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VATS sealing of thoracic duct for persistent chyle leak

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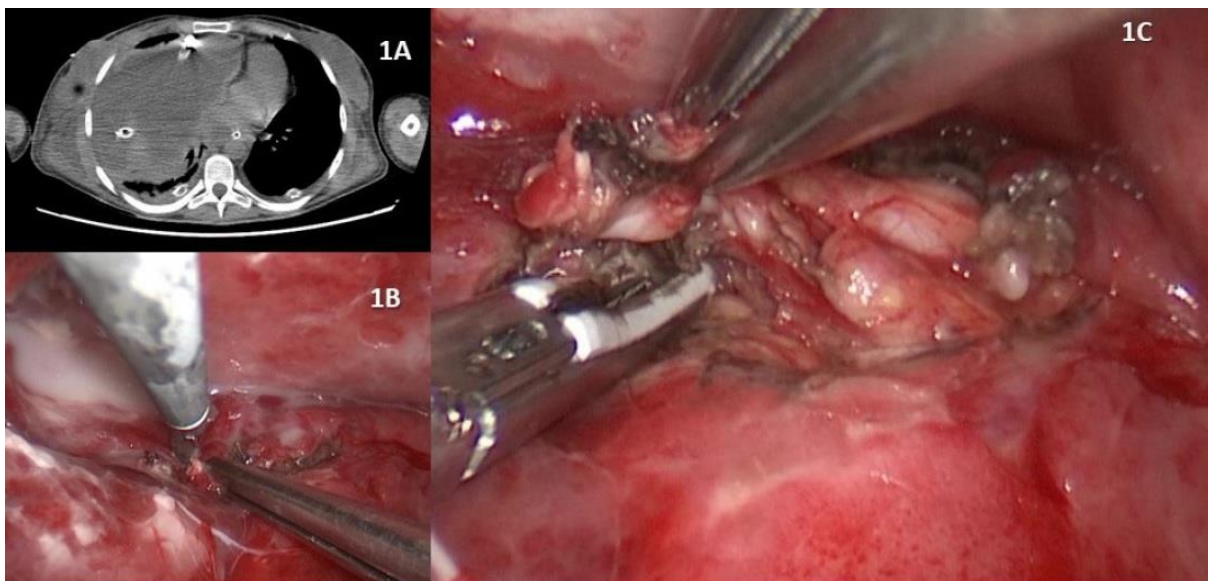


Fig.1A- Preoperative chest CT scan showing a massive right pleural effusion with a chest tube at this level

Fig.1B- Intraoperative – the dissection of the thoracic duct

Fig.1C- Intraoperative aspect - the sealing of the thoracic duct

Keywords: *persistent chylothorax, thoracic duct, VATS*

Untreated chylothorax, due to its rich composition in chylomicrons, proteins and lymphocytes, can lead to severe metabolic imbalances and decreased immune response, thus requiring prompt treatment.

We present the case of a 27 years old woman who was referred to us with persistent chylous drainage (> 600mL/day for 8 consecutive days) after a chest tube insertion for pleural effusion in another medical unit. The pleural fluid level of cholesterol of 172 mg/dL and pleural triglyceride level of 155 mg/dL, thus confirming the diagnosis. The patients also received octreotide, but the high amount of drainage persisted. A chest CT scan performed which revealed a significant amount of right pleural effusion and the presence of the chest tube at this level.



A thorough dissection and VATS sealing of the right supradiaphragmatic thoracic duct were performed, resulting in the cessation of lymphoreea. The patient was discharged 7 days after surgery, following hydroelectrolytic and metabolic rebalancing.

The identification and ligation of the thoracic duct is an apparently effortless surgery, but in reality it is difficult, given the small size of this anatomical structure, but it is the most efficient way to resolve and prevent the recurrence of the chylous effusion.

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