Abstract:
A 70 years man presented with incapacitating left calf Claudication and swelling in the left gluteal region. Physical examination revealed a 10cm x 8cm palpable pulsatile mass over the left gluteal region with palpable left femoral pulse and absent popliteal pulse and ankle pulses.ABI was 1.01 on right side and 0.6 on left side.C.T angiogram of the lower limbs was performed from lower abdominal aorta to both lower limbs. Left lower limb showed a persistent sciatic artery aneurysm with a hypoplastic superficial femoral artery coursing medially and tapering as it proceeds to popliteal region. The trifurcatin arteries were patent. The arterial system on the right side were unremarkably normal. The PSA was ligated at the distal continuity using a medial popliteal approach. Femoro popliteal bypass using a 6mm PTFE graft was performed to restore distal flow to the lower limb .. Through a separate incision in the left lower abdomen, ligation of posterior division of internal iliac artery done after therapeutic embolisation. Post operatively the pulsatile mass reduced completely. The patient recovered with palpable peripheral pulses. A rare case, which presented as pulsatile gluteal swelling.

Keyword: Claudication, Persistent Sciatic Artery, Femoro popliteal bypass, Embolisation, pulsatile gluteal swelling
Introduction:
The PSA (2,3,4) may be an dominant vessel and supplies blood to the lower limb in cases where the ilio femoral arteries fail to develop. This anomaly may be complete or incomplete (3) to its union with the popliteal artery. Since it is superficial it is prone to trauma hence aneurysmal changes can occur and it can compress the sciatic nerve and results in neurological symptoms. Both open and endovascular treatment (4) have been reported. Since there are only limited case reports we add to the current literature of open repair by ligation of the posterior division of internal iliac and establishing flow to the lower limb with an femoro popliteal bypass.

Management
Patient was evaluated with CT angiogram (1) which revealed a persistent left sciatic artery with saccular aneurysmal dilatation which continuous as popliteal artery and tibial vessels (complete type). The common femoral and profunda were normal. The left superficial femoral artery was hypo plastic and atretic at the distal thigh. The vasculatures on the right side were unremarkable.

Procedure:
using a medial approach (6), left popliteal artery was exposed and found to be non pulsatile with calcification and degenerative changes. Through a vertical arteriotomy, left transpopliteal embolectomy was performed. femoro popliteal bypass using a 6mm PTFE graft was performed to restore distal flow to the lower limb with exclusion of PSA. Through retro peritoneal approach, ligation of the posterior division of internal iliac was done. post op period unevent ful with normal pulse status and the
pulsatile mass becomes non pulsatile with considerable regression. pulse volume recordings and ABI were normal

**Conclusion**

1. High index of suspicion is needed to identify the complications of persistent sciatic artery aneurysm with thrombosis and distal embolisation the can result in limb threatening ischemia.

2. Surgical treatment remains the mainstay of treatment for a complete persistent sciatic artery aneurysm due to anatomic location and the need for revascularisation after aneurysm ligation.

3. Though it is a rare anomaly, persistent sciatic artery can be treated with excellent results once it is recognised.

**Literature Review:**

1. Vascular Disease Managemant 2010;7:E82-E85


5. Current therapy in vascular surgery 4th ed, Ernst, Stanley

6. Rutherford vascular surgery 7th ed, Crononwett