

## Open Rupture of Anastomotic Pseudoaneurysm of the Femoral Artery

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### Abstract

A 65-year-old woman presented at our hospital with a skin ulcer and blood oozing from a pulsatile tumor of the left groin. Six years previously she had been treated with an abdominal aorta-left superficial femoral artery bypass using an artificial graft to manage an infected right to left femoro-femoral bypass graft. Computed tomography imaging revealed a ruptured left superficial femoral artery with an anastomotic pseudoaneurysm.

We found during surgery that the original abdominal aorta-left superficial femoral artery bypass graft had become completely detached from the superficial femoral artery. We incised the aneurysm and then resected the hematoma and the ulcerated necrotic skin lesion. The same portion of the artificial graft was resected and partially replaced with the ipsilateral saphenous vein.

**Keywords:** Bypass; Skin ulcer; Saphenous vein

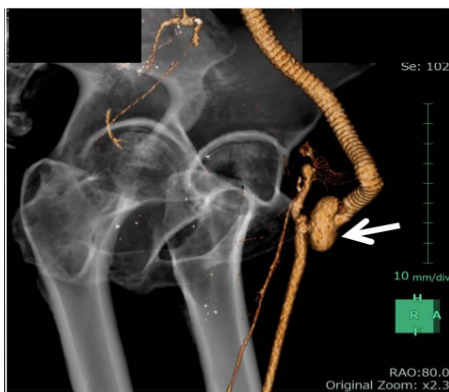
### Introduction

A 65-year-old woman presented at our hospital with a skin ulcer and blood oozing from a pulsatile tumor of the left groin. Six years previously she had been treated with an abdominal aorta-left superficial femoral artery bypass using an artificial graft to manage an infected right to left femoro-femoral bypass graft. She was hemodynamically

stable but had low hemoglobin (7.6 g/dL). Computed tomography imaging revealed a ruptured left superficial femoral artery with an anastomotic pseudoaneurysm (Figure 1) that compressed the skin ulcer (Figure 2).

She was surgically treated based on a diagnosis of open rupture of anastomotic pseudoaneurysm of the left superficial femoral artery.

We found during surgery that the original abdominal aorta-left superficial femoral artery bypass graft had become completely detached from the superficial femoral artery, and the intervening tract had dilated to form a pseudoaneurysm. We incised the aneurysm and then resected the hematoma and the ulcerated necrotic skin lesion. The same portion of the artificial graft was resected and partially replaced with the ipsilateral saphenous vein, and a distal anastomosis was



**Figure 1:** Preoperative findings of enhanced computed tomography. Three-dimensional computed tomography shows graft has completely detached from superficial femoral artery and anastomotic pseudoaneurysm (arrow).



**Figure 2:** Physical appearance of pseudoaneurysm.



**Figure 3:** Intraoperative photograph: Saphenous vein graft after replacement.

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incorporated into the distal portion of the previous distal anastomosis. We constructed the proximal and distal anastomosis of the saphenous vein graft using the end-to-side technique (Figure 3).

The patient recovered uneventfully and has remained event-free for 11 months.

Anastomotic pseudoaneurysms result from suture line interruption between the graft material and the native vessel. Although all anastomotic sites may be involved, the femoral artery is far more

vulnerable with an incidence ranging from 0.5% to 23.7% [1,2].

#### References

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