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A jelly belly: An unusual cause of ascites

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A 77-year-old man presented with a two-month history of increasing abdominal girth, weight loss and early satiety. Physical examination revealed a distended, nontender abdomen with dullness on percussion. The complete blood count and the liver function tests were normal whereas serologic tests for viral hepatitis were negative. A computed tomography (CT) scan of the abdomen showed a large amount of ascitic fluid resulting in central displacement of the small bowel and mesentery without septa of calcifications. A blind paracentesis in the left lower quadrant of the abdomen revealed a green gelatinous jelly which was impossible to aspirate. The ultrasonography (US) of the abdomen (Fig. 1) showed multiple septations in the peritoneal cavity surrounded by ascites with a "starburst" appearance and with echogenic foci within. The omentum appeared irregularly thickened. The bowel loops were displaced centrally and were non mobile instead of floating freely.

1. Diagnosis: pseudomyxoma peritonei

The patient underwent exploratory laparotomy followed by excision of about 8 kg of gelatinous masses. The appendix was completely infiltrated. Pathological examination revealed a ruptured low grade appendiceal mucinous neoplasm with widespread pseudomyxoma peritonei. The patient was given intraperitoneal chemotherapy.

Pseudomyxoma peritonei (PMP) is a rare condition, with a reported incidence of 1–2 per million per year [1]. It refers to a gelatinous ascites occurring in the context of intraperitoneal spread of a mucinous neoplasm rising usually from the appendix and less often from the ovary, colon or the pancreas. The peritoneum is seeded with mucus-producing cells, which continue to proliferate and produce mucus. The progressive accumulation of mucinous fluid gradually fills the peritoneal cavity. The patients present with increased abdominal girth, ascites, ovarian mass or abdominal pain resembling appendicitis.

Although the standard for diagnosis is a laparotomy, the radiographic appearance of PMP can be characteristic [2]. While on CT scan the mucinous material is similar in density to water, there is a central displacement of the small bowel and mesentery. At ultrasound, the echogenic foci with a "starburst" appearance of the ascitic fluid

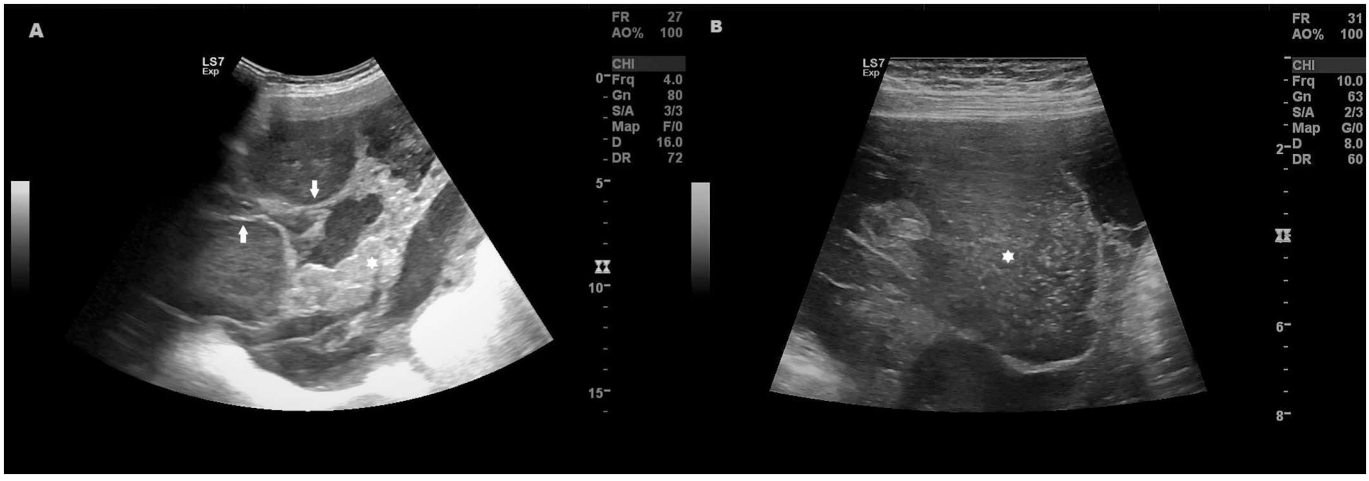

Fig. 1. Ultrasonography of the abdomen of a 77-year-old man with pseudomyxoma peritonei Panel A: ascitic fluid with multiple septations (arrows) and irregularly thickened omentum (asterisk) Panel B: "starburst" appearance of the ascitic fluid due to echogenic foci reflecting the gelatinous nature of the fluid.

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–characteristics present in our case- are reported [3] to be the specific characteristic of pseudomyxoma peritonei, reflecting the gelatinous nature of the fluid.

References

[1] Smeenk RM, Bruin SC, van Velthuysen ML, Verwaal VJ. Pseudomyxoma peritonei. Curr Probl Surg 2008 Aug;45(8):527–75.
[2] Que Y, Tao C, Wang X, Zhang Y, Chen B. Pseudomyxoma peritonei: Some different sonographic findings. Abdom Imaging 2012 Oct;37(5):843–8.
[3] Hanbidge AE, Lynch D, Wilson SR. US of the peritoneum. Radiographics 2003 May-Jun;23(3):663–84.