



Synchronous subungual glomus tumors in the same finger *

Tumores glômicos subungueais sincrônicos no mesmo dedo

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Abstract: The glomus tumor is an uncommon benign neoplasm of glomus cells. In the majority of the cases it is presented as a solitary painful papule in the subungual region. We report a rare case of a patient with two individual synchronous glomus tumors under the nail bed of the same finger.

Keywords: Glomus tumor; Nail diseases; Nails; Neoplasms, multiple primary; Surgical procedures, minor

Resumo: O tumor glômico é uma neoplasia benigna de células glômicas. Na maioria dos casos se apresenta como uma pápula solitária dolorosa na região subungueal. Relatamos o caso raro de um paciente com dois tumores glômicos sincrônicos sob o leito ungueal do mesmo dedo.

Palavras-chave: Doenças da unha; Neoplasias primárias múltiplas; Procedimentos cirúrgicos menores; Tumor glômico; Unhas

INTRODUCTION

The glomus tumor is an uncommon benign neoplasm of glomus cells, which are modified smooth muscle cells mostly found in arterio-venous anastomoses of the extremities. They represent 1 - 5% of all soft tissue tumors of the hands, are more prevalent in adult women around the 3rd or 5th decade of life and considered a rare entity in childhood¹. Clinically it appears as a small solitary nodule located in the hands in up to 75% of the patients, most of them in the fingers.^{1,2,3} Multiple glomus tumors are present in approximately 10% of the cases, with 90% presenting in the extremities before the age of 20². The classical symptom triad is paroxysmal pain (80%), local hyperalgesia (100%) and temperature sensibility to cold (63%), important diagnostic features in more than 90% of the patients³. The differential diagnoses are painful or bluish/red lesions: implantation cysts, neuromas, subungual horns, foreign bodies, leiomyoma, blue rubber bleb nevus, blue nevi and hematomas. The treatment of choice is surgical excision with classic

and innovative approaches in the literature.^{4,5} Recurrence is not uncommon and is more frequent in skin colored lesions within the nail matrix region.⁶

Opposed to the glomus tumors, glomangiomas are usually multiple, non capsulated and have a histopathologic appearance of hemangioma.

We describe a rare case of 2 synchronous glomus tumors occurring simultaneously under the nail bed of the same finger.

CASE REPORT

We report a case of a 32 years old male patient born in São Paulo - Brazil and resident in Nagoya - Japan. He was admitted to our private clinic with pain in the extremity of the 3rd left finger for 18 months. The symptoms were aggravated by cold exposure and minor traumas to the nail plate. There was no previous history of local injuries or medications in use.

The finger exam revealed through the nail plate two pale blue colored lesions, one central near the

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lunula and the other distal, close to the *hyponychium* (Figure 1). Nail dystrophy was not observed. Love's test was found to be positive by pressuring the tip of a paper clip over each of the blue spots. Pain was alleviated by insufflating a blood pressure cuff at the patient's wrist (positive Hildreth's test). Pain could also be induced with a gloved ice cube placed over the nail plate, which subsided promptly when the finger was submerged in lukewarm water.

Due to the patient's economic limitations, we did not perform any image study prior to the surgery. The nail plate was completely removed after distal block anesthesia with lidocaine and tourniquet placement. We observed two distinct pale blue papules measuring 2 to 3 mm covered by normal nail bed tissue (Figure 2). Using a transversal incision 1 mm distal and parallel to the *lunula*, the proximal lesion was exposed. The distal papule was approached by a longitudinal nail bed incision. The capsulated tumors

were then dissected and removed (Figure 3). Primary nail bed closure with absorbable 6-0 Catgut was realized and the nail plate was placed back as a biological dressing. The histopathological exam confirmed the diagnosis of glomus tumor in both lesions. Two months later the patient was contacted by e-mail and referred normal nail growth and no pain.

DISCUSSION

The subungual glomus tumor is frequently seen as a solitary lesion. In a Brazilian retrospective study of 13 years, all the patients presented with only one lesion.¹ Synchronous lesions are extremely rare and they were reported in adjacent digits, nonadjacent digits, multiple finger joints or in the pulp and subungual region.⁷⁻¹⁰ In our patient, both tumors were simultaneously subungual and, to our knowledge, it may be considered as the first report of such a rare presentation. □



FIGURE 1: Blue lesions under the nail plate



FIGURE 2: Tumors on the nail bed



FIGURE 3: Nail bed after tumors excision

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