

Glomus Tumours of the Hand: Why do we Still Miss a Treatable Cause of Severe Fingertip Pain? A Single Surgeon Experience In 56 Cases

Warid Altaf^{1*} and Parag Sancheti²

¹Consultant, Department of Hand and Upper Limb Surgery, Sancheti Hospital, Pune, India

²Dean, Sancheti Hospital, Pune, India

***Corresponding Author:** Warid Altaf, Consultant, Department of Hand and Upper Limb Surgery, Sancheti Hospital, Pune, India.

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Glomus tumours of the hand represent one of the most paradoxical conditions in musculoskeletal practice. They are rare, benign, and usually only a few millimetres in size, yet they produce pain that is severe, persistent, and often disproportionate to their clinical appearance. Despite being described in classical surgical literature many decades ago, glomus tumours continue to be underdiagnosed or diagnosed late, frequently after years of patient suffering. This disconnect between textbook knowledge and real-world practice raises important questions about diagnostic habits, clinical examination, and surgical decision-making in modern hand surgery.

The classical triad of paroxysmal pain, pinpoint tenderness, and cold hypersensitivity remains the cornerstone of diagnosis and has stood the test of time [1,3]. Patients typically describe sharp, lancinating pain that may awaken them from sleep, triggered by minimal contact or exposure to cold. Yet, in daily clinical practice, these symptoms are often attributed to more common or convenient diagnoses such as neuroma, arthritis, nail bed infection, or even psychosomatic pain. The result is a prolonged diagnostic journey marked by multiple consultations, repeated imaging, and escalating frustration. Importantly, this delay is not benign; chronic pain affects sleep, work efficiency, mental health, and overall quality of life.

One reason for delayed diagnosis may be the gradual erosion of careful clinical examination in favour of early imaging. While magnetic resonance imaging has rightly emerged as the most sensitive and specific modality for detecting glomus tumours, imaging should complement-not replace-clinical suspicion. Small lesions, atypical locations, or operator-dependent imaging techniques can still yield false reassurance [3,5]. Simple bedside tests such as Love's test and Hildreth's sign, though often relegated to examination textbooks, remain powerful tools when applied thoughtfully [6]. Their greatest value lies in narrowing diagnostic focus and guiding appropriate imaging, rather than serving as standalone confirmatory tests.

Once diagnosed, surgical excision is definitive and curative in the vast majority of cases. Few procedures in hand surgery offer such immediate and dramatic symptom relief. Patients often describe complete resolution of pain within hours of surgery, underscoring the mechanical and localized nature of the pathology. However, this apparent simplicity is deceptive. The nail unit is a complex anatomical structure, and even minor surgical imprecision can result in cosmetic deformity or functional dissatisfaction. Nail ridging, delayed growth, and hook nail deformity are complications that can undermine an otherwise successful excision and negatively influence patient perception of outcome.

The choice of surgical approach is therefore critical. The transungual approach remains the most commonly employed technique for centrally located subungual tumours, offering excellent exposure and direct visualization [7]. However, it demands meticulous handling

of the nail plate and germinal matrix. Excessive cautery, rough dissection, or inadequate repair of the nail bed can result in permanent nail deformity. Alternative approaches, such as lateral subperiosteal or periungual techniques, are particularly useful for eccentrically located tumours and allow preservation of the nail plate with reduced cosmetic morbidity [7]. The guiding principle across all approaches is complete excision with the capsule under magnification, respecting the surrounding nail bed and matrix.

Recurrence remains a vexing issue and is often mistakenly attributed to tumour aggressiveness rather than surgical factors. Reported recurrence rates in the literature range from 5% to 15% [4,5]. In most instances, recurrence reflects incomplete excision, inadequate exposure, or failure to identify satellite nodules. Preoperative MRI with contrast can aid localisation, especially in recurrent cases, but intraoperative magnification and patience remain indispensable. Importantly, recurrence should not be viewed as a failure if recognised early; re-excision typically results in durable symptom relief and patient satisfaction.

From an educational perspective, glomus tumours offer a valuable lesson for trainees and practicing surgeons alike. They reinforce the enduring importance of listening to the patient, performing a focused examination, and understanding anatomy in detail. In an era increasingly dominated by protocols, imaging algorithms, and time pressures, glomus tumours remind us that diagnostic certainty often begins at the bedside. For young surgeons, they also highlight that “small surgery” demands as much precision and respect for anatomy as more complex reconstructions.

There is also a broader implication for healthcare systems in endemic and non-endemic regions alike. Earlier diagnosis reduces unnecessary investigations, repeated consultations, and prolonged analgesic use. Awareness among primary care physicians, dermatologists, and orthopaedic surgeons can shorten the diagnostic pathway and improve patient experience. Given the rarity of the condition, sharing institutional and single-surgeon experiences through well-documented case series and reflective editorials remains valuable.

In conclusion, glomus tumours of the hand are not difficult to treat, but they are easy to miss. Their continued under-diagnosis reflects gaps in clinical suspicion rather than limitations of technology. Early recognition, judicious use of imaging, and meticulous surgical technique can transform patient outcomes almost instantly. For the hand surgeon, few interventions are as gratifying as relieving years of pain with a precise and well-executed excision. The challenge lies not in treatment, but in remembering to consider the diagnosis [8,9].

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