

## OPAT for vascular graft infection

### Abstract:

**Objectives:** An estimated 1% of endovascular aneurysm repair (EVAR) devices become infected, carrying a high mortality rate. Surgical explantation is recommended and prognosis is guarded. This retrospective cohort analysis focuses on the role of outpatient parenteral antimicrobial therapy (OPAT) in the management of aortic vascular graft infections following EVAR.

**Methods:** Patients who received OPAT for aortic graft infections (AGI) following EVAR from 2014 to 2018 inclusive were identified using the OPAT database. Clinical, microbiological and radiological data were collected. Survivors were followed up for a median of 36 months (range 25-60) after first presentation with infection. Outcomes were assessed.

**Results:** Eleven cases with 20 OPAT episodes were identified: 10/11 male, median age 76 (IQR 71-81). Median time to presentation was 7 months (range 0-81 months) after EVAR. OPAT lead to a 55% reduction in length of hospital stay. One patient had graft explantation; four others had temporising measures. Eight of 11 were alive a median of 36 months after presentation with infection, having had a median of 2 re-treatments on OPAT (range 1-3). Seven of the eight survivors were on continuous suppressive oral antimicrobials; three were also intermittently on intravenous antibiotics for flares of infection. Patient/ infection outcomes were cure (1/11), improved (7/11), failure (3/11).

**Conclusion:** AGI following EVAR usually presents in the first year after graft deployment. OPAT has an important peri-operative role in patients suitable for curative surgery. OPAT followed by oral suppressive antimicrobial therapy can be a feasible long-term treatment for non-curative management of AGI. Survival in our cohort was longer than expected, and OPAT was feasible despite the complexity of these infections. OPAT can avoid multiple and lengthy hospital admissions and maximise time at home and quality of life in this cohort with life-limiting infection.

### Reference:

Allen N, Adam M, O'Regan G, Seery A, McNally C, McConkey S, Brown A, de Barra E. Outpatient parenteral antimicrobial therapy (OPAT) for aortic vascular graft infection; a five-year retrospective evaluation. *BMC Infect Dis.* 2021 Jul 9;21(1):670. doi: 10.1186/s12879-021-06373-4. PMID: 34243725; PMCID: PMC8268523.

[Full Text](#)

# Learn more about elastomeric pumps

[Click to follow sponsored link](#)