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LETTER TO EDITOR

Voluminous Pancreatic Mucinous Cystadenoma in a Non Pregnant Woman with Rheumatoid Arthritis

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Dear Editor,

Indeed, cystic tumors of the pancreas are rare and account for 10 %–15 % of pancreatic neoplasms (1). There are four main categories of pancreatic cystic tumors:

1. Mucinous cystic tumors (MCTs);
2. Serous cystic tumors (SCTs);
3. Intraductal papillary cystic tumors (IPCTs); and
4. Papillary cystic tumors (2, 3).

Mucinous cystic neoplasm of the pancreas is an uncommon tumor characterized by an inner mucin-producing columnar epithelium layer and an outer dense cellular ovarian-type stromal layer. These tumors are typically localized in the body and tail of the pancreas and do not communicate with the pancreatic ductal system (1-4). According to previous studies, MCTs are found more commonly in females, especially in middle-aged compared to elderly individuals, and therefore are sex-hormone sensitive (3, 4). Most of the large MCTs reported to date were found in pregnant women and were interpreted to be due to the overexpression of sex hormones common to the pregnancy period (5-9). This is the first report of a huge MCT in a nonpregnant woman with rheumatoid arthritis undergoing corticosteroid treatment. A 50-year-old woman was referred to Shahid Beheshti Hospital, Babol, Iran due to abdominal pain, distention and left abdominal mass. The patient was nonalcoholic with no history of gallbladder problem or pancreatitis. Her only major medical history consisted of rheumatoid arthritis diagnosed at 42 years of age and had been undergoing prednisolone (a corticosteroid) treatment. Physical examination suggested the presence of a mass in the left hypochondrium. An abdominal CT scan confirmed this finding. The patient underwent tumor resection with distal pancreatectomy due to the size and difficult handling of the tumor. A voluminous mass was found originating from the pancreatic body and tail *(Figure 1)*. No evidence of invasive or metastatic tumor spread was observed within the abdomen. A pathological examination revealed a 23 × 11 × 14 cm, pinkish-gray, multilocular tumor weighing 3,065 g. The cyst had a smooth internal surface filled with dark-brown fluid. Microscopically, the cyst wall was lined with mucin-producing columnar epithelium associated with an outer dense cellular ovarian-type stroma. The histological diagnosis was a mucinous cystic neoplasm (mucinous cystadenoma). The postoperative course was uneventful, and the patient was discharged 6 days after surgery in good general condition. In a 6-month follow-up visit, the patient was in good health and presented no signs of recurrence the unusual size of the tumor is in contrast to the findings from other reports because the patient was not pregnant and the cyst showed no sign of malignancy. In previous studies, most of the large MCTs reported were in pregnant women, most likely due to the overexpression of sex hormones during this period (5-9). This is the first case of a large MCT in a nonpregnant woman with rheumatoid arthritis undergoing corticosteroid treatment. Another case study reported a large MCT in the appendix of a rheumatoid arthritis patient treated with steroids (10). To date, very few studies have been conducted tothe presence of various steroid receptors in MCTs. These studies have almost identified estrogen and progesterone receptors in the mass (11-13). Because the presence of other steroid receptors, especially glucocorticoid receptors, has not been confirmed in MCTs, it is likely that prednisolone causes irregular mass overgrowth by interacting with possible glucocorticoid receptors. In this regard, overexpression of glucocorticoid receptors in cases of human pancreatic cancer has been shown in only one study (14).

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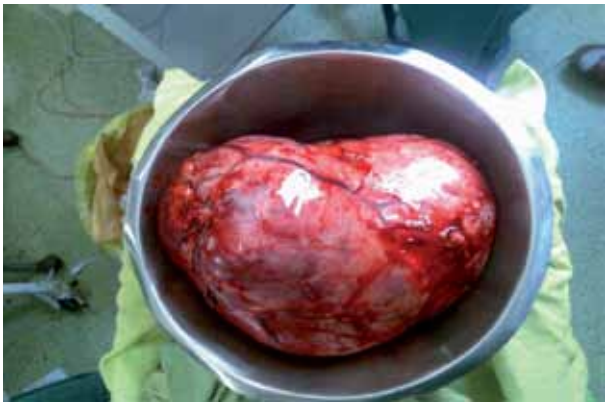

Figure 1. A huge cystic mass was found originating from the body to the tail of the pancreas

Therefore, we recommend further investigations of the steroid side effects especially in patients with potentially malignant tumors.

Keywords: Mucinous cystadenoma; Pancreas; Rheumatoid arthritis

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