GIANT CELL FIBROBLASTOMA IN A 62-YEAR-OLD PATIENT. A CASE REPORT

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Summary

A case of giant cell fibroblastoma in a 62-year-old male is described. The 2x1.5x1.5 cm tumor was excised from the right supraclavicular area. Histologically, it was typical with exceptions that the typical pseudovascular spaces were seen only focally and the neoplastic cells were closely spatially associated with lymphocytes and plasmocytes. This association was suggestive of emperipolesis. The unusual clinicopathologic features caused some diagnostic difficulty.

Key words: dermatofibrosarcoma protuberans - emperipolesis - giant cell fibroblastoma - myxoinflammatory fibroblastic sarcoma - Rosai-Dorfman disease

Súhrn

Obrovskobunkový fibroblastóm u 62-ročného muža. Kazuistika

Obrovskobunkový fibroblastóm je tumor s typickým výskytom v detskom veku. V histologickom obraze sú preň charakteristické pseudovaskulárne priestory vystlané CD34-pozitívnymi nádorovými fibroblastami, zčasti viacjadrovými („floret" typu). Popísaný je prípad u 62-ročného muža, t.j. podľa literatúry u doposiaľ najstaršieho pacienta. Tumor rozmerov 2x1,5x1,5 cm bol excidovaný zo supraklavikulárnej oblasti. Histologicky boli diagnostické pseudovaskulárne štruktúry slabo vyvinuté a prítomné len fokálne. V tumore bola pozorovaná asociácia nádorových buniek s lymfocytmi a plazmocytmi, ktorá tvorila až obraz emperipolézy a tým lézia napodobňovala iné jednotky s emperipolézou, ako sú Rosai-Dorfmanova choroba a myxoinflamatórny fibroblastický sarkóm. Poznanie spomenutých menej obvyklých klinickopatologických rysov lézie môže byť nápomocné pri diagnóze.

Kľúčové slová: dermatofibrosarcoma protuberans – emperipoléza – obrovskobunkový fibroblastóm – myxoinflamatórny fibroblastický sarkóm – Rosai-Dorfmanova choroba

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INTRODUCTION

Giant cell fibroblastoma (GCF) was described by Shmookler and Enzinger in 1982 (**23**). The tumor is located in dermal and subcutaneous tissue, it has a tendency for local recurrence, and sometimes it transforms to dermatofibrosarcoma protuberans (DFSP) (**5, 6, 12, 24**). GCF shares some morphological (**6, 12, 23, 24**), immunophenotypical (**5**) and genetic features with DFSP (**2, 16, 26**), and therefore both lesions are regarded to be variants of one entity (**6, 12**) or, alternatively, GCF is considered to be juvenile form of DFSP (**24**). GCF occurs usually in children whereas patients with DFSP are predominantly adults. Here, we would like to present unusual GCF in 62-year-old male patient. To our knowledge, a case with age higher than 62 years was not reported before. In addition, the present case showed some features that had caused diagnostic difficulty, such as a paucity of diagnostic pseudovascular spaces, an association of multinucleated cells with inflammatory cells mimicking any other tumor with emperipolesis, and areas resembling pattern of myxoid DFSP (**4**).

MATERIALS AND METHODS

The formalin-fixed tissue of the surgically removed specimen was routinely processed and the sections were stained with hematoxylin and eosin, PAS with and without diastase stains, and alcian blue at pH2.5. For immunohistochemistry, the sections were stained with antibody against vimentin (V9), epithelial membrane antigen (EMA, E29), alpha-muscle-specific-actin (HHF-35), alpha-smooth muscle actin (1A4), desmin (D33), S100 protein (polyclonal), HMB45 (HMB45), leukocyte common antigen (LCA), CD68 (KP1), lysozyme (polyclonal), CD31 (JC70A, 1:50, MW), (all from DakoCytomation, Glostrup, Denmark), CD34 (Qbend 10), cytokeratin AE1/AE3 (both from NeoMarkers, Westinghouse, CA, USA), and D2-40 (Signet, Dedham, MA, USA) using the avidin-biotin peroxidase complex technique. Appropriate controls were used. The clinical information was obtained from the patient's physician.

CASE REPORT

The 2x1.5x1.5 cm dermal-subcutaneous tumor was marginally excised from right supraclavicular region in a 62-year-old male patient. Clinician suspected cutaneous cyst, because the cut surface was fibrous and gelatinous and the lesion was slightly protuberant. Two months after the marginal excision a reexcision was performed. After additional four months no signs of recurrence were found. **Histologically**, the dermal/subcutaneous tumor without ulceration was non-encapsulated and, focally, it showed honeycomb and parallel growth patterns of infiltration into subcutaneous fat (**Fig. 1**).