

Pleomorphic hyalinizing angiectatic tumor arising in the groin: A case report



Chibueze Onyemkpa (MD, MWACS)^{a,*}, Tolutope Oyasiji (MD, MRCS)^b

^a Department of Surgery, Michigan State University, East Lansing, MI, USA

^b Department of Surgical Oncology, Barbara Ann Karmanos Cancer Institute at McLaren Flint, Wayne State University School of Medicine, MI, USA

ARTICLE INFO

Article history:

Received 31 July 2016

Received in revised form 7 September 2016

Accepted 2 October 2016

Available online 8 October 2016

Keywords:

Pleomorphic hyalinizing angiectatic tumors

Soft tissue tumors

PHAT

ABSTRACT

INTRODUCTION: Pleomorphic hyalinizing angiectatic tumors are a rare group of tumors that are currently classified as benign tumors of unknown differentiation. To our knowledge, less than 100 cases have been reported in literature. We report a case that presented in the groin – an uncommon location for this rare tumor.

CASE REPORT: A 75 year-old female presented with a seven-year history of painless right groin mass with rapid growth of 2 year duration. On physical examination, a firm and mobile mass was identified in the right groin. It measured 12 cm × 8 cm, with no clinically palpable lymph nodes. Microscopic and immunohistochemical features were consistent with pleomorphic hyalinizing angiectatic tumor.

DISCUSSION: Pleomorphic hyalinizing angiectatic tumor is a rare soft tissue tumor usually diagnosed using microscopic and immunohistochemical analysis to allow for differentiation from other soft tissue tumors. It is treated by wide local excision.

© 2016 Published by Elsevier Ltd on behalf of IJS Publishing Group Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

Pleomorphic hyalinizing angiectatic tumors are a rare group of tumors first reported 2 decades ago by Smith et al. [1,2] Since its first report, less than 100 cases have been documented [3,4]. We report a case that presented as a groin mass with a view to add to the body of evidence on this rare tumor which will guide accurate diagnosis and management.

2. Case report

A 75 year old African-American female who presented with a seven-year history of painless right groin mass. The mass had progressively increased in size over the years but more noticeably in the last 2 years prior to presentation.

She has a past medical history which is significant for arthritis, hypercholesterolemia and hypertension for which she was on Clonidine, Hydralazine, Lisinopril and Metoprolol. She also has a family history which is significant for stomach cancer in her father, lung cancer in two siblings, colon cancer in a sister, liver cancer in a brother, and skin cancer in another brother.

Pertinent finding on physical examination included a firm mass in the right inguinal region. The mass extended toward the right side of the mons pubis. It measured approximately 12 cm in its longitudinal dimension and 8 cm in transverse dimension. It was mobile – not attached to the overlying skin or the underlying structures, non-pulsatile and was not associated with tenderness or erythema. There was no ulceration or enlarged groin lymph node.

Initial laboratory work up showed normal biochemical and hematological profiles. A computerized tomography scan of the abdomen and pelvis was done and showed a 4.9 cm × 7.2 cm × 10.7 cm partly solid and cystic heterogeneous enhancing subcutaneous mass in the right inguinal region (Fig. 1). The patient proceeded to have a core needle biopsy of the tumor and pathology reported a diagnosis of cellular angiofibroma. In view of her family history and recent rapid increase in size of the tumor, a wide local excision was undertaken to treat the tumor.

Pathologic evaluation of the specimen revealed a tumor measuring 12 cm × 7 cm × 5 cm with cystic spaces measuring up to 7 cm. Sections of the mass showed moderately cellular spindle cell neoplasms arranged in a random pattern with variable sized vessels, both ectatic and small hyalinized vessels set within an edematous focally myxoid stroma and intervening thick collagen bundles. There was sparse mitotic activity. There were areas with giant cells showing marked degenerative atypia (Fig. 2). Immunohistochemistry demonstrated cells positive for CD34, vimentin, estrogen and progesterone receptors (Fig. 3) but negative for desmin, SMA, S100 and CD 117 (Fig. 4). Immunohistochemical staining for STAT6

* Corresponding author.

E-mail address: Chibueze.Onyemkpa@hc.msu.edu (C. Onyemkpa).



Fig. 1. CT image of pelvis showing the lesion in the right groin.

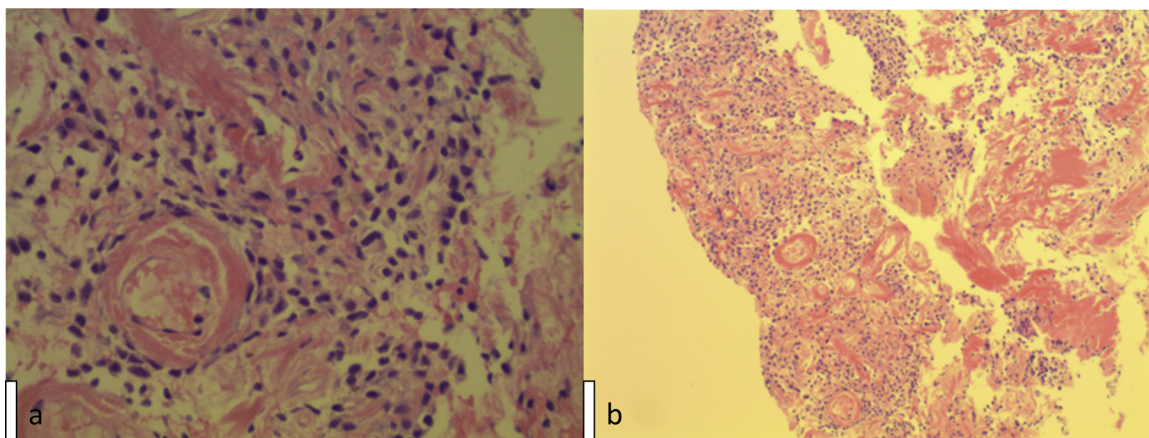


Fig. 2. a) High power view of the tumor. b) Low power view showing low grade spindle cell neoplasm with prominent vascular component and perivascular hyalinization.

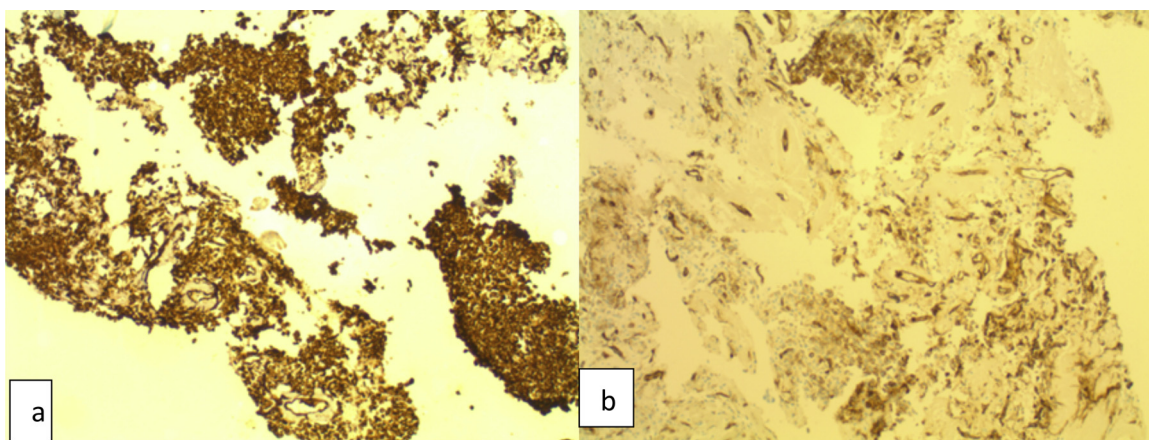


Fig. 3. Immunohistochemistry, (a) Vimentin, positive, (b) CD 34, strong positivity.

was also negative. The final pathologic diagnosis was Pleomorphic Hyalinizing Angiectatic Tumor (PHAT).

3. Discussion

Most described cases of pleomorphic hyalinizing angiectatic tumors have been noted to involve the lower limbs while breast,

upper limbs, buttocks, and trunk are less frequently affected [4,5]. In the above patient, the lesion was located in the groin which is an uncommon location. Demographically, PHAT tumors are more prevalent in older women – as it is the case for this patient.

Histologically, Pleomorphic hyalinizing angiectatic tumors possess dilated, thin-walled vessels lined with a layer of hyaline substance composed mostly of fibrin. These are immersed in a

Download English Version:

<https://daneshyari.com/en/article/8833254>

Download Persian Version:

<https://daneshyari.com/article/8833254>

[Daneshyari.com](https://daneshyari.com)