

## Objectives

- To illustrate different imaging findings of acute and delayed presentation of traumatic gluteal artery injury
- To review different endovascular treatment options for gluteal artery injury

### Post traumatic gluteal AVM

Patient: 61 year-old female

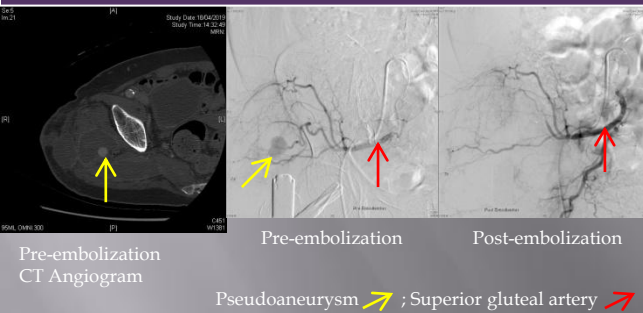
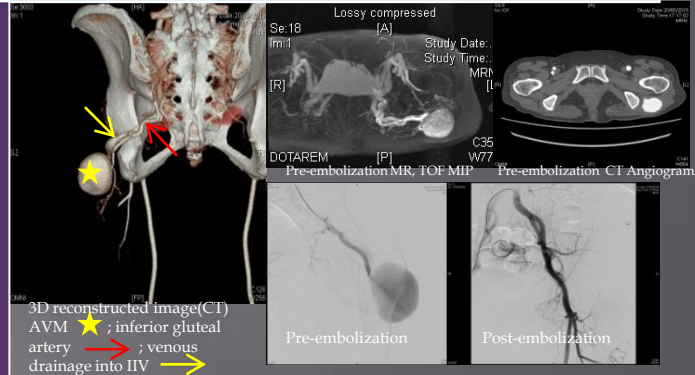
Injury mechanism: Slip and fall

Presenting symptoms: Gradual left gluteal swelling and worsening sciatica 4months after the injury

Imaging findings: A 5cm pseudoaneurysm supplied by left inferior gluteal artery with drainage into left internal iliac vein(IIV)

Embolization: The lesion was occluded by 50% to 20% NBCA glue, with direct external venous compression of outflow using C-clamp at the same time

Outcome: Post-embolization angiogram showed complete sac occlusion and USG showed no residual Doppler flow. No re-bleeding requiring repeat intervention was encountered.



### Superior gluteal artery pseudoaneurysm

Patient: 87 year-old female

Injury mechanism: Slip and fall with right femoral intertrochanteric fracture

Presenting symptoms: Painful gluteal swelling 2 weeks after proximal femoral nail antirotation(PFNA)

Imaging findings: A 1cm right superior gluteal artery pseudoaneurysm with intramuscular hematoma

Embolization: The feeding artery(perforating branch of right superior gluteal artery) was occluded by 20% NBCA.

Outcome: Post-embolization angiogram showed no contrast filling of the pseudoaneurysm. No re-bleeding requiring repeat intervention was encountered.

### Acute gluteal hematoma with active contrast extravasation

Patient: 82 year-old male

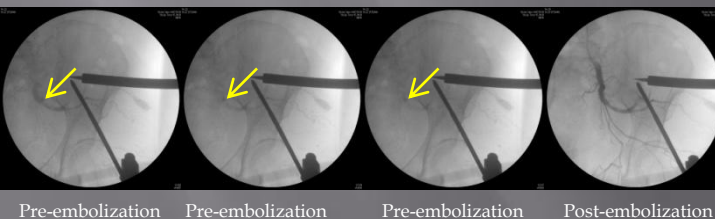
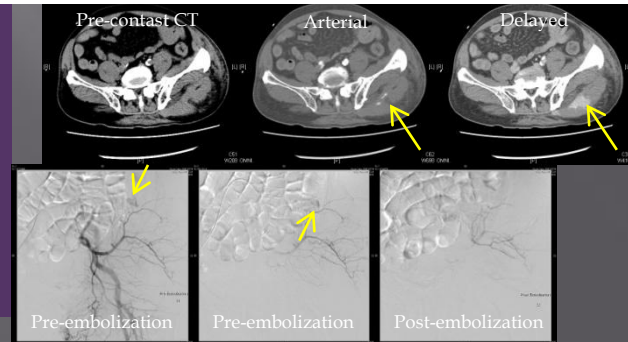
Injury mechanism: Falling off staircase

Presenting symptoms: Hemorrhagic shock

Imaging findings: A 11x4cm acute left gluteal hematoma with active contrast extravasation from left superior gluteal artery

Embolization: Selective Gelfoam embolization was performed to occlude the feeding artery(upper branch of left superior gluteal artery)

Outcome: Post-embolization angiogram showed no active contrast extravasation. No re-bleeding requiring repeat intervention was encountered.



### Superior gluteal artery laceration

Patient: 74 year-old female

Injury mechanism: High-energy road traffic accident

Initial presentation: Unstable comminuted pelvic fractures

Imaging findings: Pre-treatment angiogram demonstrated active contrast extravasation from a lacerated branch of left superior gluteal artery

Embolization: Gelfoam embolization to the lacerated branch of left superior gluteal artery

Outcome: Post-embolization angiogram showed no active contrast extravasation. No re-bleeding requiring repeat intervention was encountered.

## Conclusion

This pictorial review illustrates a spectrum of imaging findings and endovascular treatment options for superior and inferior gluteal artery injury