

LETTER TO THE EDITOR

Disseminated trichoblastomas – successful treatment with CO₂ laser

Editor

Trichogenic adnexal tumours are rare neoplasms, as most of them are benign.¹ First described by Headington in 1970, these tumours have been initially separated into trichoblastic fibromas, trichogenic trichoblastomas and trichogenic myxomas, in respect to the content of epithelial and mesenchymal components in them.² The recently used term ‘trichoblastoma’ was inculcated in 1993 by Ackerman *et al.*, as a summarized concept of all benign cutaneous neoplasms, composited mostly by follicular germinative cells.³ TB can occur at any age, but it is more commonly seen in adults, as no dominated gender distribution is usually associated.^{2,3} Most recent classification divides TB into subcutaneous, pigmented, clear cell, sebaceous and sweat gland differentiation, as the pigmented, or the so-called melanocytic type shows a tendency for malignant transformation, even with less common incidence.^{4,5} However, it should be considered in the differential diagnostic plan, in respect to its aggressive course and specific management.^{2,5}

We present a 31-year-old patient who was consulted on an occasion of multiple tumour-like lesions, scattered on his back, chest, as well as in the retro-auricular area, with unspecified duration. A progressive growing of the lesions with initial symptoms of moderate pain was obtained by the patient since a couple of years ago. The family history was negative for dermatologic diseases, as well as no accompanying diseases were reported. Within the dermatologic examination, multiple disseminated nodules with whitish to pale brownish discoloration and without signs of inflammation, but a tendency to confluence in plaques were clinically established. Hairs, as well as the visible mucosa were without pathological changes (Fig. 1a,b). The performed dermatoscopic examination with polarized light obtained greyish-blue structureless areas and dendritic branching blood vessels (Fig. 1d). Histopathological examination from the conducted biopsy observed an elevated symmetrical lesion, well demarcated from the surrounding tissue, without infiltrative growth, with smooth interface considering the environmental dermis, groups and strands of trichoblasts with peripheral palisade-like order, while necrosis was established only in single trichoblasts. Areas with follicular differentiation, but without artefactually detachment from the surrounding stroma in single nests were obtained focally, while the presence of such

detachment was established around the entire lesion as well as in the surrounding dermis. Cornification in separate nests and small cysts with corneocytes without oedema and inflammatory infiltration in the stroma were also observed, without melanocytes among the tumour trichoblasts. The immunohistochemical study showed Bcl-2 only in single peripheral trichoblasts, without expression in the in-depth cells. The described morphological picture corresponds to trichoblastoma (Fig. 2a,b,c). The additionally performed laboratory blood tests were within the normal range. Patient was subjected to 7 consecutive laser therapy sessions, space of 4 weeks apart in order all lesions to be



Figure 1 (a) Disseminated small-sized brownish nodules without inflammation and tendency to confluence in plaques located in left retroauricular area. (b) Solitary nodule with the same clinical characteristics, located in the breast area. (c) Complete remission of the lesions 7.5 months after the initial procedure with CO₂ laser. (d) Dermatoscopic findings: Greyish – bluish structureless areas and dendritic branching blood vessels.

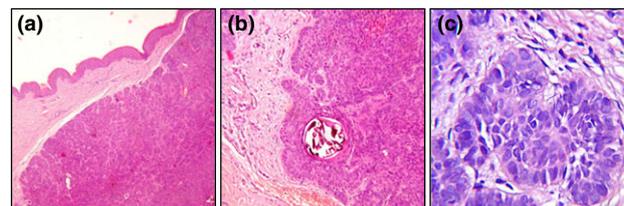


Figure 2 (a) Histological findings: (HE 10 × 10) well-demarcated lesion with artefactually detachment from the surrounding stroma around the entire lesion. (b) Histological findings: (HE 10 × 10) Small cyst containing corneocytes. (c) Histological findings (HE 10 × 20) Trichoblasts with follicular differentiation.

completely removed. Fig. 1c demonstrates the therapeutic result of single lesion removal (Fig. 1a) 6 weeks post a cold laser ablation treatment with power density of 500 to 600 w/per square cm into healthy tissue. Complete remission and satisfactory aesthetic results were achieved (Fig. 1c).

It should be take into consideration that occasionally, some of the typical trichoblastoma lesions may tend to progressively transform into the malignant trichoblastic carcinoma, with a potential to metastasize and with aggressive patterns of local growth.⁵ Different regimens are reported as satisfactory in TB, including curettage and electrodesiccation or surgical excision.⁶ Although complete surgical excision is usually curative, local recurrence could easily occur, however, in the case of incompletely excised lesions, where a re-excision with clean surgical margins should be performed.⁷ Mohs micrographic surgery could be also considered, as the results are usually more satisfactory aesthetically.² Trichoblastomas may be also excised for cosmetic reasons, or if they occur in functionally sensitive areas and inflict functional disorders.^{2,3}

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