ARP Case Report Nº 16: Serous Cystadenoma of the Pancreas and Lung Sarcoidosis

Caso Clínico ARP Nº16: Cistoadenoma Seroso do Pâncreas e Sarcoidose Pulmonar

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A 69 year-old female was referred to our institution for vague abdominal discomfort, occasional epigastric pain and marked weight loss. There were no relevant findings in the patient's medical history or physical examination. She underwent routine abdominal ultrasound which revealed a heterogeneous mass in the pancreatic body and further examination was warranted. Abdominal CT (computed tomography) was performed, with pre and post-contrast images demonstrating a lobulated mass in the pancreatic body, measuring 50x51mm (Fig 1a). The lesion has a homogeneous appearance, centrally hypodense, with mainly peripheral enhancement, with central areas of water-density(Fig 1b,1c). No calcified foci are seen. There are no signs of vascular invasion, with pancreaticoduodenal vessels forming a peripheral “mesh” around the pancreatic mass, nor distal parenchymal atrophy. These findings were suggestive of a serous cystadenoma, confirmed with MR (Fig 2A and B).

Keywords
Pancreas; Cystadenoma; Sarcoidosis; Lymphadenopathy.

Abstract
69 year-old female referred to our institution for abdominal discomfort, epigastric pain and weight loss (10Kg in 6 months). Abdominal e thoracic CT was performed and later on additional abdominal MR.

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Palavras-chave
Pâncreas; Cistadenoma; Sarcoidose; Linfadenopatia.

There is no need to translate this part as it is already in English.
EUS guided biopsy of the abdominal adenopathies was performed revealing multiple non caseous granulomas, findings suggestive of sarcoidosis. Moreover, high levels of angiotensin conversion enzyme (ACE) on peripheral blood tests was also present.

Discussion

Pancreatic serous cystadenomas are benign neoplasms, typically encountered in older women (60 y.o.). They’re composed of multiple small cysts (<1cm) usually arranged in a “honeycomb” like pattern, with a peripheral epithelial lining and central fibrous septae, that can form a central scar, sometimes calcified. Most lesions demonstrate a slight predominance for the pancreatic head and are usually incidental findings. Rarely, mass-effect related symptoms can occur due to displacement of surrounding structures. Distal atrophy of the pancreas and ductal dilation, wether of the pancreatic or biliary ducts is uncommon.

Although most cases are sporadic, serous cystadenomas can also occur in the setting of von Hippel-Lindau disease. On imaging, the appearance depends on the number of fibrous septae and degree of enhancement. Lesions are usually lobulated, hypodense on pre-contrast CT, sometimes with central calcification with a stellate pattern. When large numbers of microcysts are present, these lesions may appear solid in nature. Thus, MR imaging can be useful in the diagnosis, demonstrating small clusters of fluid-containing cysts on T2-weighted images.

Due to their benign nature, most lesions are observed without treatment. If symptomatic, surgical resection can be considered and no recurrence has been reported once resected.

In this case, sarcoidosis was an incidental finding. Lung and mediastinal involvement of this non-cascading granulomatous multi-systemic disease occurs in 90% of patients with sarcoidosis, usually between 20-40 years of age, with a slight female predominance. On high-resolution CT, parenchymal findings of perilymphatic irregular nodular thickening with preferential upper lobe distribution, centriflobular nodules, interlobular septae and fissure thickening is characteristic. Ancillary findings include miliary and ground-glass opacities. In stage IV disease, findings of pulmonary fibrosis can be seen. Differential diagnosis depends on the disease stage and consequently the different imaging findings, but in this case tuberculosis should be considered. High levels of ACE favor sarcoidosis and the presence of granulomas on biopsy aided the diagnosis. Treatment is reserved for symptomatic patients and the mainstay are corticosteroids, with remission depending on the stage of disease at presentation.