Peritoneal hydatid cyst: an unusual cause of abdominal pain in a haemodialysis patient

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A 22-year-old man with end-stage renal disease on haemodialysis (HD) was admitted to our hospital with a generalized abdominal pain. He had been on HD without complications the previous year. One year before admission, peritoneal dialysis was discontinued because of peritonitis due to candida infection. At physical examination, his blood pressure was 150/90 mmHg and heart rate was 90 b.p.m. His abdomen was soft but tender and there was a mass (15 x 15 cm) at the periumbilical region. Laboratory examination results were as follows: peripheral white blood cell count 7800 (4.400–11.000 cells/ml) (73% were neutrophils, 17% lymphocytes); haematocrit 18.4% (41–50%), sodium 134 mmol/l (136–145 mmol/l), potassium 4.2 mmol/l (3.4–4.5 mmol/l), Cl 96 mmol/l (96–108 mmol/l), urea 71 mmol/l (2.50–7.50 mmol/l), creatinine 6.8 mg/dl/l (0.7–1.5 mg/dl), glucose 92 mg/dl (70–110 mg/dl), and C-reactive protein 93 mg/l (0–5 mg/l). A septated intraperitoneal cystic mass suggesting hydatid cyst was detected on ultrasonography (Figure 1). The MRI of the abdomen was performed with a 1.5-T magnetic unit (Magnetom Symphony, Siemens, Erlangen, Germany) in order to gain further information on the cystic mass. The Cystic mass showed similar characteristics on MRI (Figure 2). The mass was 4 x 10 x 16 cm in size in the peritoneal cavity, and had no contrast enhancement and pericystic invasion. No other lesion was demonstrable in any organ. The patient underwent the operation without complications and then his functions were stable following the intervention. Hydatidosis was confirmed histopathologically by demonstrating protoscolex in the cyst content. Albendazole was started 2 x 400 mg/day.

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Fig. 1. Abdominal ultrasonography shows septated cystic mass in the peritoneal cavity.

Fig. 2. Sagittal T2 weighted MR image shows huge intraperitoneal cystic mass with regular contour and no evidence of any pericystic abnormality.
Although hydatid cysts are known to affect the liver and lung commonly, they can also be seen in the peritoneal cavity. Cysts in the peritoneal cavity account for 10–16% of the cases in the literature and mainly result from the rupture of concomitant liver cysts [1]. Primary peritoneal hydatid cyst is rare. Mosca et al. [2] reported abdominal hydatid disease in uncommon sites in a series of 15 patients. Hydatid cysts were located in the peritoneum in eight patients. Mansari et al. [3] reported 12 cases of peritoneal hydatidosis. In 11 out of 12 patients, it was secondary. Another study showed that 18 of 49 patients had hydatid disease in the peritoneal cavity [4]. Additionally, secondary infection is also rare in hydatid cyst. Infected peritoneal hydatid cyst may cause abdominal pain as well as local mass effect and may mimic sclerosing peritonitis, which is infrequently encountered in dialysis patients. The disease may present just after the start of haemodialysis. Severe peritonitis may immediately precede the diagnosis, but the condition often presents some months after peritoneal dialysis has been stopped because of peritonitis or for other reasons. We had started our patient on haemodialysis because of fungal infection. Thus, sclerosing peritonitis was thought to be the first diagnosis. As a result, hydatidosis should be considered in the differential diagnosis in these patients, particularly in endemic regions.

Conflict of interest statement. None declared.

References

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