POPLITEAL FOSSA

Dr Kaweri Dande
Resident
Department Of Anatomy
King George’s Medical University, UP, Lucknow
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Learning objectives

• By the end of this teaching session all the students must be able to correctly:
  • Describe and demonstrate the location of the popliteal fossa
  • Enumerate the boundaries, roof and floor of the popliteal fossa
  • Enumerate the contents of the popliteal fossa
  • Describe the relations of the popliteal fossa
  • Draw a labelled diagram of the popliteal fossa
  • Describe the applied anatomy of the popliteal fossa
Preface

• Important transition area
• Between thigh and leg
• Passes structure between two
Location

- Diamond shaped space
- Behind knee joint
- Formed between muscles
- Posterior compartment of thigh and leg

Outline of right popliteal fossa
Boundaries

- Superolaterally: biceps femoris

- Superomedially: semitendinosus, semimembranosus
  supplemented: gracilis, sartorius, adductor magnus

- Inferolaterally: lateral head of gastrocnemius, Plantaris

- Inferomedially: medial head of gastrocnemius
Floor

Above downwards

- Popliteal surface of femur
- Capsule of knee joint
- Oblique popliteal ligament
- Popliteal fascia
- Popliteal muscle
Roof

- Deep fascia (popliteal fascia)

- Continue
  Above fascia lata of thigh

Below deep fascia of leg
Superficial Fascia Over Roof

• Short saphenous vein

• Cutaneous nerve
  - Posterior cutaneous nerve of thigh
  - Posterior division of medial cutaneous Nerve of thigh
  - Peroneal (sural) communicating nerve
Content

- Popliteal vessels and its branch
- Tibial nerve and its branches
- Common peroneal nerve and its branches
- Genicular branch of obturator nerve
- Popliteal lymph nodes
- Fat
Relations In Fossa

• Upper part (medial to lateral)
  Artery, vein, nerve

• Middle part (superficial to deep)
  Nerve, vein, artery

• Lower part (medial to lateral)
  Nerve, vein, artery
Popliteal vessels

- Popliteal artery
  Deepest
  Branches: muscular
cutaneous
genicular

- Popliteal vein
  Continues as femoral vein
  Tributaries: small saphenous
  vein

Variations in branching of popliteal artery:
- ATA → Anterior tibial artery
- PTA → Posterior tibial artery
- OA → Peroneal artery
Nerve

• Tibial nerve (L4, L5, S1, S2, S3)
  • Branches - genicular
    • muscular
    • cutaneous: sural

Common peroneal nerve (L4, L5, S1, S2)
Branches - cutaneous: peroneal communicating
  • lat. cut. Nerve of calf
    • muscular (may be)
    • genicular
Applied Anatomy

- Pulsation Of Popliteal Artery
- Measurement Of Blood-Pressure
- Popliteal Artery Thrombosis
- Graft
- Aneurysm

Pulse recording

BP Recording
There’s no such thing as useless knowledge. You never know what doors it’s going to open up for you.

Ben Carson

Thank you