Massive vegetation in device-related endocarditis

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A 71-year-old man was transferred to the extraction centre with *Staphylococcus aureus* endocarditis and a 3.5 × 1.7 cm vegetation adherent to the ventricular lead of his 7-year-old secondary-prevention dual chamber ICD (see Panel A and Supplementary material online, Videos S1–S3).

He had been initially managed medically but the vegetation increased in size. He was refused surgical extraction due to frailty and multiple co-morbidities (severe LV dysfunction, cachexia, previous hypoxic brain injury, and chronic pulmonary disease). Although the potential haemodynamic and infective consequences of embolization of the vegetation were a contraindication to percutaneous extraction, his deteriorating condition justified this novel approach.

Initially, unsuccessful attempts were made to capture the vegetation with several types of snare. The leads were then extracted using a locking stylet and laser sheath and the vegetation, having briefly adhered to the tricuspid valve, disappeared from transoesophageal echo view. Pulmonary angiography located it in the origin of the left lower pulmonary artery (Panel B). It was captured with a tri-snare (Panel C) and pulled back into the IVC. The right iliac vein diameter was too small to pull it further with the snare. A 14 mm Cobra balloon was tracked beyond the vegetation and inflated. This was used alongside the snare to pull the compressed mass into the femoral vein without further embolisation, where it was removed in three pieces by open venotomy (Panel D). The patient was extubated the same day, made a full recovery and eventually discharged home.

Supplementary material is available at European Heart Journal online.

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