

Leiomyoma of the Inferior Vena Cava

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Abstract

Case Report

Leiomyomas are benign smooth muscle tumors that can develop at any site where smooth muscle is present. The leiomyoma in the inferior vena cava is a rarely observed pathology. We report the case of a 50-year-old patient, an abdomino-pelvic CT scan was performed which allowed to specify the retroperitoneal location of the mass, lateralized on the right, at the expense of the inferior vena cava (IVC), with a benign appearance of the IVC, Anatomopathological examination is in favor of a leiomyoma of the IVC.

Keywords: Leiomyoma Inferior Vena Cava.

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INTRODUCTION

Leiomyoma of the inferior vena cava (IVC) is a benign vascular tumor that can present as a mass most often localized in its retrohepatic portion. The definitive diagnosis is based on multiple radiological imaging studies and the result of the histological examination.

PATIENT AND OBSERVATION

We report the case of a 50-year-old female patient, who was referred to us to the radiology department for an abdomino-pelvic CT scan for the exploration of a mass of the epigastric region objective on ultrasound made for chronic epigastralgia.

There was no previous hysterectomy for polymyomatous uterus and 5 years ago. The clinical examination revealed an epigastric mass.

A CT scan was performed (fig.1) which allowed to specify the retroperitoneal location of the mass, lateralized to the right, at the expense of the retrohepatic inferior vena cava (IVC), which is of an isodense lobulated tissue nature, poorly enhanced after PDC injection.

The absence of locoregional extension of the mass is also noted. A benign-looking tissue mass of the IVC Anatomopathological examination showed a tumor made of muscle cells wrapping around the venous lumen in favor of a leiomyoma of the IVC.



Fig-1: A transverse contrast-enhanced CT scan shows: Retroperitoneal mass lateralized to the right, dependent on the retrohepatic inferior vena cava (IVC), which is isodense lobulated tissue, poorly enhanced after PDC injection.

DISCUSSION

Leiomyomas are benign smooth muscle tumors that arise primarily in the uterus. In other sites they are generally considered to arise from the smooth muscle, they may arise from the smooth muscle wall of a blood vessel. Leiomyomas arising in veins are rare [1].

Kevorkian and Cento published a review of smooth muscle tumors of veins and arteries and could not find a single benign tumor, Fischer et al published a review of primary smooth muscle tumors of venous origin and reported a leiomyoma of the jugular vein, This particular case is rare in that it is not only a benign smooth muscle tumor, presumably arising from a vein wall, but also because it must have components both

inside and outside the vessel requiring resection of a portion of the vessel to resect the tumor [2].

The role of imaging is the evaluation of retroperitoneal soft tissue masses, lesion location, specific components, extension and vascularity of the tumor to narrow the spectrum of differential diagnoses [3, 4]. The tumor originates from the tunica media of the IVC and contains a large number of vessels [5].

Histopathologically, typical, epithelioid, cellular, hemorrhagic, lipoleiomyoma, and symplastic variants of leiomyoma are distinguished [6].

CONCLUSION

Leiomyomas are benign smooth muscle tumors, leiomyoma of the IVC remains a rarely observed entity.

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