Proliferating pilomatricoma - Case report*

Rogerio Nabor Kondo1 Rubens Pontello Junior1
Francine Milenkovich Belinetti1 Caroline Cilião1
Vanessa Regina Bulla Vasconcellos1 Dora Maria Grimaldi2

INTRODUCTION
Proliferating pilomatricoma (PP) is a proliferative variant of pilomatricoma, first described by Kaddu S. et al in 1997.1,2 It is considered a benign tumor, but local recurrence may occur if excision is incomplete. Very few cases of this rare neoplasm have been reported in the world. However, to the best of our knowledge, no case had previously been described in Brazil. We report a case of PP in the scalp without evidence of local recurrence one year after surgical treatment.

CASE REPORT
A 60-year-old Caucasian male had a three-year history of an asymptomatic nodular mass on the right temporal region of scalp. The patient reported gradual enlargement, but that quickly increased this size in the previous two months. Dermatological examination revealed the firm mass, red, painless mass, measuring about 7cm x 3.5 cm, near the right supra-aucicular area (Figure 1). The regional lymph nodes were not enlarged.

DISCUSSION
Proliferating pilomatricoma (PP) was diagnosed based on clinical and histopathological findings. Pilomatricoma or calcifying epithelioma of Malherb (CEM), first described in 1880 by Malherb and Chenantais, represents approximately 1% of all benign skin tumors and it is the second most common cutaneous neoplasm in childhood and youth. It is a slow-growing, firm, dermal or subcutaneous neoplasm, usually measuring under 3 cm in diameter. Pilomatricomas are considered benign and rarely recur after surgical excision.3,7 However, cases of CEM with a tendency for focal invasiveness and local recurrence have been reported and designated firstly as aggressive pilomatricomas.1,2
In 1997 Kaddu et al. examined retrospectively cases of CEM and found instances of unusual, architecturally, histopathologic features. On clinical examination, most patients were elderly individuals; the lesions were found to be painless, dome-shaped, solitary, painless, medium- to large-sized nodules on the head and neck regions. Histopathological evaluation revealed relatively large lesions predominantly composed of a lobular proliferations of basaloid cells, exhibiting variable nuclear atypia and mitotic figures, focal areas containing eosinophilic, cornified material, along with shadow cells. Proliferating pilomatricoma was proposed by these authors as a histopathologically distinctive subset of pilomatricoma and it was considered a proliferative variant of CEM. 1,2

Kaddu et al. considered PP a benign tumor because of a histopathological profile that implied benignity: relative symmetry, sharp circumscription, lack

An Bras Dermatol. 2015;90(3 Suppl 1):S94-6.
How to cite this article: Kondo RN, Pontello Junior R, Belinetti FM, Cilião C, Vasconcellos VRB, Grimald DM. Proliferating pilomatricoma – Case report. An Bras Dermatol. 2015;90 (3 Suppl 1):S94-6.

REFERENCES

1. Satoh M, Ookouchi M, Yamamoto T. Photoletter to the editor: Proliferating pilomatricoma with no recurrence during a 3-year follow-up. J Dermatol Case Rep. 2012;6:81-4.

2. Kaddu S, Kerl H. Morphological stages of pilomatricoma. Am J Dermatopathol. 1996;18:333-8.

3. Hernández-Núñez A, Nájera Botello L, Romero Maté A, Martínez-Sánchez C, Utrera Busquets M, Calderón Komáromy A, et al. Estudio retrospectivo de pilomatricomas: 261 tumores en 239 pacientes. Actas Dermosifiliogr. 2014;105:699-705.

4. Hague JS, Maheshwari M, Ryatt KS, Abdullah A. Proliferating pilomatricoma mimicking pyogenic granuloma. J Eur Acad Dermatol Venereol. 2007;21:688-9.

5. Barbosa Júnior AA, Guimarães NS, Sadigursky M, Dantas Júnior RJ, Tavares I, Brandão M. Pilomatrix carcinoma (malignant pilomatricoma): a case report and review of the literature. An Bras Dermatol. 2001:76:581-6.

6. Sassmannshausen J, Chaffins M. Pilomatrix carcinoma: a report of a case arising from a previously excised pilomatricoma and a review of the literature. J Am Acad Dermatol. 2001;44:588-91.

Mailing Address:
Rogerio Nabor Kondo
Rua Paes Leme 1186
Jardim Piranha
8610-810 - Londrina - PR
Brazil
E-mail: rkondo@onda.com.br

Of ulceration in the majority of cases, a fibrous tissue arranged compactly around the neoplasm, and lack of perineural or intravascular involvement by basaloid cells. Current incidence and prevalence is unknown due to the low number of cases reported. However, Satoh et al. compiled the available clinical data from all previously reported cases. Although it was a small series, some aspects are nevertheless noticeable and some clinical information was highlighted: there were 7 males and 8 females (men and women are almost equally affected); patients appeared to be older than those with classical pilomatricoma (ranging from 18 to 88 years); the lesions measured 1.5 to 5.5 cm in diameter, typically larger than in classical CEM (0.5-1.6 cm); nodules situated mostly on the head and neck. Our case entailed the afore mentioned clinical aspects. Differential diagnoses for PP include baso-cell carcinoma, epidermal cyst, pyogenic granuloma, other neoplasms with metrical differentiation, and matrical carcinoma (pilomatrix carcinoma).

Malignant transformation of CEM into a pilomatricoma can be suspected in cases with repeated local recurrences. Hence, theoretically, PP may develop into pilomatricoma.

The treatment of choice for PP is complete surgical lesion resection, as in the present case. The lesion was removed with a 3-mm margin. Local recurrence may occur if excision is incomplete. Our patient showed no signs of local recurrence one year after the excision (Figure 6).