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**Original article**

**A Study on the bifurcation of sciatic nerve with its clinical significance**

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**Abstract:**

**Introduction:** The sciatic nerve (SN) arises from the sacral plexus. It usually appears in the gluteal region below the piriformis muscle, passes along the back of the thigh and divides into tibial and the common fibular (peroneal) nerves near the apex of the popliteal fossa. But the point of bifurcation of the sciatic nerve is very much variable.

**Methods:** A study was conducted on the division of the sciatic nerve, in the Department of Anatomy, NRS Medical College, Kolkata, over two years, from December, 2012 to the November, 2014. 50 inferior extremities of 25 cadavers were dissected for this study. The dissections were done while teaching MBBS Students in the said department. The relevant structures were observed minutely and photographs were taken.

**Observations:** Among the fifty inferior extremities, in the sciatic nerve was found to be divided into tibial and common peroneal nerves in different levels (in the pelvis, gluteal region etc.)

**Results:** Out of fifty lower limbs,in forty one cases (82%) the sciatic nerve divided in the back of the thigh, near the apex of the popliteal fossa according to normal anatomy. In nine lower limbs (18% cases), the nerve divided high above, either in the sacral fossa (14% cases) or in the gluteal region (4% cases).

**Conclusion:** This high division of the sciatic nerve may result in nerve injury during deep intramuscular injections in the gluteal region, sciatica, piriformis syndrome etc. So this variation has importance in gross and clinical anatomy.

**Key Words:** Division of Sciatic Nerve, tibial nerve, common peroneal nerve, piriformis muscle