

## Endometrial Cyst of Pancreas

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### Abstract

Endometriosis is a benign condition characterized by the presence of endometrial tissue outside the endometrial cavity. It is usually confined to the pelvis and reproductive organs, but has been described in the omentum, gastrointestinal tract, peritoneum, operative scars, lymphnodes, umbilicus, skin, lungs, pleura, bladder and kidney. Endometrial cyst of Pancreas is extremely rare. To our knowledge only seven such cases have been reported in the literature [1]. Herein, we describe a patient with pancreatic endometrial cyst presenting as cystic mass in the tail of Pancreas.

**Keywords:** Endometrial Cyst; Pancreas; Endometriosis.

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### Introduction

Cystic lesions of Pancreas occasionally cause problems in diagnosis and management. Common cystic lesions of pancreas include pancreatic pseudocyst, serous cystic neoplasm, solid pseudopapillary neoplasm, mucinous cystic neoplasm, and intraductal mucinous papillary neoplasm [1,3,6]. Endometrial cyst of Pancreas is very rare [4].

### Case History

A 25 year old unmarried woman presented with history of recurrent episodes of abdominal pain of almost one year duration. At times it used to be

severe. Prior to admission, she had three episodes of severe abdominal pain lasting for almost a day. She was evaluated in an out side hospital for the same. CT done there, showed a thick walled cyst in the tail of Pancreas measuring 4.6x 4.2 cm related to hilum of spleen, suggestive of Serous cystadenoma. She was referred to our hospital for surgery. On examination she was well-built and well nourished. All laboratory investigations were within normal limits. Per abdomen there was no mass palpable. MRI and MRCP done in our hospital showed a well encapsulated cystic lesion with enhancing thin walls in the tail of Pancreas measuring 3.9x 3.5 cm closely abutting the main pancreatic duct medially and splenic vessels posteriorly. MRI findings were suggestive of benign serous cystadenoma. Following this, she underwent Spleen preserving distal Pancreatectomy.



## Histopathology

Our laboratory received a distal Pancreatectomy specimen measuring 4.5x3.5x1.5 cm. Gross examination revealed a well circumscribed ovoid cystic mass (Fig. 1) with pancreatic tissue at the periphery. Cut surface showed a cyst measuring 3.8x3.3x1.5 cm containing brownish fluid. Inner surface of the cyst was irregular, trabeculated and brownish. Microscopically the sections from the cyst wall showed areas of haemorrhage, lining columnar epithelium and stromal elements characteristic of endometriosis (Fig. 2). This was confirmed by positive immunostaining for estrogen and progesterone receptors in the glands and CD 10 in the stroma. Rest of the Pancreatic tissue appeared normal. Following our diagnosis we advised gynaecological evaluation of the patient including imaging of abdominal and pelvic organs. Ultrasound pelvis showed endometriotic cyst of right ovary measuring 2.2x 1.9 cm. She is on follow up and is doing well.

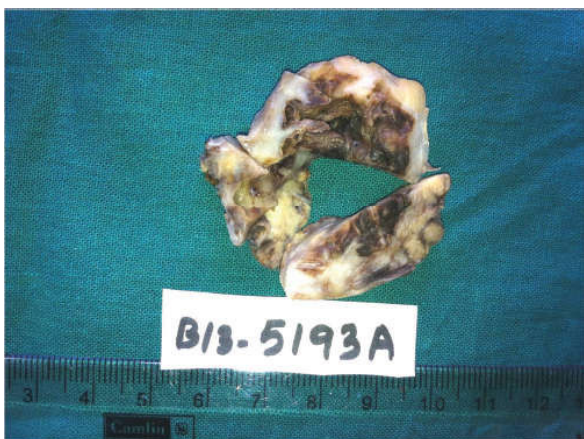


Fig. 1:

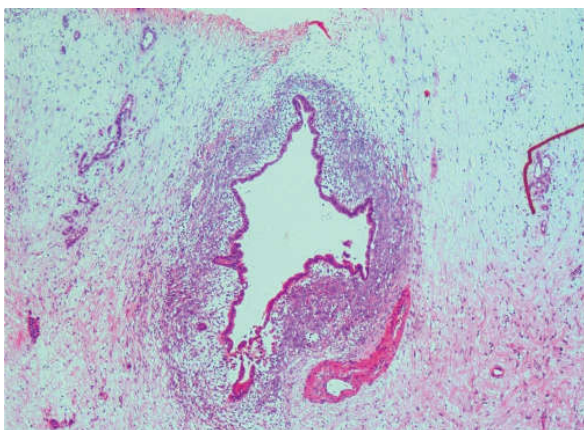


Fig. 2:

## Discussion

Endometriosis has been encountered in multiple sites such as ovaries, fallopian tubes, uterine ligaments, umbilicus, incisional scars, hernia scars, urinary bladder wall, kidney, lung, stomach, intestines and spleen [2,4,5]. Pancreatic Endometrial cyst is an extremely rare disease. Endometriotic cysts are associated with massive hemorrhage and have been rarely reported in the pancreas [7,8,11]. As in other locations, these occur in females of reproductive age. Typical diagnostic features are presence of endometrial glands lined by columnar epithelium with endometrial like stroma around. The endometrial nature of stroma can be confirmed by immunohistochemistry with CD 10. On reviewing the literature, only 7 cases have been reported [1,11]. All reported cases were in the age group of 21-47 yrs [1,2]. All had a history of recurrent upper abdominal pain. Location of cyst was Pancreatic tail in 5 cases and body in 2 cases [11,12,13]. Our patient presented with abdominal pain and the cyst was located in the pancreatic tail. Despite being one of the most frequently encountered gynaecologic diseases, the exact pathogenesis of endometriosis remains unclear [4,9,14,15]. Many theories have been proposed which includes coelomic metaplasia, implantation theory, direct extension, and theory of lymphatic and vascular metastasis [10,14,15]. The theory of lymphatic and vascular metastasis holds good in our case.

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