

Glomus tumor in the abdominal wall

Tumor glômico de parede abdominal

Kelen Chistina A. Bezzerra; Djulienne Marly K. Reis; Franciele Carla Prichoa

Hospital São Francisco, Concórdia, Santa Catarina, Brazil.

ABSTRACT

The glomus tumor is a rare benign soft tissue tumor. We report a case of a 45-year-old male patient who presented with a painful mass in the abdominal wall. The patient underwent total tumor resection and the anatomical pathology diagnosis was of glomus tumor. The glomus tumor presents differential diagnosis of carcinoid tumor, hemangiopericytoma and vascular leiomyoma.

Key words: glomus tumor; abdominal wall; soft tissue tumors.

RESUMO

O tumor glômico é um tumor raro e benigno de tecidos moles. Relatamos o caso de um paciente do sexo masculino, 45 anos, que apresentava nódulo doloroso na parede abdominal. Foi realizada a ressecção total do tumor; o diagnóstico anatomopatológico foi de tumor glômico. Este apresenta diagnóstico diferencial, com tumor carcinóide, hemangiopericitoma e leiomioma vascular.

Unitermos: tumor glômico; parede abdominal; neoplasia de partes moles.

RESUMEN

El tumor glômico es un tumor raro y benigno de tejidos blandos. Se presenta el caso de un paciente de 45 años, con el hallazgo de un nódulo doloroso en la pared abdominal. Se realizó una resección completa de la lesión y el diagnóstico por anatomía patológica fue de tumor glômico. El diagnóstico diferencial del tumor glômico se plantea con tumor carcinóide, hemangiopericitoma y leiomioma vascular.

Palabras clave: tumor glômico; pared abdominal; tumor de tejidos blandos.

INTRODUCTION

The glomus tumor is a rare and benign soft tissue tumor. It is assumed that it originates from cells similar to the modified

smooth muscle cells from the glomus body⁽¹⁻³⁾. Although it is more commonly found in the subungual region, it can also be found more rarely in places such as trachea, mediastinum, lungs, urinary bladder, skeletal muscle tissue and soft tissues^(1, 4). It occurs, in general, in middle-aged women^(3, 5).

CASE REPORT

A 45-year-old male patient presents painful nodular lesion on the abdominal wall. Total tumor resection was performed, and the material referred to pathological anatomy, whose gross-anatomy revealed a nodular lesion measuring $1.5 \times 1.1 \times 0.6$ cm and microscopy, an encapsulated neoplasm consisting of round and small cells of eosinophilic cytoplasm and uniform nuclei, with no atypia, in solid block or arranged around blood vessels (**Figures 1** and **2**). Immunohistochemical analysis showed that the cells were positive for smooth muscle Actin (1A4), caldesmon (h-CALD) and type IV collagen (CIV 22). The final diagnosis was of glomus tumor.

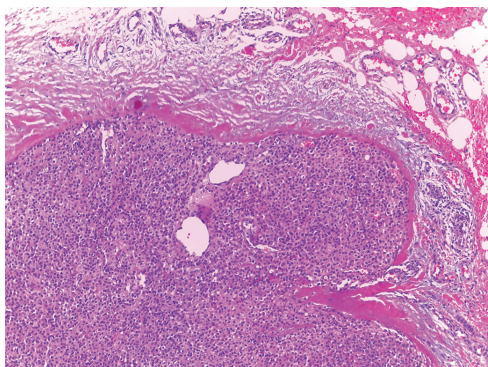


FIGURE 1 – Histopathology, 100× HE: encapsulated lesion composed of small round cells
HE: hematoxylin and eosin stain.

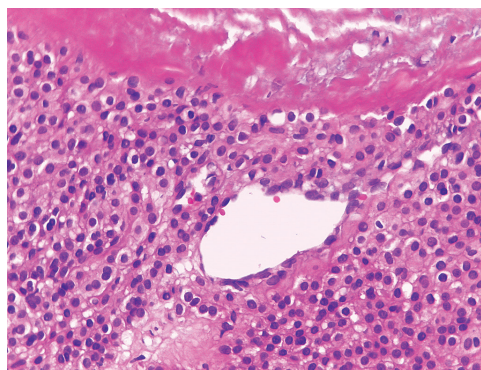


FIGURE 2 – Histopathology, 400× HE: cells with eosinophilic cytoplasm and uniform nuclei arranged around blood vessels
HE: hematoxylin and eosin stain.

DISCUSSION

Glomus tumors account for about 1.6% of all soft tissue neoplasms⁽¹⁾. They are believed to originate from cells similar to the modified smooth muscle cells of a neuromyoarterial glomus, or glomus body, which is a form of arteriovenous anastomosis that may be associated with thermoregulation^(1,5). Surgical resection is usually curative, and recurrence of the lesion is rare⁽³⁾.

REFERENCES

1. Azevedo-Pereira AE, Rigueiro MP, Abrão FC. Tumor glômico endobrônquico com atelectasia de lobo superior direito. *J Bras Pneumol*. 2010; 36(3): 390-3. Available at: <http://dx.doi.org/10.1590/S1806-37132010000300018>.
2. Madhusudhanan D, Jamuna SR, Chandramohan SM, Anbarasu S. A rare submucosal tumour of stomach-glomus tumour: a case report. *Int J Surg Case Rep*. 2015; 11: 64-7. PubMed PMID:25935733.
3. Kim YD, Son JS, Lee JW, Han YJ, Choi H, Jeong YJ. Extradigit glomus tumor causing abdominal pain-a case report. *Korean J Pain*. 2012; 25(2): 108-11. PubMed PMID:22514779.
4. Gutiérrez AP, Pérez MP, Díaz MS, Ablanado P, Herrero AZ, Fresno MP. Tumor glômico gástrico. IV-CVHAP. 2001; pôster-E-039. Available at: <https://conganat.uninet.edu/IVCVHAP/PDF/P039.pdf>.
5. Lee W, Kwon SB, Cho SH, Eo SR, Kwon C. Aglomus tumor of the hand. *Arch Plast Surg*. 2015; 42(3): 295-301. PubMed PMID:26015884.

CORRESPONDING AUTHOR

Kelen Chistina Alves Bezzerra  0000-0001-7914-432X
e-mail: ke_b@zipmail.com.br



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