

Kui Chuan TING and Vui Heng CHONG



A elderly lady with a background history of advanced ovarian tumour was admitted with recurrent abdominal distension. She previously had had paracentesis to relieve her symptoms. On this occasion, she noted that the effluent (**Panel**) was different from previous drainage.

What is the diagnosis?

Answer: refer to page 62

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(Refer to page 42)

Answer: Chylous ascites

This particular patient had advanced ovarian cancer and had metastasis to the lymphatic. The obstruction to the lymphatic had become critical to affect the lymphatic flow resulting in the formation of chylous ascites.

Chylous ascites is a condition which involves the accumulation of chyle in the peritoneal cavity due to a disruption to the flow in the lymphatic system. This is most commonly caused by malignancy and cirrhosis. Other causes include infection, such as tuberculosis, and trauma to the abdomen, such as from surgery. It is an uncommon condition which occurs in 0.5% of ascites in cirrhotic patients and an incidence of 1:20,000 hospital admissions.¹

Chyle, which consists of lymph and emulsified fats, are first formed in the small intestine then transported through the lymphatic vessels and into the cisterna chyli located anterior to the second lumbar vertebra and posterior to the abdominal aorta. The cisterna connects with the thoracic duct, which passes through the aortic opening of the diaphragm, flows along the right mediastinum and enters the venous system eventually. Any damage or blockage to these chan-

nels may cause chylous effusion into the thoracic or abdominal cavities.²

Patients usually present with abdominal distension, and depending on the underlying aetiology, the onset may vary from acute to chronic. They may also complain of non-specific symptoms such as abdominal pain, weight loss and anorexia. Complications of late detection may result in sepsis.

The definitive diagnosis is made by performing paracentesis, in which the ascitic fluid is drained and analysed. High level of triglyceride is indicative of such diagnosis. A computed tomography (CT) scan can be performed to assess the extent of the fluid accumulation or malignant masses. Lymphangiogram may also be used to visualise obstructions in the lymphatic system.

The management involves treating the underlying aetiology, and this can be a conservative or surgical approach. In addition, patients should commence on low fat diet and diuretic therapy. Total parenteral nutrition may be required if patients fail to respond or require surgery. Surgical operations such as a shunt may be an alternative option.³

REFERENCES

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