

Ruptured Pseudoaneurysm of The Gluteal Artery

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Citation

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Abstract

Aneurysms of the Gluteal artery are rare; the majorities are pseudoaneurysm secondary to trauma. Ruptured pseudoaneurysm is rare and is a difficult situation associated with high mortality. We report a case of 70-year-old male who presented in shock with profuse bleeding from chronic incised wound over the right gluteal region. He had history of trauma to right gluteal and thigh region one year back in a road traffic accident. He subsequently noticed a swelling over the right gluteal region, which was progressing in size. He was operated a couple of time upon it, considering it as a haematoma or an abscess. After initial resuscitation, he was shifted to Operation Theatre where a two staged procedure was done. Post-operatively he had a smooth recovery and was discharged after one week. His Histopathological report revealed infected pseudoaneurysm of branch of internal iliac artery.

INTRODUCTION

Aneurysms of the Gluteal artery are rare; the majority are pseudoaneurysm secondary to trauma. Ruptured pseudoaneurysm is/are rare and difficult situation associated with high mortality. We report a case of ruptured pseudoaneurysm of the gluteal artery, who presented in shock with profuse bleeding from right gluteal region and managed by a two staged approach.

CASE REPORT

A 70 years ex-serviceman presented to us in shock with profuse bleeding from chronic incised wound over the right gluteal region. He had history of trauma over right gluteal region one year back in a road traffic accident sustaining subcapital fracture of neck of right femur and subsequently observed a swelling which was gradually progressing in size over the same region. He was operated upon this swelling a couple of time elsewhere, considering it to be a haematoma or an abscess. In view of increased vascularity he was referred to our centre for further management.

On presentation, his pulse was feeble, systolic BP of 60 mm Hg with Haemoglobin of 3gm%. After initial resuscitation with IV fluids and blood transfusion patient was shifted to Operation Theatre. With extra peritoneal approach both the iliac arteries were identified, and ligation of right internal iliac artery was done. Then the right gluteal region was explored with a separate incision. There was large amount of foul smelling haematoma and necrosed muscle. After

haematoma evacuation we found a large friable artery with lacerated wall (Pseudoaneurysm of Gluteal artery) in the depth of the wound. Lacerated portion was excised (sent for histopathological examination) and the remnant was transfixed. Wound was packed after thorough Debridement. Postoperatively he was on antibiotics (Teicoplanin, Metrogyl, and Amikacin) for 5 days. He made a satisfactory recovery and was discharged after 7 days. His Histopathological report revealed infected pseudoaneurysm of the branch of internal iliac artery.

Figure 1

Figure 1: Patient with chronic incised wound over the right gluteal region



Figure 2

Figure 2: Intra-operative photograph showing rent in the gluteal artery, after excision of the pseudoaneurysm

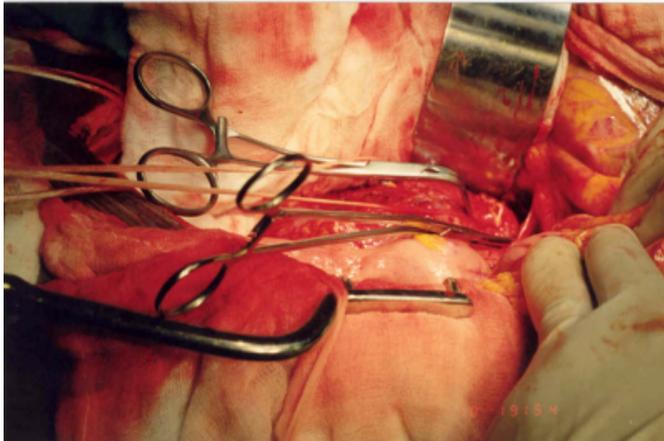


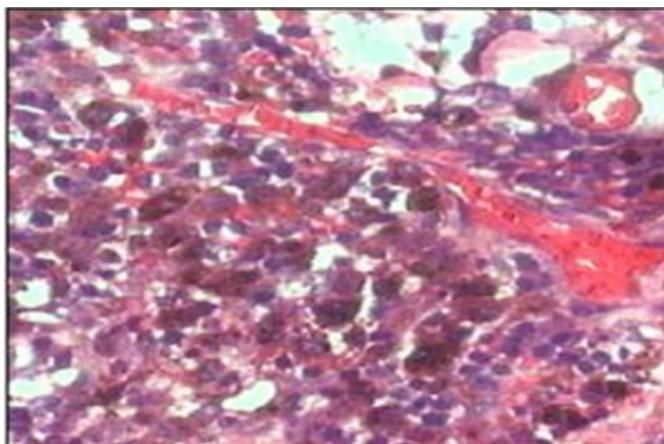
Figure 3

Figure 3: After completion of surgery



Figure 4

Figure 4: Histopathological examination suggestive of pseudoaneurysm



DISCUSSION

The majority of gluteal artery aneurysms are pseudoaneurysm secondary to trauma^{1,2}, pelvic fracture or

iatrogenic causes. They present with a painful, sometime pulsatile swelling in the gluteal region, there may be a bruit and signs of inflammation or symptoms of sciatic nerve compression³. They may mimic a gluteal abscess with disastrous results². It rarely ruptures and presents with profuse bleeding. True gluteal artery aneurysms are rare and their aetiology is secondary to atherosclerosis, infection and polyarteritis nodosa⁵.

Diagnostic investigations used included Ultrasound, CT scan, MRI/MRA, and Arteriography. Arteriography is particularly valuable in demonstrating the anatomy and excluding the diagnosis of a persistent sciatic artery (PSA) aneurysm.

Traditionally, the approach to gluteal artery aneurysm is in two stages – a transperitoneal or retroperitoneal approach to gain proximal control on the internal iliac artery and a gluteal approach to the aneurysm itself. Interventional radiological techniques have been used to try to reduce surgical morbidity. These include coil embolisation and balloon occlusion³ of the aneurysm. Similar techniques have been used in the control of acute bleeding⁴ and in definitive treatment. The two stage approach should be used in the treatment of pseudoaneurysm, ruptured aneurysms or aneurysm involving the artery before its exit from the sciatic foramina. True gluteal aneurysms are solely extra pelvic and can be managed from gluteal approach alone.

Internal iliac artery ligation alone should not be recommended because back filling can occur due to extensive collateral supply in the gluteal region³. Most cases present with symptoms related to aneurysm size and pressure effects, consequently surgical treatment and aneurysmectomy is the treatment of choice. In all cases, care must be taken to avoid damage to sciatic nerve which is often adherent to the aneurysm sac¹.

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