A STUDY OF POPLITEAL ARTERY AND ITS VARIATIONS
WITH CLINICAL APPLICATIONS

ABSTRACT

The Popliteal artery is the continuation of the femoral artery from the fifth osseo aponeurotic opening in adductor magnus to the femoral intercondylar fossa. Variations in the origin, course and branching pattern of popliteal artery are very common and of interest to anatomists and clinicians. Study of Popliteal artery and its variations will be helpful, before proceeding any diagnostic, interventional and surgical procedures in knee joint. Knowledge of the origin, course, length, diameter, branches, terminal branching pattern and its relations to the adjacent neurovascular structures of popliteal artery is important in orthopaedic and vascular surgeries.

Present study was done to document and provide information of both normal and variant anatomy of Popliteal artery. 25 adult human cadavers (50 Lower limbs) from the Institute of Anatomy, Madras medical College were used for the study.

In the present study it was found that the mean length and diameter of popliteal artery was 18.6mm and 7.8mm respectively. Unusual origin of Inferolateral genicular artery from anterior tibial artery was 2%. Variations of terminal branching pattern of popliteal artery observed were a) High division of popliteal artery was 2%, b) Trifurcation
of popliteal artery was 2%,

(c) Popliteal artery was related superficial to popliteal vein in one of the specimen was 2%

The data obtained will be useful for vascular and orthopaedic surgeons and interventional radiologist.

**Keywords**: Popliteal artery, Femoral artery, Trifurcation.