

A study of variations in the origin of Profunda femoris artery

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Profunda femoris artery, the main artery supplying the thigh, is a branch arising from the femoral artery, 3-4 cm below the inguinal ligament. Knowledge on common variations is important to make procedures like femoral artery catheterization, embolectomy and harvesting myocutaneous flaps safe and easy. Twenty seven formalin fixed cadavers from the Department of Anatomy, Faculty of Medicine, University of Peradeniya, were used and routine dissections were carried out to study the relationship of Profunda femoris artery to the femoral artery. The distance from inguinal ligament, immediately above the common femoral artery, to the origin of Profunda femoris artery was measured using a tape and a string. The Profunda femoris artery originated from the posterolateral

aspect of the common femoral artery in 66% of limbs. The next common origins were from the posterior (15%) and posteromedial (11.3%) aspects. There were few from the lateral aspect (5.6%) and one from the medial aspect (1.9%). The mean distance of origin of Profunda femoris artery was 3.2 cm. In 30.1% it was < 3 cm and in 2 limbs it was less than 1cm. Considerable variations in the origin of the Profunda Femoris artery were noted in our study. In contrast to standard anatomical texts, 33% of the limbs had arteries originating from sides other than posterolateral and 30.1% of arteries originated within 3cm from the inguinal ligament. Knowledge of these variations is important to avoid inadvertent injury to the vasculature during clinical procedures.