

SCIATIC NERVE DIVISION: ANATOMIC SUPPORT FOR CLINICAL WORK

Dear Sir,

With great interest, we read the article by Prakash et al, entitled "Sciatic nerve division: a cadaver study in the Indian population and review of the literature".⁽¹⁾ A total of 86 inferior extremities were dissected in order to expose the sciatic nerve, including its division into the tibial and common peroneal nerves.

First, we would like to commend the authors for emphasising the issue of sciatic nerve division, which may contribute to the development and clinical picture for several clinical conditions. However, we believe that such a review of the literature should include all relevant references, even the older ones. For instance, the senior author of this letter, Marko Pecina, presented the results of sciatic nerve division and its relationship to the piriformis muscle gained from 130 anatomical specimens of lower extremities back in 1979.^(2,3) At that time, the subdivision level of the sciatic nerve was studied by the naked eye and histologically, but the two observation methods are not entirely in accordance. The sciatic nerve was divided into the tibial and common peroneal nerves before its exit from the pelvis in 28.46% of the specimens. In the remaining examined specimens, the sciatic nerve was divided at the upper part of the posterior compartment of the thigh in 16.15% of the specimens, at the middle part of the back of the thigh in 16.15% of the specimens, and at the lower part of the posterior compartment of the thigh and in the popliteal region, in 39.23% of the specimens. It is important to emphasise that in the case of high-level (intrapelvic) division of the sciatic nerve, one branch of the nerve (almost exclusively peroneal nerve) passed through the piriformis muscle in 21.62% of the specimens.

Unfortunately, no clinical significance of the passage of the peroneal nerve through the piriformis muscle has been mentioned in the article by Prakash et al;⁽¹⁾ such definitive information would be of practical interest for clinicians. The relationship of the sciatic nerve and/or its two major divisions with anatomical structures along its course from the spine to the leg is a subject of continuous interest among clinicians. Huge efforts are invested to clarify this relationship (especially in patients with sciatic tunnel syndromes) by different imaging modalities and by surgery, as a last resort.⁽⁴⁾ Therefore, any modern anatomical study should contribute to such efforts by providing any useful information it can attain.

Yours sincerely,

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Editor's Note: The authors, Prakash et al, have not responded to the above letter.