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Pseudomyxoma peritonei is a rare but challenging neoplastic disease. It is characterized with intraperitoneal mucinous-gelatinous fluid accumulation. The origin is mostly mucinous cysts of the ovary or appendix vermiformis. Pseudomyxoma peritonei rarely presents as a mass mimicking abdominal wall hernias [1-4]. The reports describing the relation between Pseudomyxoma peritonei and incisional hernia are less common [5]. A recurrent incisional hernia due to pseudomyxoma peritonei is presented here.

## Case Report:

A 60-year old female patient had been operated on for a left mucinous ovarian cyst 20 cm in diameter in another center in February 1998. Mucinous material had disseminated into inter-loop spaces through the right subdiaphragmatic region. Total abdominal hysterectomy+bilateral salpingo-oophorectomy and peritoneal toilet had been performed.

She was re-hospitalized for abdominal distention and a 4 cm defect over the incision and underwent a hernia repair using polypropylene mesh, in December 2001. Abdominal distention recurred by time and gave a rise to an incisional hernia in Pfannenstiel incision in May 2006. She was operated on again for decompression and repair, but the operating team could not achieve this intent because of sticky adhesions and simply closed the incision.

As the hernia became gigantic to limit the patient's daily life within the next 2 years, the patient was referred to our department for operation. Her abdominal girth remarkably enlarged. A very large hernia, mostly located on the left side existed (Figure 1). CT displayed a large incisional hernia including bowel loops and the abdomen was full of massive intra-abdominal mucinous material deposition (Figure 2). MR also confirmed the same findings (Figure 3).

In the operation, a meshoma was found. Abdomen was full of a large amount of mucinous fluid and gelatinous material. Following abdominal decompression the bowel loops put back into the abdominal cavity. A prosthetic hernia repair with 30x30 cm polypropylene mesh was performed. The patient was discharged on the postoperative 5th day following an uneventful recovery.

Although abdominal distention has become a problem again after the operation she is doing well at postoperative 6th month with no sign of recurrence.



Figure 1. Patient on the operation table.  
A. A large incisional hernia seen from the patient's leg side.  
B. The view of the hernia from cranial side.



Figure 2. Computed tomographic features of the case. Bowel loops float within mucinous ascites.

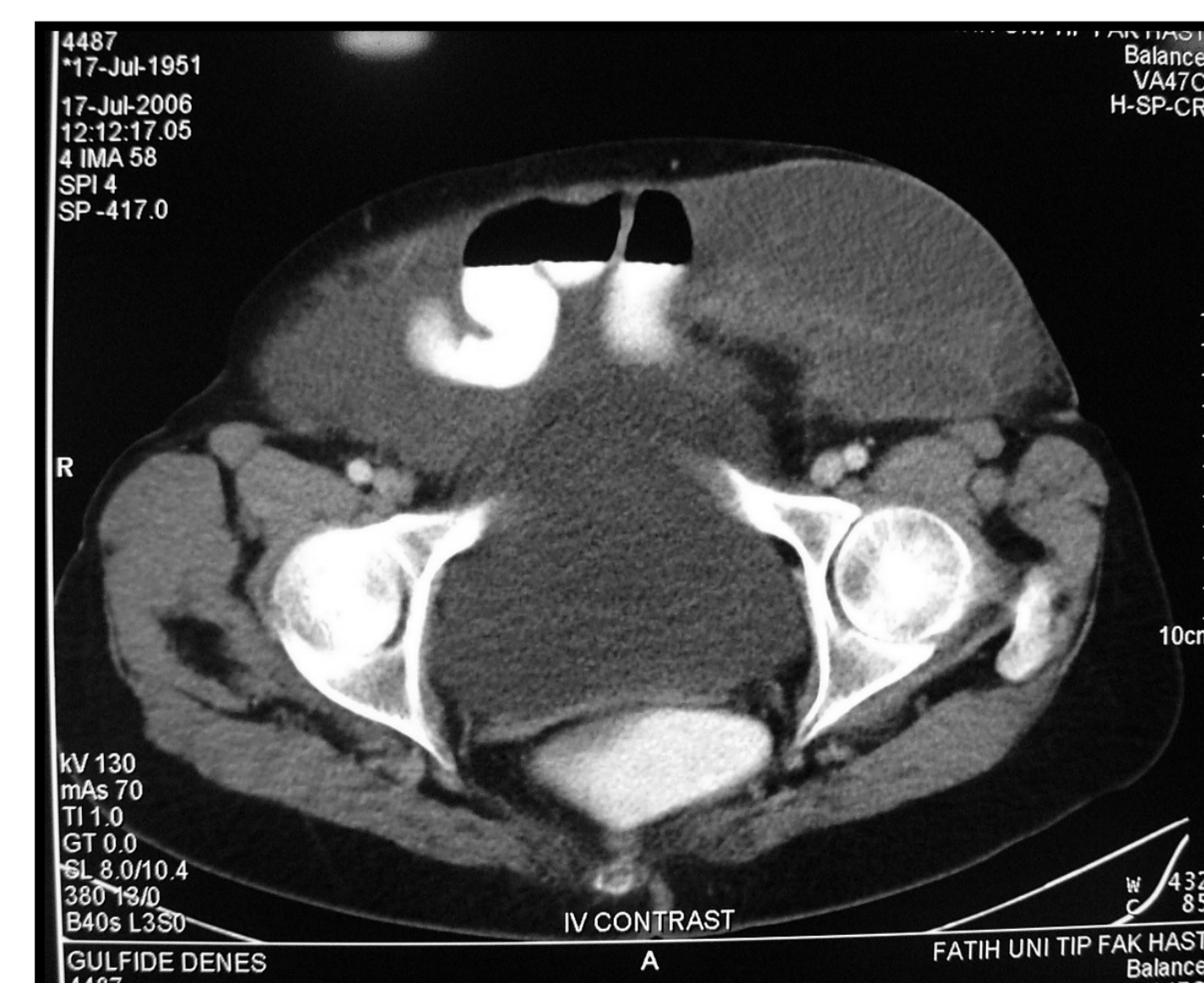


Figure. 3 Magnetic resonance imaging of the case. A large incisional hernia containing bowel loops and a great amount of fluid.

## Comment

Patients with pseudomyxoma peritonei usually complain with an increase in abdominal girth. However, an obvious abdominal wall hernia is not common. There are a limited number of case reports in the literature describing an inguinal [1-3], femoral [4] or umbilical [6] hernia secondary to Pseudomyxoma peritonei.

Hernia may be a result in a previously diagnosed pseudomyxoma peritonei case as recurrent disease [7]. On the other hand, mucinous material may be found in hernia sac without any previous specific diagnosis [3]. A report from Washington Cancer Institute revealed that 14% of the patients with pseudomyxoma peritonei first presented with a new-onset hernia, of which the majority were inguinal hernias [3]. A recurrent incisional hernia at the previous incision made for previous surgical treatment has not been reported to date, except for a case report published in Italian more than 50 years ago [5]. However, as the other factors increasing intra-abdominal pressure, mucinous ascites accumulation secondary to pseudomyxoma peritonei is an obvious risk factor for developing incisional hernias.

In fact, ideal treatment for pseudomyxoma peritonei is under debate. It seems that a major debulking procedure is of benefit in most cases. Adjuvant therapy may be added or not. In patients with abdominal wall hernias due to pseudomyxoma peritonei are possibly best treated prosthetic repair.

## Conclusion

Pseudomyxoma peritonei is a rare cause of abdominal wall hernias. Though the results of surgical interventions are not promising the only option for the patient with poor quality of life is surgical repair.

## References

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