

# POPLITEAL FOSSA

DESCRIBE POPLITEAL FOSSA UNDER FOLLOWING HEADINGS:  
BOUNDARIES,CONTENT,APPLIED ANATOMY. DESCRIBE ORIGIN, COURSE,  
AND BRANCHES OF POPLITEAL ARTERY (LE)  
POPLITEAL FOSSA -BOUNDARIES AND CONTENTS (SE)  
POPLITEAL ARTERY ORIGIN, TERMINATION AND BRANCHES (SE)

Popliteal fossa is a diamond shaped area behind the knee joint.

## Boundaries of popliteal fossa

Inferolateral- lateral head of gastrocnemius and plantaris

Inferomedial- medial head of gastrocnemius

Superomedial- semitendinosus, semimembranosus, adductor magnus

Superolateral- biceps femoris

Roof- skin, superficial fascia, deep fascia

Floor- popliteal surface of femur, oblique popliteal ligament, popliteus covered with fascia

## Contents-

Popliteal artery

Popliteal vein

Terminal part of short saphenous vein

Tibial nerve

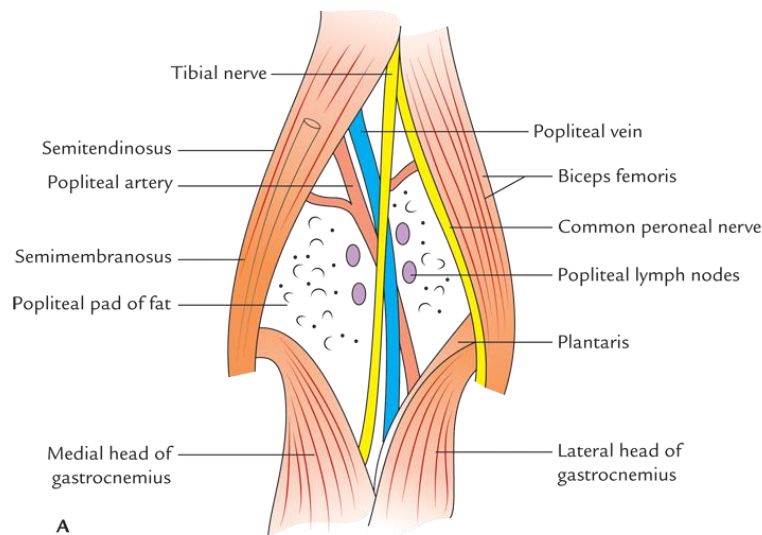
Common peroneal nerve

Posterior cutaneous nerve of thigh

Genicular branch of obturator nerve

Pad of fat

Deep popliteal lymph nodes



### Applied anatomy

Popliteal artery is involved in aneurysms which usually expands posteriorly compressing popliteal vein and tibial nerve

### Popliteal artery

#### Origin-

continues from femoral artery at the junction of middle third and lower third of thigh at hiatus magnus

#### Course-

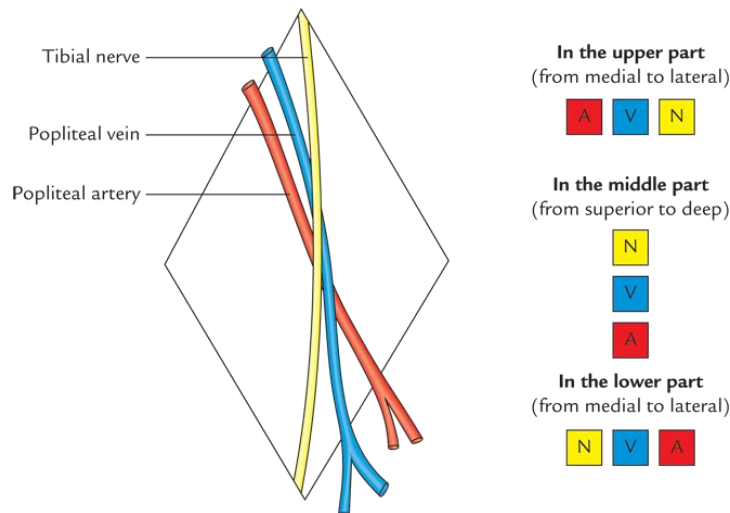
from the hiatus it runs downwards on the popliteal surface of femur, oblique popliteal ligament, popliteus muscle and ends at the distal border splits into anterior tibial and posterior tibial arteries. In its course posteriorly it is related to semitendinosus, semimembranosus, popliteal nerve, popliteal vein, two heads of gastrocnemius

#### Branches-

Cutaneous- skin and fascia

Muscular- muscles of popliteal fossa

Genicular- take part in anastomosis around knee joint. Branches are- superior medial genicular, superior lateral genicular, inferior medial genicular, inferior lateral genicular, middle genicular



### LATERAL POPLITEAL NERVE (SE)

It is terminal branch of sciatic nerve arising at the apex of popliteal fossa.

Its root value is dorsal division of anterior primary rami of L4, L5, S1, S2.

It runs downwards and laterally along the medial margin of biceps femoris to the neck of fibula where it ends under cover of peroneus longus by dividing into two terminal branches superficial peroneal and deep peroneal nerves.

Superficial Peroneal nerve supplies peroneus longus and brevis (lateral compartment).

Deep Peroneal nerve supplies tibialis anterior, extensor digitorum longus, extensor hallucis longus and peroneus tertius anterior compartment).

#### **Branches-**

Cutaneous- sural communicating, lateral cutaneous nerve of calf.

Genicular- superior lateral genicular, inferior lateral genicular, recurrent genicular nerves.

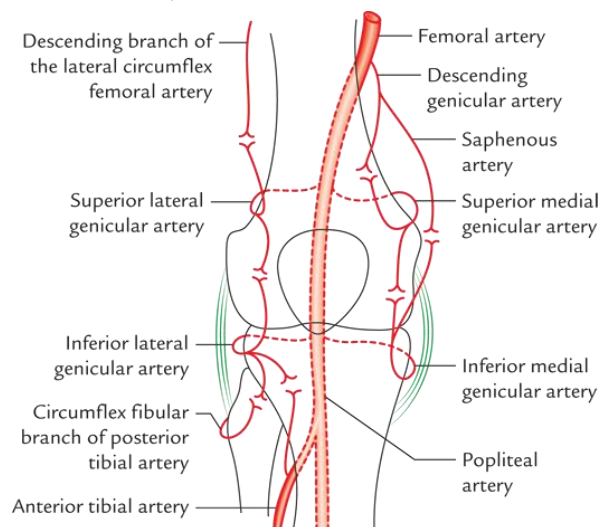
### **ANASTOMOSIS AROUND KNEE JOINT (SE)**

All the five genicular branches (superior medial genicular, superior lateral genicular, inferior medial genicular, inferior lateral genicular, middle genicular) anastomose with each other. Apart from this they anastomose with the following branches

Superomedial- superior medial genicular with descending genicular artery of femoral artery

Superolateral- superior lateral genicular with descending branch of lateral femoral circumflex artery

Inferolateral- inferior lateral genicular with anterior tibial recurrent artery of anterior tibial artery



### **POPLITEAL FOSSA- FLOOR (SA)**

Popliteal fossa is present in the posterior part of knee

From above downwards the floor is made up of-  
popliteal surface of femur

oblique popliteal ligament  
popliteus muscle covered with fascia

### **POPLITEAL ARTERY- BRANCHES (SA)**

Popliteal artery is the continuation of femoral artery and is one of the contents of popliteal fossa.

Branches of popliteal artery -

Cutaneous- skin and fascia

Muscular- muscles of popliteal fossa

Genicular- Branches are- superior medial genicular, superior lateral genicular, inferior medial genicular, inferior lateral genicular, middle genicular. These branches take part in anastomosis around knee joint.

### **FOOT DROP (SA)**

Foot drop is a condition characterized by weakness of dorsiflexion of ankle and toe.

#### **Cause-**

Common peroneal nerve is commonly injured due to fracture of fibula or direct trauma as it winds round the neck of fibula.

#### **Features-**

The foot is plantar flexed and inverted.

Muscles in the anterior and lateral compartment of leg are paralysed due to which dorsiflexion and eversion of foot is lost leading to foot drop.