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Introduction

Acromegaly is a rare endocrine disease and is associated with an increased prevalence of colorectal cancer and pre-malignant tubular adenomas, and also may be associated with other organ malignancies such as breast and thyroid. We report a rare case of acromegaly concomitant with adenocarcinoma arising from pancreas.

Case presentation

A 52-year-old man who was diagnosed with acromegaly two years ago referred our outpatient clinic. After diagnosis, transsphenoidal surgery was performed. Surgery was not reduced serum growth hormone (GH) and insulin-like growth factor 1 (IGF-1) to normal, therefore somatostatin analog treatment was started. After this treatment, glucose-suppressed GH concentration was <1.0 ng/mL and serum IGF-1 concentration normal for age and gender. He was admitted to out-patient clinic with abdominal pain about 1 month ago. Abdomen CT showed that 44X26 mm mass lesion in the tail of the pancreas and multiple metastatic lesions in the liver (Figure 1). Upper gastrointestinal endoscopy and colonoscopy showed that erosive gastritis and polyps in the colon, respectively. After these imaging studies, endoscopic ultrasound-guided needle aspiration biopsy was performed to the mass lesions in the tail of the pancreas. Pathological examination revealed a adenocarcinoma arising from the pancreas (Figure 2).

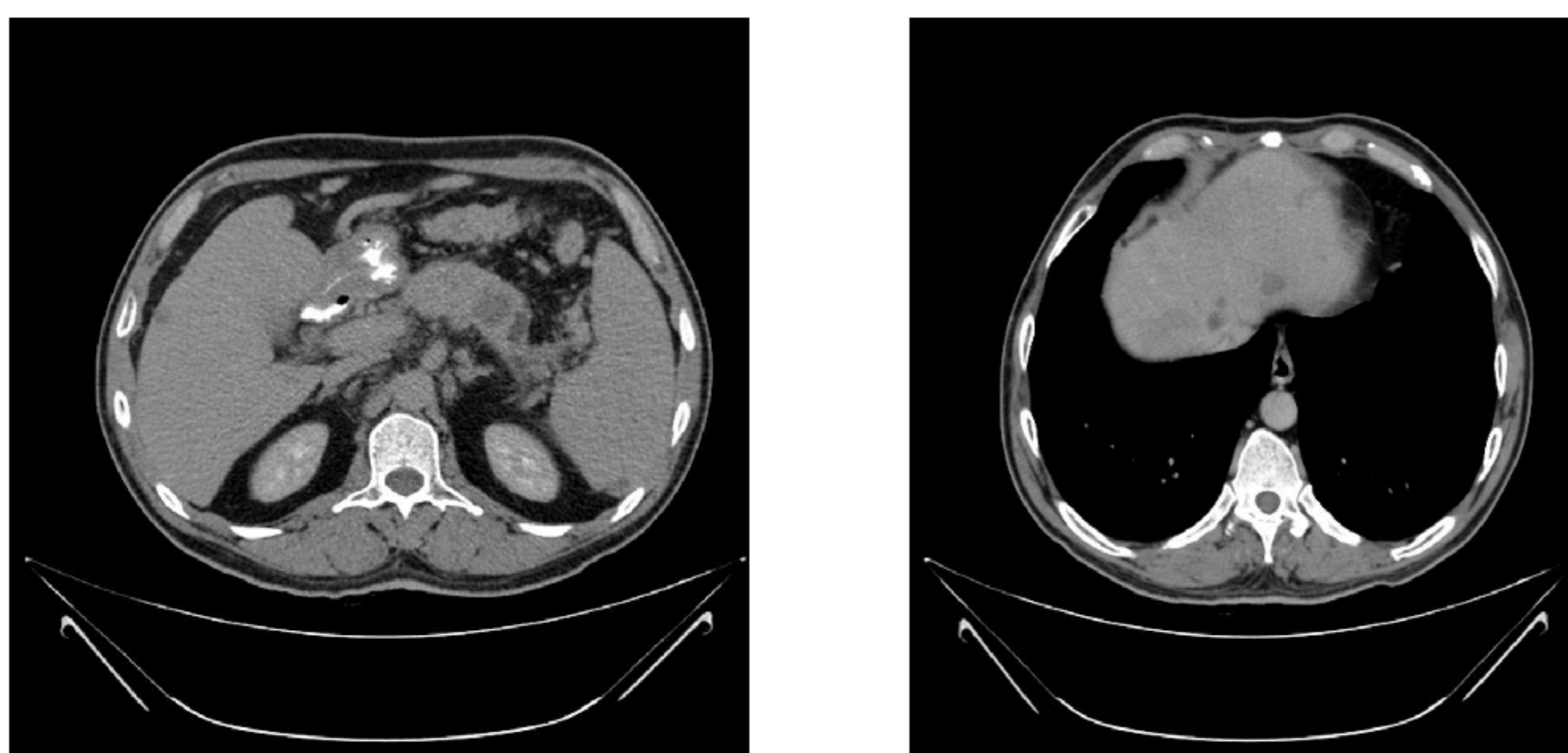


Figure 1. Abdominal CT image of mass lesion in the pancreas and multiple metastatic lesions in the liver.

Discussion

Acromegaly is an endocrine disorder which characterized by excessive growth hormone secretion. The systemic clinical features of acromegaly occur as a consequence of the unfavorable effect of elevated serum concentrations of both GH and IGF-1. Impaired cardiovascular function in acromegaly is an important determinant of morbidity and mortality. In addition, the development of malignancies may increase the risk of mortality in these patients. Kind of cancers such as gastrointestinal tract, thyroid, breast, lung, prostate, skin, soft tissues, brain, bone, and lymphohematopoietic system have been described in association with acromegaly (1). According to our knowledge, present case was the first patient concomitant with acromegaly and pancreatic adenocarcinoma in the medical literature. The patients with acromegaly have an increased risk of benign and malignant neoplasms. These situation may be related with increased circulating levels of IGF-1 because of mitogenic and anti-apoptotic activity of IGF-1 (2).

Conclusion

The co-existence of acromegaly and pancreas adenocarcinoma is very rare condition. There is limited information in the literature on this subject. It may be important to consider pancreatic adenocarcinoma in the presence of acromegaly.

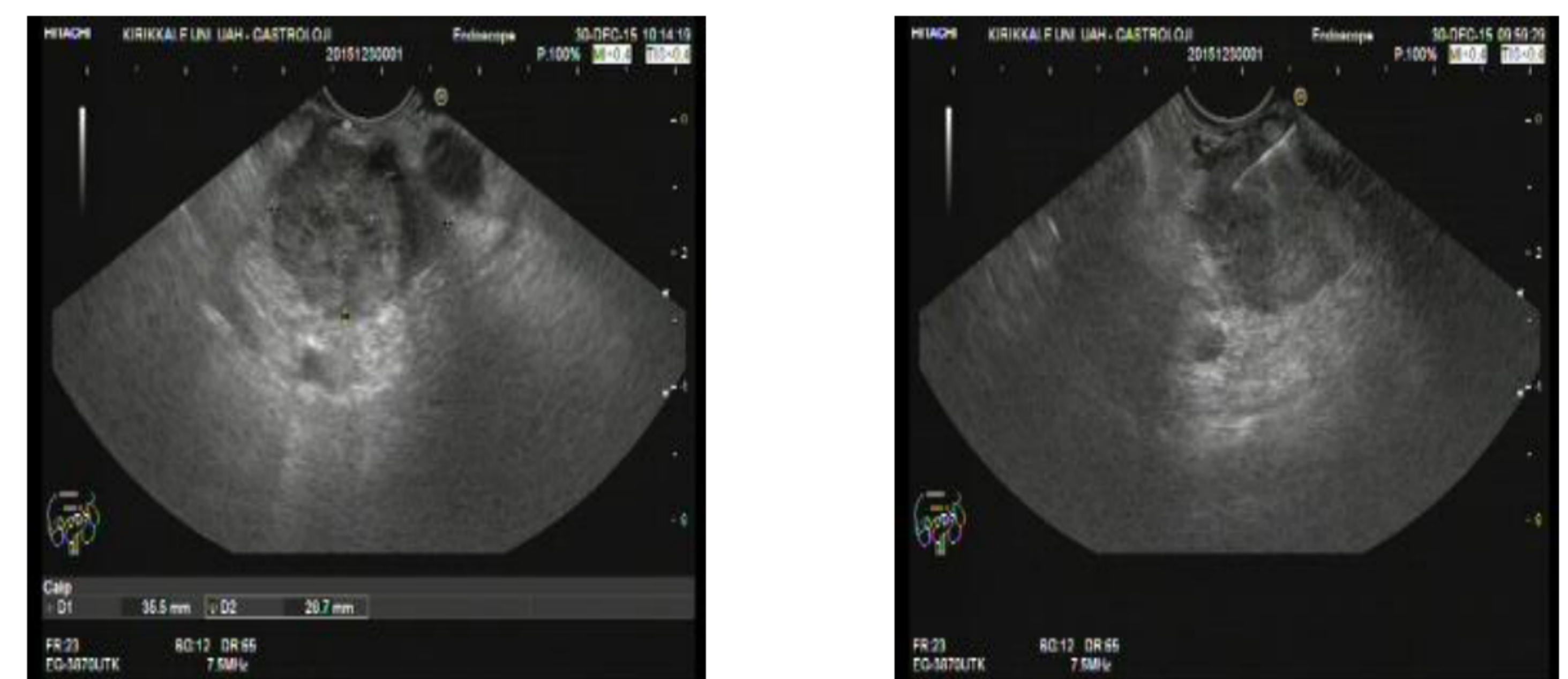


Figure 2. Endoscopic Ultrasound image of the mass lesion in the pancreas

References:

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- 2- Paul J. Jenkins, Cancers Associated with Acromegaly, *Neuroendocrinology* 2006;83:218–223.

