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Case Report

Exteriorized thrombosed axillo-bifemoral graft with empyema post coronary artery bypass grafting with axillo-femoral bypass

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ABSTRACT

Following its introduction in 1963, axillofemoral bypass grafts have improved, with patency rates comparable to aortofemoral and aortobifemoral grafts. Graft infection and thrombosis may worsen axillofemoral bypasses, rendering subsequent management challenging in surgically high-risk patients. We present an unusual case of anexteriorized thrombosed axillofemoral graft infection in a 65 years' male who recently underwent coronary artery bypass grafting with axillobifemoral grafting, presented in sepsis with empyema of chest and infected graft was exteriorised. He developed foul smelling discharge and fever. The patient was treated with antibiotics and infected graft was removed. The image highlights the social stigma and debilitating complications caused by these grafts in developing countries.

1. Case presentation

A 65 year oldmale presented to cardiac surgical outpatient unit with complaints of fever, chest pain and pus discharge from the previous chest tube insertion site. He had history of Coronary artery bypass grafting with axillo-femoral bypass about one month ago at some peripheral hospital. On examination, he had low grade fever, but his vitals were normal. His dacron graft has been exposed below the chest and has come out of the subcutaneous tunnel. It was grossly infected and non-pulsatile. On Doppler examination, it was found to be thrombosed. He was having foul smelling purulent discharge from the graft site as well as chest tube insertion site.

2. Description of the employed technique

Since patient was not having rest pain, he was admitted and started on intravenous antibioticsaccording to pus culture sensitivity. After stabilization, he was taken in the operative room, all three anastomotic sites were exposed and graft was divided and the exteriorized graft was removed. The patient's general condition improved and sepsis subsided. He was discharged and was planned to be re-evaluated at a later stage for his peripheral vascular disease.

3. Discussion

Infection of prosthetic grafts complicate 0.5–3.5% of all patients with a mortality rate of up to 75% and is considered a horrific consequence of aorto-iliac revascularization procedures.[1–3] The definitive treatment is graft excision followed by revascularization via extra-anatomical or in situ reconstruction. However, in clinical practice, care is adapted to the patient's comorbidities, and Samson's updated Szilagyi classification system of extra-cavitary vascular graft infection which correlates extent of infection with prognosis[3,4] When axillo-femoral graft infections occur in patients who have limited revascularization options and are unable to tolerate major re-operative procedures, complications arise. In such cases, rather than graft excision, the best treatment choice could be graft rescue or conservative antibiotic administration. A

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Fig. 1:

contaminated vascular graft that has degraded through adjacent structures necessitates graft removal in the form of overt septicemia.Skervin et al[5] reported a axillo-femoral bypass graft transgressing the chest wall with sepsis related to the patent graft. They test clamped the graft and after ensuring viability of limb, they explanted it under local anesthesia. They emphasized that explanting an infected extra-anatomical bypass graft does not need a concomitant revascularization procedure if the patient is at high risk of surgery.

Our report highlights the social stigma faced by the patients and debilitating complications that can be caused by these grafts especially in developing nations.

4. Source of Funding

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5. Conflict of Interest

None.

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