Neurofibromas of saphenous nerve mimicking thrombophlebitis

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Abstract  Young man aged 25 years complained of persistent pain on the medial side of the lower part of the thigh for 2 months. A cord like structure was palpable with 3 small nodular swelling parallel to the course of the long saphenous vein. Initially he was treated as a case of thrombophlebitis of saphenous vein in a clinic near his home. When the pain persisted after receiving injection heparin therapy, he was referred to the vascular surgery clinic. Duplex scan reported as thrombophlebitis of a vein parallel to the great saphenous vein. We continued the injection heparin and suspected thrombophilia. There were no other known risk factors for thrombosis. The pain persisted, so we excised the cord like structure with nodular swellings and biopsy reported it as neurofibromatosis of the saphenous nerve. Postoperatively the pain subsided dramatically and in the follow up clinic he mentioned about the paresthesias in the distribution area of saphenous nerve.

Case report

Small tumors of the peripheral nerves are often difficult to diagnose and there can be delay in their diagnosis. Peripheral nerve tumors can be easily mistaken for the other pathologies such as thrombophlebitis [1]. Tumors can occur in the superficial and deep nerves. Neurofibromatoses are a diverse group of genetic conditions that share of predisposition to development of tumors of nerve sheath. Cord like structure with nodular swellings in the lower part of the thigh can be easily mistaken for thrombophlebitis [2]. Here we are reporting a case of neurofibroma of the saphenous nerve mimicking thrombophlebitis with severe pain which was relieved after excision.

Young man aged 25 years was admitted with history of severe pain on medial side of the lower part of the thigh for last 2 months. A cord like structure was palpable for a length of 10 cm parallel to the saphenous vein. There were three nodular swellings over this cord. These nodules were very tender to touch and painful. Initially he was he was treated in a clinic near his home with suspicion of thrombophilia (Fig 1). He received injection heparin and as there was no relief of pain he was referred to vascular surgery clinic. Duplex scan was reported as thrombophlebitis of the vein parallel to the saphenous vein in the lower part of thigh. All the other investigations were within normal limits. There were risk factors suggestive of thrombophilia. We considered excisional biopsy of the segment looking like thrombophlebitis as there was unusual pain, tenderness and it was resistant to a course of injection heparin therapy. In the biopsy report it was confirmed as neurofibroma of the saphenous nerve (Fig 2). Postoperatively the pain subsided dramatically. He was walking freely without pain and limping. In the follow up 2 months after surgery he complained of paresthesias (mild) in the distribution area of saphenous nerve.
Fig. A  Course of the saphenous nerve on the medial side of lower 1/3rd of thigh

Fig. B  Neurofibroma in the saphenous nerve on the medial side of lower 1/3rd of thigh

Figs.  Histopathological examination of tumor – Neurofibroma (1–6)
1. Low power view showing the lesion
2. High power view showing the spindle shaped cells with abundant amount of cytoplasm and hyper chromatic nucleus
3. High power view showing hypo cellular areas with spindly shaped cells in matrix
4. High power view with spindle shaped cells with buckling of the nucleus
5. High power view with showing hyalinization