

A rare cause of bilateral isolated cruris edema: Liver neuroendocrine tumor

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In this article, we would like to highlight an interesting patient and draw attention to an important issue. Edema in the lower extremities is a common clinical condition. As it is known, there are three types of leg edema. Venous edema, lymphedema and lipoedema. Venous edema consists of an extremely low-viscosity, protein-poor interstitial fluid resulting from increased capillary permeability that cannot be accommodated by a normal lymphatic system. Lymphedema occurs as a result of increased protein-rich interstitial fluid in the skin and subcutaneous tissue resulting from lymphatic dysfunction. Lipoedema, on the other hand, is considered a form of maldistribution of fatty tissue rather than true edema.^[1] Edema may develop due to many congenital and acquired causes. These causes are trauma, recurrent infections (cellulite, lymphangitis, and parasitic diseases), after surgical interventions (such as lymph node dissection in cancer patients), pelvic area cancers that cause lymph node metastasis (prostate, ovary, cervix, colorectal cancer, etc.), Klippel-Trenaunay syndrome and lymphangiosarcoma.^[2] Cruris edema due to liver neuroendocrine tumor is an entity that we rarely encounter in the clinic.

On physical examination of a 51-year-old male patient who presented with bilateral isolated cruris edema, there was edema in both legs below the knees, particularly around the ankle. There were no signs of inflammation such as pain, tenderness,

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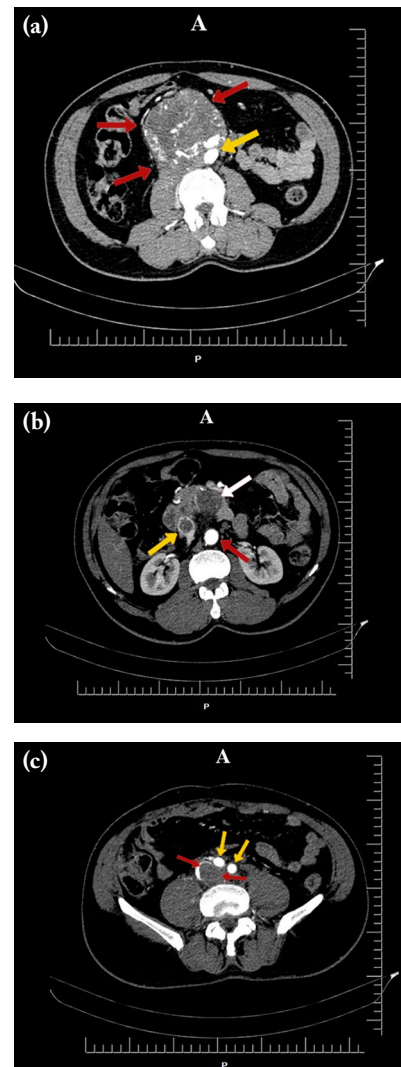


Figure 1. (a) A mass lesion with lobulated contours dense vascularity extending to the iliac bifurcation level, surrounding the aorta (red arrows), abdominal aorta (yellow arrow). (b) Thrombosed inferior vena cava (yellow arrow), abdominal aorta (red arrow), tumoral mass (white arrow), (c) Right and left iliac arteries (yellow arrows), Thrombosed right and left iliac veins (red arrows).

redness. Peripheral pulses were palpable. Other cardiovascular examination findings were normal. No venous thrombosis or thrombophlebitis was detected in the lower extremity venous color Doppler ultrasound (CDUS). The quantitative D-dimer level was measured as high as 2.82 ug/mL (normal range: 0 to 0.5 ug/mL). On abdominal computed tomography (CT) angiography, a mass lesion with lobulated contours measuring approximately 85×88×100 mm in size, with dense vascularity extending to the iliac bifurcation level, surrounding the aorta in the paracaval area in the retroperitoneum of the pancreatic head, but not narrowing it, was observed, and the appearance of a tumor thrombus extending from the mass into the inferior vena cava was observed (Figure 1a, b). The inferior vena cava and iliac veins appeared thrombosed (Figure 1c). Liver neuroendocrine tumor was diagnosed in the biopsy taken from the patient at an external center.

In conclusion, patients with complaints of edema in the lower extremities, no venous thrombosis detected in CDUS, and high quantitative D-dimer levels should undergo abdominal CT angiography, if their renal functions are normal. Abdominal CT angiography,

or alternatively magnetic resonance angiography, is a useful examination in that it provides detailed information about both ilio caval thrombosis and surrounding organs and formations.

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