Case (612) Amputation neuroma after liver transplantation: an

uncommon complication

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CASE PRESENTATION

A 65-year-old patient with a liver transplant 5 months ago is admitted to the emergency department with severe abdominal pain and bad general condition. Specific liver blood test showed an increase in liver enzymes.

Abdominopelvic contrast-enhanced computed tomography revealed a hypodense ill-defined mass that surrounds the structures of the celiac trunk and extends to the hepatic hilum, producing a significant decrease in the caliber of the hepatic and splenic arteries.

In the liver, multiple hypodense areas with irregular edges suggesting infarcts are identified and the spleen is markedly hypodense compatible with extensive splenic infarction. The patient evolves badly, dies after some hours and an autopsy was performed.

DISCUSSION

Pathologic diagnoses after the autopsy were ischemic hepatitis with extensive necrosis and mass in the celiac trunk and hepatic hilum compatible with amputation neuroma which stenosed the vascular structures. The amputation neuroma is a hyperplastic proliferation of axons, Schwann cells and fibroblasts in a collagen matrix that forms at the proximal end of an amputated or injured nerve.

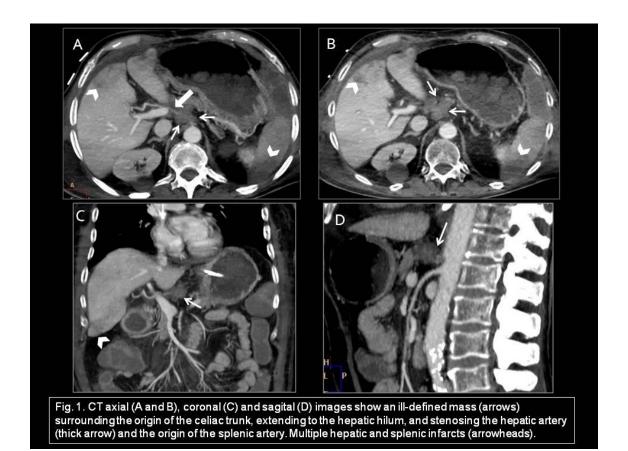
Any nerve covered by Schwann cells and interrupted by trauma or by surgical amputation can develop traumatic neuroma secondary to axonal proliferation and reactive hyperplasia of the supporting cells.

In the abdomen it has been described after multiple surgical procedures such as gastrectomy, cholecystectomy and orthotopic liver transplantation, in the last two due to the large number of nerve fibers located in the hepatic hilum responsible for the innervation of the biliary system.

In patients with liver transplantation, the neuroma may present as soft tissue, nodule, or mass and may cause obstruction of the bile duct or vascular structures being an uncommon finding with few radiologycal cases reported.

CONCLUSION

The amputation neuroma in patients with liver transplantation is a rare but potentially a serious complication. It should be suspected in the presence of soft tissue, nodule or mass in the liver hilum and included in the differential diagnosis of stenosis of the vascular structures of the hilum and stenosis of the bile duct with or without bile dilatation.



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