TIBIAL POSTERIOR NERVE INJURY CAUSED BY BELOW-KNEE COMPRESSION STOCKING

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Introduction:

Peripheral mononeuropathies are one of the leading causes of access to health care. The diagnosis and location of peripheral nerve lesions depend mainly on the clinical history and the physical examination but sometimes is not enough.

Case report

70 years female, with type 2 diabetes, using **elastic stockings**, started **pain in the popliteal region**. It was later associated with low back pain and she was medicated with muscle relaxants, analgesics and NSAID.

However, she was observed by the PRM service for maintaining the pain which was **irradiating to the posterior muscles of the leg and to the internal malleolus**.

Ultrasound: Left tibial nerve after infiltration with lidocaine (A1) and the right tibial nerve (A2). At the bottom is visible both internal femoral condyles.

She had apparent pain in the palpation of the semitendinosus tendon but a Piriformis Syndrome was suspected due to muscle contracture and an electro-acupuncture session was performed.

Nonetheless, the patient maintained the pain and an **ultrasound scan** was executed. The **ultrasound probe increased the symptoms when pressing the posterior tibial nerve which was very superficial** (a variant of the normal). This nerve had an **increased dimension** in comparison to the contralateral one and a **positive Tinel's sign**. **A local infiltration was performed with 1.5cc of 1% Lidocaine which lead to the regression of the symptoms.**

Discussion:

There were several factors that contributed to this clinical presentation, first, the characteristics of the **antalgic gait** that was probably the activator factor of the **piriformis muscle syndrome**, second, the **compression** caused by the elastic stockings on the tibial nerve, and finally the predisposition of the nerve to injury, either by its **anatomical variation** or by **type 2 Diabetes Mellitus**.

Conclusion

This case highlights the importance of having a **good clinical history** combined with a **detailed physical examination** associated with the **ultrasound scan** in order to complement the data collected as much as possible to reach the diagnostic key.

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