Elongated pigtail complicating pericardiocentesis

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We report the case of a 49 year-old man, admitted to our institution for tamponade. His previous medical history was mainly an oesophageal epidermoid cancer, with local metastases treated by chemotherapy and radiotherapy, and oesophageal prosthesis. His cardiovascular risk factors were mainly smoking. His medication was morphine.

For one week, his dyspnoea had been worsening, until he was classified NYHA III. On account of right heart failure, he was then admitted to the intensive care unit. On admission the patient was hemodynamically unstable, with hypotension (100/78 mm Hg), sinus tachycardia (120 bpm), without paradox pulse. Physical examination revealed a strong pericardial rub, with right heart failure. Echocardiography confirmed a large pericardial effusion, with tamponade evolution. Pigtail pericardiocentesis under echoguidance was then performed in order to relieve symptoms, although the aetiology was likely metastasis involvement. The patient was then immediately relieved, anatomy analysis evidenced metastatic cells.

The day after, the patient was asymptomatic, and a new echocardiography revealed no pericardial effusion. It was decided to remove the pigtail. In spite of careful traction, it was impossible

Figure 1. Chest computed tomography-scan. Note the loop around the heart (1) and elongated segment of the probe (2).
to take away the pigtail. After discussion with surgeons, it was decided to try again. The pigtail was then elongated. A chest computed tomography-scan confirmed elongation and evidenced a loop around the heart, which could explain these difficulties.

On account of a very poor prognosis, it was then decided to cut the extracorporeal extremity, in order to avoid surgery.

Figure 1 illustrates a rare complication of pericardiocentesis. We recommend using a guidewire whenever a pigtail is not easy to take away, before inducing such complications.

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