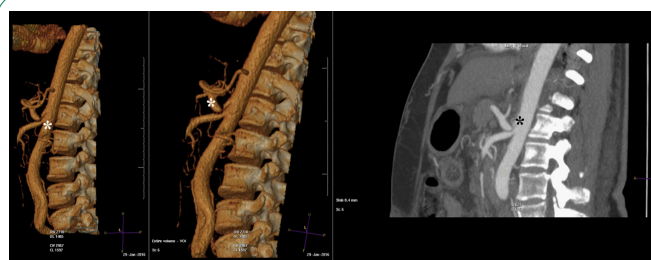


Figure 1: CT-scan reconstruction showing a marked stenosis (*) at the celiac trunk.

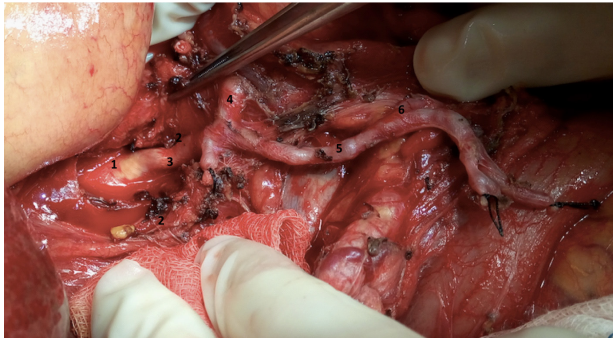


Figure 2: Intraoperative image of the celiac trunk after sectioning the median arcuate ligament. (1-celiac trunk, 2- sectioned fibrous bands, 3-celiac stenosis, 4-splenic artery, 5-hepatic artery, 6-gastroduodenal artery).

Discussion

The median arcuate ligament causes most of the stenosis of the celiac artery. The flow of organs dependent on the celiac artery is ensured by collaterals. They may be affected during the first phase of orthotopic liver transplantation and as a consequence, compromise the irrigation of the graft, which may lead to failure of the graft. The standard treatment is the release of the celiac artery with the section of the arcuate ligament. The usefulness of this maneuver is verified by checking the flows.

Conclusion

Despite the low incidence of symptomatology in relation to the arcuate ligament syndrome in the general population, its identification and treatment in liver transplantation is imperative since it can lead to graft loss.

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