Dear Editor

Glomus tumour is a benign vascular hamartoma containing neuromyoarterial cells of normal glomus apparatus first described by Barre and Masson in 1924.[1] The knowledge of this entity and surgical skill is necessary to prevent delay in diagnoses and the treatment. We report a case of subungual glomus tumour successfully excised with transungual approach with partial nail avulsion.

A 58-year-old female presented with pain on the left thumb for 12 years which was gradually increasing in the last 3 years. The pain was worse with exposure to cold water or when she bumped the thumb. There was no other significant medical history.

The general and systemic physical examination was within normal limit. On local examination, there was a violaceous spot on the lunula and longitudinal ridging on the nail plate [Figure 1a]. The love test (applying pressure to the suspected area with a pinhead, which elicits exquisite localised pain) was positive. The posterior-anterior and lateral view of X-ray left hand was normal [Figure 1c]. Magnetic resonance imaging of the left thumb revealed T1 hypointense, T2/T2-FS hyperintense spherical mass showing intense enhancement on the post-contrast study of distal phalanx suggestive of glomus tumour [Figure 1d].

The glomus tumour was excised with distal digital block as anaesthesia. The nail plate was marked with a surgical marker at the location of the tumour. Proximal nail avulsion was done to expose the nail bed tumour. The nail bed was sectioned longitudinally over the tumour. The tumour was very meticulously dissected from the surrounding tissue with blunt curved scissors [Figure 1b]. The incision was closed with 4-0 vicryl suture. The nail plate was put back in place as a physiological covering and secured to lateral and proximal nail folds. The tumour was sent for histopathology which showed glomus tumour [Figure 2]. There is no pain or recurrence at 2 years follow-up.

The classic triad of symptoms of subungual glomus tumour are severe pain, pinpoint tenderness and temperature sensitivity. With the classical triad of symptoms, glomus tumour can be diagnosed clinically. However, the mean duration of symptoms until diagnosis was 4.6 years (range 1 month to 20 years)[2] and 4.5 years (range, 6 months to 10 years).[3] In our patient, it took 12 years for proper diagnosis after visiting many different speciality clinics. Bhaskaranand and Navadgi in their study of 18 patients revealed that the cold sensitivity test was 100% sensitive, specific and accurate;

Figure 1: (a) Violaceous spot suggesting location of glomus tumour with longitudinal ridging, (b) excised glomus tumour kept on the nail plate, (C) X-ray of the left hand, (d) magnetic resonance imaging of the left thumb

Figure 2: Histopathology showing features of glomus tumour (H and E, ×100)
Hildreth’s test was 71.4% sensitive, 100% specific and 78% accurate; and the love pin test was 100% sensitive and 78% accurate.[4]

The only effective treatment of subungual glomus tumour is complete surgical excision. Many surgical approaches have been reported to excise the tumour.[2,3] The standard approach is a direct transungual excision. The different surgical approach for excision of glomus tumour is illustrated in Table 1. Van Geertruyden et al.[10] performed transungual resection in 30 subungual tumours. They reported 6.6% recurrence and a post-operative incidence of nail deformity of 3.3%. Traditionally, a complete nail avulsion is done to expose the tumour. However, in our patient, we did partial nail avulsion to excise the tumour. The transungual approach with partial nail plate removal helps in less post-operative pain and faster healing as the area of surgery is less. It also helps in proper growth of nail as there are no chances of distal nail embedding in the case of proximal nail avulsion as in our case.

Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.

Binod Kumar Thakur, Shikha Verma, Ankit Jitani
Departments of Dermatology and STD and ‘Pathology, North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences, Shillong, Meghalaya, India

Address for correspondence: Dr. Binod Kumar Thakur, Department of Dermatology and STD, North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences, Shillong - 793 018, Meghalaya, India, E-mail: binod.k.thakur@gmail.com

REFERENCES
1. Barre JA, Masson PV. Anatomy-clinical study of certain painful sub-ungual tumors (tumors of neuromyo-arterial glomus of the extremities). Bull Soc Dermatol Syphiligr 1924;31:148-59.
2. Song M, Ko HC, Kwon KS, Kim MB. Surgical treatment of subungual glomus tumor: A unique and simple method. Dermatol Surg 2009;35:786-91.
3. Muramatsu K, Ishara K, Hashimoto T, Tominaga Y, Taguchi T. Subungual glomus tumours: Diagnosis and microsurgical excision through a lateral subperiosteal approach. J Plast Reconstr Aesthet Surg 2014;67:373-6.
4. Bhaskaranand K, Navadgi BC. Glomus tumour of the hand. J Hand Surg Br 2002;27:229-31.
5. Roan TL, Chen CK, Horng SY, Hsieh JH, Tai HC, Hsieh MH, et al. Surgical technique innovation for the excision of subungual glomus tumours. Dermatol Surg 2011;37:259-62.
6. Vasisht B, Watson HK, Joseph E, Lionelli GT. Digital glomus tumours: A 29-year experience with a lateral subperiosteal approach. Plast Reconstr Surg 2004;114:1486-9.
7. Ekin A, Ozkan M, Kabaklioglu T. Subungual glomus tumours: a different approach to diagnosis and treatment. J Hand Surg Br 1997;22:228-9.
8. Fong ST, Lam YL, So YC. A modified periungual approach for treatment of subungual glomus tumour. Hand Surg 2007;12:217-21.
9. Wang PJ, Zhang Y, Zhao JJ. Treatment of subungual glomus tumors using the nail bed margin approach. Dermatol Surg 2013;39:1689-94.
10. Van Geertruyden J, Lorea P, Goldschmidt D, de Fontaine S, Schuind F, Kinnen L, et al. Glomus tumours of the hand. A retrospective study of 51 cases. J Hand Surg Br 1996;21:257-60.

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

White Hair Removal with Follicular Unit Extraction

Dear Editor,

White hairs have proven refractory to any kind of photoepilation technology because of the absence of melanin chromophore in the hair follicle. Many treatment protocols have been tried, but none of them have been effective treatment. We, herein, present a case report of a 40-year-old woman with white hair successfully removed via follicular unit extraction (FUE).

A 40-year-old woman presented for laser hair reduction of excessive hairs on sideburns. On examination, the patient had both black and white hairs with hyperpigmentation present over the sideburns [Figure 1]. She was started on diode laser for black hair and FUE was planned 2 weeks later for the removal of white hair.

Informed consent was obtained. Under aseptic conditions, all hairs were cut to a length of 1–2 mm. Under local anaesthesia and proper magnification, a motorised, sharp-walled, 0.8 mm, serrated punch was used for scoring of follicles [Figure 2]. The follicles were extracted via forceps and inspected for any transection [Figure 3]. Dressing was done for 24 h and a topical antibiotic cream was given for 5 days.

A total of 116 hairs on the right side and 45 hairs on the left side were removed in three sessions at an interval of 4 weeks each [Figure 4]. The transection rate of follicle was kept below 5%. There was no regrowth, visible scarring or pigmentary anomaly present in the treated area after 5 months of the first session.

The present scenario shows an innovative method to eliminate white hair. Because of the absence of any chromophore, photoepilation is not effective in this kind of hair. Many light- and heat-based therapies have been tried for white hair removal such as use of radiofrequency, laser after colouring or use of melanin-encapsulated liposomes before laser therapy. However, none of them have proven to be an effective therapy with results varying 17%–54%.