Glomus Tumor of Digital Nerve – A Case Report

Devasena Srinivasan • Srinivasan Rajappa

Received: 14 April 2014 / Accepted: 6 May 2014 / Published online: 22 May 2014
© Society of the Hand & Microsurgeons of India 2014

Dear Sir

32 year old lady was seen for pain in ulnar border of ring finger of 3 years duration. Examination revealed point tenderness and a pea-sized nodule over the ulnar border of the ring finger approximately 1 cm distal to the DIP joint crease. Tapping over the swelling produced parasthesiae. Hematological investigations and plain radiographs were normal. MRI showed lesion arising from the terminal branch of the ulnar digital nerve (Fig. 1). The patient underwent exploration under regional anesthesia and loupe magnification. Intra-operatively, a 0.5 cm×0.5 cm swelling which was greyish blue was seen arising from the terminal branch of the digital nerve (Fig. 2). It was possible to separate this swelling from the nerve branch. Histopathological examination was suggestive of Glomus tumor. The patient was disease free at the end of 1 year follow-up.

Glomus tumor arising from digital nerve is rare as human nerve does not contain glomus bodies. Only three cases have been reported in the literature Mitchell et al. [1]. Mitchell et al. [1] and Kline et al. [2] described glomus tumors arising from the ulnar digital nerve of the thumb. Kim and Jung [3] described similar lesion in ulnar digital nerve of ring finger in the 4th web. All lesions were successfully treated by surgery. Other tumors of digital nerve like Schwannoma [4] have been reported. Differential diagnosis considered in our patient were benign nerve tumors, GCT of tendon sheath and implantation dermoid. The presence of parasthesiae on tapping was more suggestive of nerve tumor. The patient had multiple consultations and treatments before she was seen by us. Excision

D. Srinivasan
Department of Medicine, Sri Ramachandra Medical College,
Chennai, India

S. Rajappa (✉)
Department of Orthopedics, Division of Hand Surgery, Sri
Ramachandra Medical College, B2 clinic, SRMC campus, Porur,
Chennai 600 102, Tamil Nadu, India
e-mail: chickko2002@yahoo.com

Fig. 1 MRI showing swelling in the Ulnar digital nerve of the middle finger

Fig. 2 Intraoperative picture showing the tumor arising from the terminal digital nerve

resulted in complete resolution of symptoms although she had a tender scar for about 3 months post-operatively. This case emphasizes the fact that although glomus tumors are typically sub-ungual, they can also occur in other unusual places like the one described. Biopsy followed by immunohistochemistry analysis would confirm the neural origin. An index of suspicion is necessary to prevent delay in diagnosis.

Conflict of Interest All named authors hereby declare that they have no conflicts of interest to disclose.

References

1. Mitchell A, Spinner RJ, Ribeiro A (2012) Glomus tumor of digital nerve: a case report. *J Hand Surg* 37A:1180–1183
2. Kline SC, Moore JR, de Mente SH (1990) Glomus tumor originating within a digital nerve. *J Hand Surg* 15 A:98–101
3. Kim SW, Jung SN (2011) Glomus tumor within a digital nerve. *J Plast Reconstr Aesthet Surg* 64:958–960
4. Ozdemir O, Kurt C, Coskunol E, Calli I, Ozsoy MH (2005) Schwannomas of the hand and wrist: long term outcomes and review of literature. *J Orthop Surg* 13(3):267–272