Endovascular salvage of ventricular assist device outflow conduit fissuration

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Purpose:
to report the endovascular management of a life-threatening late complication of left ventricular assist device (LVAD) implantation.

Case report:
a 64 years old woman known for chronic ischemic cardiomyopathy requiring LVAD implantation 3 years earlier came to our attention for an episode of acute heart failure. At contrast-CT investigation a 35x45mm pseudoaneurysm of the LVAD outflow conduit was detected incidentally at the level of one of the steel sternal stitches. Exclusion of the pseudoaneurysm was achieved by positioning a Fluency 12x80mm covered stent through right brachial access under local anesthesia.

Conclusions:
Fissuration of LVAD outflow conduit is an unreported possible late complication of these devices. Endovascular approach to such condition allows minimally-invasive management of this life-threatening complication otherwise requiring redo-sternotomy and LVAD conduit substitution.