

## Sternal metastasis as a first manifestation of adenocarcinoma of the pancreas



Fig. 1

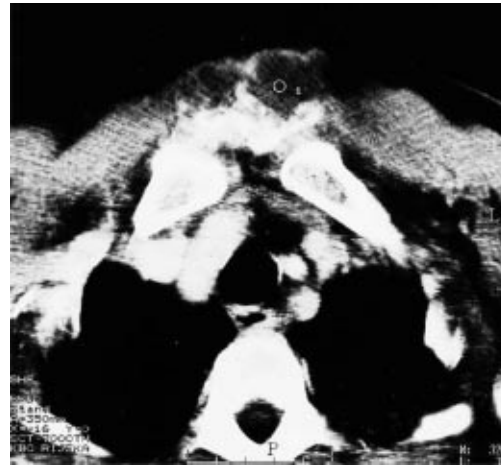


Fig. 2

A 63-year-old woman noticed a bump growing on her anterior chest wall (Fig. 1), but she did not present to the hospital until jaundice and abdominal pain occurred. A thorough examination disclosed that the patient was suffering from metastatic tumor of the pancreatic head.

She had suffered from an insulin dependent diabetes mellitus for years. Laboratory tests showed mild alterations in glucose, alkaline phosphatase, GGT, AST and ALT levels. Ultrasound of the abdomen revealed the hypoechogene lesion in the position of uncinatus process with an intensive pneumobilia. A radioisotope bone scan with Technetium-99m methylene diphosphonate revealed the only pathological accumulation of activity in the upper part of the sternum. An X-ray of the sternum demonstrated an expansive osteolytic lesion of the manubrial region as a result of the destruction of the original cortex in the anterior part. This was confirmed by a CT scan, the lesion was necrotic in a large part, the bone was expanded as a result of the anterior cortical destruction (Fig. 2). Histopathological examination of a biopsy revealed small bone fragments and the connective tissue infiltrated with unspecific gland formations and typical signed ring cells of an adenocarcinoma were seen.

The patient underwent choledochoduodenostomy to relieve her of jaundice and pain. The biopsy of the pancreas confirmed the diagnosis of the pancreatic adenocarcinoma. Although the patient was treated with a chemotherapy regimen with gemcitabine and irradiated with megavoltage photons of  $^{60}\text{Co}$  afterwards, the sternal metastasis continued to grow.

There are only few reports of bone metastases originating from carcinoma of the pancreas, all of them affecting temporal bones and presenting with hearing loss [1]. We are not aware of a previous report of an "osteophobic" tumor, such as pancreatic adenocarcinoma, presenting with a sternal metastasis as a first manifestation.

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### Reference

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