Case Report
Glomus Tumor- Commonly Missed Tumour Of The Nail Bed
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Abstract

Introduction: Glomus tumor is a neuromyoarterial tumor arising from glomus bodies. It was first described by Wood & later named by Masson. Its a rare benign vascular tumor of the nail bed and are also difficult to diagnose. Most commonly found in the subungual space of the hand. They can either be solitary or multiple. Solitary glomus tumors are more common in women.

Case Report: We describe a case in a 24 years old female patient who presented to us with long standing severe pain in her left ring finger. Clinico-radiologically, patient was initially misdiagnosed as a case of chronic paronychia and was treated conservatively. However her symptoms persists and later surgical excision and biopsy proved it to be a solitary glomus tumor.

Conclusion: Glomus tumor is not so uncommon tumor but most of the time either it is misdiagnosed or overlooked by surgeons and physicians. So one should always rule out glomus tumor in a patient presented with unknown cause of nail bed pain. Early diagnosis and surgical excision is the key for successful treatment of the tumor.

Keywords: Glomus tumor, neuromyoarterial, Finger,Diagnosis, Surgical treatment.

Introduction

It is a rare benign vascular tumor, which presents with cold intolerance, intense paroxysmal pain, and well-defined site of pain at the origin of the tumor[2]. Most commonly occurs in the subungual region[1,3] and arises from glomus bodies which are highly concentrated in the finger and toe tip, especially beneath the nail which play a role in thermoregulation. Usually 75% are found in hands ,65% of which occur in finger tips[2,3]. The glomus tumor is very small and not easily palpable. May be misdiagnosed or diagnosed late.

Plain radiograph does not show any bony involvement until late stage. Tumor can be diagnosed clinically by various clinical tests[4]. Various other types of tumors that may affect the subungual space should always be ruled out such as subungual exostosis, soft-tissue chondroma, hemangioma, epidermal cysts, squamous cell carcinoma and malignant melanoma. However,MRI and histopathology remains the investigation of choice to confirm the diagnosis[5,6]. The treatment of choice is complete surgical excision of the tumor[8-11].

Case Report

A 24 year old female patient, presented with pain and a small barely visible swelling over the fingertip of left ring finger(Fig.1a,b) for 9 months. The patient initially visited to many doctors and was treated conservatively for chronic paronychia in the form of analgesic and multiple courses of antibiotics and antifungals. But her symptoms persists and presented to our orthopaedic OPD. The patient had severe episodes of pain over her fingertip during same period. The
pain was more excruciating during night and any stimulus to the fingertip would exacerbate the pain. The pain was localized. During episodes of pain, patient noticed erythema around the swelling. The pain had limited her daily activities. There was no history of trauma. No relevant past medical history. Systemic examinations was also normal. The examination of fingertip revealed bluish discoloration and discrete swelling. Gentle touch exacerbated the

Discussion

One case was reported by Rijal et al [5], where a female patient was treated for paronychia of great toe, but the patient was actually having glomus tumor. Similarly our case was also misdiagnosed by clinicians as a case of swelling of infective origin and was treated several times with analgesic and multiple courses of antibiotics and antifungals.

Glomus tumors arise from neuromyoarterial glomus bodies and it accounts for 1 to 5% of hand tumors out of which 20 to 75% occurs in subungual area[1,2]. The patient usually present with visible or palpable subungual tender mass and even slight touch to finger pulp would precipitate an excruciating pain[2,3].

Subungual glomus tumor results in nail deformity, change of color beneath the nail, and intolerance to cold[1]. Basically divided into two types – solitary and multiple. Of these, solitary are more common and mainly found in adults[1,2]. The glomus tumor is very small and is not easily palpable. That is why most of the time either it is missed or misdiagnosed by the clinician. Plain X-rays remains irrelevant unless large & long standing cases where it might show some soft tissue changes and cortical erosion[1,6]. We stress the role of MRI in cases of unexplained pain, to rule out glomus tumor. MRI of glomus tumor is isointense with dermis of nail bed in T1 weighted images and homogenous hyperintense in T2 weighted images[6]. Excision of tumor is easy, as it is located over the tip of finger, but Subungal glomus tumors are more difficult to treat, because they are small, and require meticulous surgery for nail preservation.
References


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