Entrapment neuropathy of the infrapatellar branch of the saphenous nerve treated by partial division of sartorius

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ABSTRACT
We describe a case of entrapment neuropathy of the infrapatellar branch of the saphenous nerve as it pierces sartorius muscle. This is a rare cause of anteromedial knee pain that is easily overlooked and may be mistaken as arising from other anatomical structures in that region. The pain was successfully treated by partially dividing the sartorius muscle and translocating the nerve away from the site of entrapment. It is important to consider entrapment neuropathy of the infrapatellar branch of the saphenous nerve as a differential diagnosis when assessing a patient with anteromedial knee pain.

Key words: Infrapatellar branch of saphenous nerve, knee pain, nerve entrapment, saphenous nerve, sartorius

INTRODUCTION
Entrapment neuropathy of the infrapatellar branch of the saphenous nerve is a rare and often overlooked cause of pain in the anterior and/or medial aspect of the knee. The condition accounts for <1% of adults presenting with lower extremity pain.1,2 As a result, the symptoms may be mistaken for other more commonly encountered disorders affecting this region, such as patellofemoral pain syndrome, knee joint osteoarthritis, medial meniscus injuries, pes anserine bursitis, and medial collateral ligament injuries.3,4 Failure to recognize this condition can result in delayed diagnosis and the patient undergoing unnecessary investigations or treatment.

We present a case of anteromedial knee pain caused by entrapment of the infrapatellar branch of the saphenous nerve by sartorius. In doing so, we seek to remind the reader of this unusual, but important, cause of anteromedial knee pain and describe its successful treatment by surgical release of the sartorius muscle.

CASE REPORT
A 33 year old male patient presented to our unit complaining of pain in the anteromedial aspect of the right knee. The pain had been ongoing for 4 years, but increasing in severity for the last 8 months. The pain was exacerbated by movement of the knee joint, particularly when getting up from a chair and climbing or descending stairs. The patient described hypersensitivity in the infrapatellar region and was unable to wear tight fitting trousers, as even the slightest touch aggravated the pain. The patient was otherwise fit and well, with no history of trauma or surgery to the knee. Physical examination revealed a positive Tinel’s sign on the medial aspect of the right knee, approximately 6 cm proximal to the joint line. Pressure over this area reproduced the patient’s pain, which he described as “shooting” in nature.