

of onset, location or migration of pain and severity of systemic response (Lee et al. 2010). The use of ultrasonography and CT to aid diagnosis has been advocated, which may show bowel wall thickening, peri-colonic fat infiltration, extra-luminal air or abscess. Compared to duodenal, small bowel diverticula are almost 4 times more likely to perforate (Nakatani et al. 2016). **Take home message:** Although less common than appendicitis, diverticulitis of the ascending colon or terminal ileum should be considered in patients presenting with right iliac fossa pain. Limited small bowel resection and anastomosis or diverticulectomy is a safe surgical method to use in some cases of ileal diverticulitis. Many cases of uncomplicated small bowel diverticulitis may be treated conservatively without requiring operative intervention. Thus accurate and early diagnosis, aided by radiological imaging can ensure appropriate clinical management and avoid unnecessary surgery and its associated risks for patients presenting with acute, uncomplicated small bowel diverticulitis.

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## Graft aneurysm as long-term complication of a polyester prosthesis and its adequate management - short review based on a systematic review of literature and a representative case report

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**Introduction:** A material-associated true aneurysm after previous use of a vascular prosthesis for arterial reconstruction mostly in peripheral arterial occlusion disease (PAOD) is considered a rare but serious complication.

**Case description:** A 49 year old male patient underwent several sequential steps of arterial recanalization/reconstruction because of PAOD, stage IIb (walking distance, <100m) according to local findings with endovascular measures and vascular surgical bypass implantation by means of a femoropopliteal P1-prosthetic bypass at the right and left leg (the right distal prosthetic segment was extended with a venous bypass to the P3-segment because of a distal suture aneurysm and arterial thrombosis of the right calf. After 10 years, a true prosthetic aneurysm was diagnosed at the right thigh using Duplex-ultrasonography and complementary MR-angiography. It was successfully treated with a femoro(prosthetic)-infragenaal 6-mm-Gore®-Propaten® bypass (W.L. Gore, Putzbrunn, Germany) down to the P3-segment of the right popliteal artery. Nineteen articles were found in the literature search, which had been published since 1995. Most frequently, pseudoaneurysms of knitted polyester prostheses at the femoropopliteal segment occurred after approximately 12.91 years in average. In one third of cases, 2 or more aneurysms of dacron prostheses were described. Histological and electromicroscopic investigations revealed mainly breakings of filaments and foreign body reactions. In more than half of the patients, the aneurysm was resected and for reconstruction, an interponate was implanted. Complete removal of the prosthesis and endovascular therapy were only 2nd choice.

**Results and Conclusions:** Development of true prosthetic aneurysms has not been satisfyingly clarified yet. It belongs to the late complication profile - even it occurs rarely - and should be controlled after a post-operative interval of one decade if the arterial recanalization/reconstruction was performed using prosthetic material after previously - in the sequential approach - endovascular intervention and venous bypass could not be used.

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## Minimally invasive direct coronary artery bypass and TAVI: Timing and considerations in octogenarians: A case report

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**Keywords:** Minimally invasive direct coronary artery bypass; TAVI; Coronary revascularization; Pacemaker; Case report

**Introduction:** Coronary artery disease is frequently associated with aortic stenosis. Using minimally invasive direct coronary artery bypass (MIDCAB), we conducted a single bypass of the LAD using the LIMA on an 87-year-old patient with TAVI-prosthesis and pacemaker. This case report describes the procedure for our rather special patient, from intake to discharge.

**Case description:** A 87-year-old male was admitted to our hospital due to NONSTEMI. Surgical history included TAVI Corevalve® endoprosthesis (81y.o.) and BIOTRONIK pacemaker for left bundle branch block. We opted for minimally invasive direct coronary artery bypass (MIDCAB) using the Da Vinci® Robot System. There were no adverse events in the post-operative period. Patient was discharged on the 8<sup>th</sup> postoperative day. Several questions arose while treating our rather complex patient: what is the optimal timing for revascularization after TAVI and what method of revascularization should be used?

**Results and Conclusions:** We consider TAVI followed by MIDCAB as a feasible approach for these complex patients. It is potentially beneficial regarding blood loss and hospital stay. The staged approach avoids many risks described in literature. Research is needed to support this intuitive assumption; the effect of TAVI on coronary hemodynamics on the long term as well as comparing combined and staged TAVI-MIDCAB could be interesting subjects for further investigation.

**Take home message:** A staged minimal invasive procedure with TAVI and followed by MIDCAB might be beneficial in octogenarians.

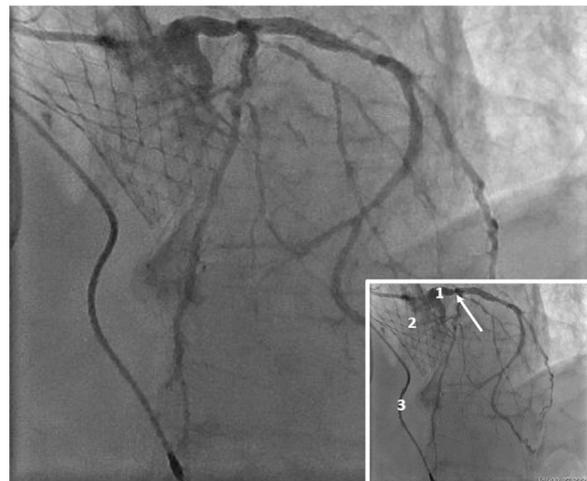


Figure 1: Coronary angiography of the left coronary artery. 1: Left main stem. 2: TAVI Corevalve. 3: Pacemaker wire. Arrow indicates targeted stenosis.