## Traumatic inferior gluteal artery pseudoaneurysm presenting as recurrent bleeding and acute anemia: A case report and review of the literature.

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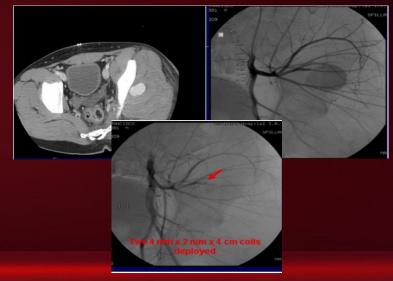
## Introduction

- A pseudoaneurysm is a localized dilation in the blood vessel, contained only by a single fibrous layer <sup>1</sup>.
- Caused by blunt or penetrating trauma, most commonly gunshots and stab wounds <sup>1,2</sup>.
- May present weeks to years later.
- <1% of all pseudoaneurysms occur in the gluteal artery, more commonly affecting the superior gluteal artery <sup>3</sup>.
- Clinically, pseudoaneurysms can be silent, cause mass effects, or systemic manifestations <sup>3,4</sup>.

## **Patient Presentation**

- 18 year old male presents with stab wounds to the LUQ and left flank. Hypotensive per EMS but hemodynamically stable in the trauma bay.
- The patient underwent an exploratory laparotomy. A laceration to the peritoneum was noted and sutured. Mesenteric bleeding noted and ligated at 3 points. The abdominal cavity was irrigated and closed in layers.
- Recovery was unremarkable and the patient was discharged post-op day 4

- 4 days later he returned to the ER with intermittent bleeding from the wound in his left iliac region. The wound was packed and he was discharged.
- 3 days later he returned again with persistent oozing from the same site complaining of dizziness, weakness, and trouble walking. Labs showed anemia with Hbg 7.2 down from 9.6 post laparotomy.
- CTA showed hyperattenuation in the left gluteal region localized to the inferior gluteal artery with active extravasation.



## Treatment

- Digital Subtraction Angiography confirmed a pseudoaneurysm of the left IGA
- 2 coils were deployed and reinforced with thrombin.
- No complaints at 2 and 6 week follow ups. **Discussion** 
  - Pseudoaneurysms of the IGA are rare and prone to misdiagnosis increasing the risk of rupture <sup>1</sup>.
  - Possible symptoms include a painful gluteal mass, nerve compression, distal ischemia <sup>4</sup>.
    - Common misdiagnoses include gluteal abscess, sarcoma, lipoma, and hernia <sup>1,4</sup>.
    - Delayed onset of symptoms increases the likelihood of misdiagnosis.
  - Treatments have included surgical arterial ligation, US-directed thrombin injection, or fixation with an endoprosthesis <sup>4</sup>
    - Open surgical approaches can disrupt tamponade, as such endovascular techniques are often preferred.

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