

Pigmented nevus expressed histologically as typical basal cell carcinoma

EL-Bardaie AM and Ahmed MM

Department of Oral Pathology, Faculty of Dental Medicine, Al-Azhar University, Cairo, Boy, Egypt
Moahdelrzk72@yahoo.com

Abstract: Background and purpose: It is the purpose of this article to report the first unusual case showing no clinico-pathological correlation. A 53-year old Caucasian man sought treatment with a chief complaint of an itching and a slight bleeding from a common mole on the skin of left side of the nasal bridge, started two months before seeking medical examination. **Material & Methods:** The tumor posed a diagnostic problem by light microscopy, careful search for many serial sections are needed. **Result:** The tumor cells had features characteristic of basal cell carcinoma. **Conclusion:** basal cell carcinoma, even if unusual, should be considered in the differential diagnosis of pigmented skin lesions.

[EL-Bardaie AM and Ahmed MM. **Pigmented nevus expressed histologically as typical basal cell carcinoma.** *J Am Sci* 2016;12(5):104-106]. ISSN 1545-1003 (print); ISSN 2375-7264 (online). <http://www.jofamericanscience.org>. 13. doi:10.7537/marsjas12051613.

Key words: Common mole, basal cell carcinoma.

1. Introduction

Collision tumors are characterized by the coexistence of two cancers in the same anatomical site and its pathogenesis remains controversial. Although uncommon, the association of basal cell carcinoma and melanocytic nevus is the most common among combinations of skin tumors¹. Several studies have demonstrated the benefit of integrating clinical with pathologic information, to obtain a confident diagnosis for melanocytic tumors^{2,3}. The purpose of this article is to report the first unusual case showing no clinico-pathological correlation. The tumor posed a diagnostic problem by light microscopy, but careful search for many serial sections showed that the tumor cells had features characteristic of basal cell carcinoma (BCC).

Case report

A 53-year old Caucasian man sought treatment with a chief complaint of an itching and a slight bleeding from a common mole on the skin of left side of the nasal bridge, started two months before seeking medical examination. The patient stated that the common mole become obvious in late second decade of his life. It was a well-circumscribed brownish-black elevated, verrucous, hairy lesion and measured approximately 5 mm in greatest dimension (Fig 1). The tentative diagnosis was premalignant melanosis and the lesion was totally excised, placed in fixative, and submitted for histopathologic examination. Postoperative healing was excellent after 6- month.

2. Materials and methods

Tissue was fixed in neutral- buffered formalin and routinely processed to paraffin wax, five micron sections were cut for conventional histology and sections were stained with haematoxylin and eosin (H&E).

“Compliance with Ethical Standards”

The patient gave us its approval to do this work .

3. Results

The H&E stained section revealed, islands and sheets of columnar cells which showing deeply staining nuclei with some mitotic figures. The periphery of the cell nests was composed of well polarized cells, that are strongly suggestive of cells of the basal layer of skin (Fig. 2) careful search for nevus cells in many serial sections was not successful.



Fig. (1) Asymmetric pigmented skin tumor composed of one brownish-black plaque near to the nose.

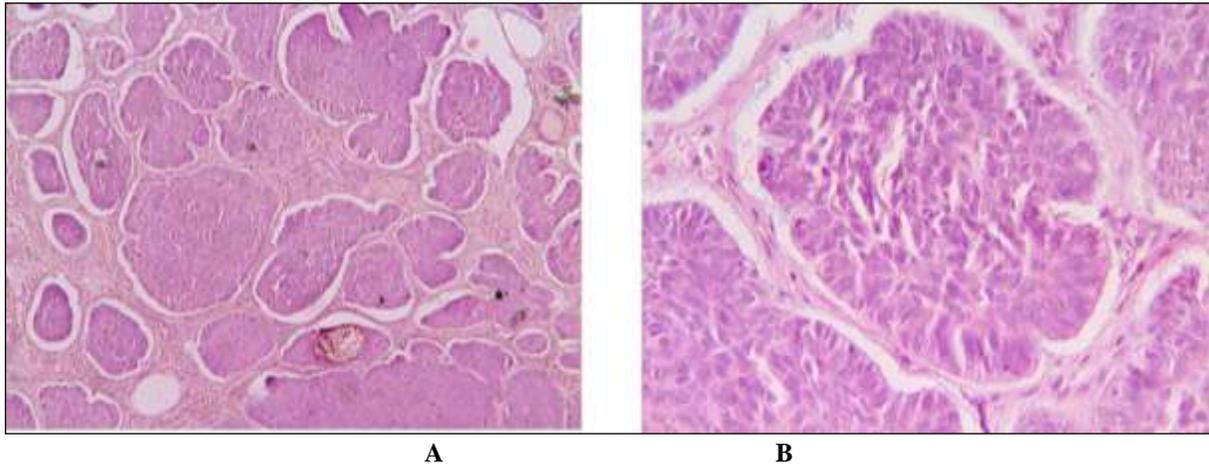


Fig. (2) H&E stained section revealed, histologic characteristics of BCC. In conventional histology, BCC shows nuclear pleomorphism, with some mitotic cells showing atypical mitosis and a loss of palisades, which are usually typical for BCC (A and B; X 40, 200).

4. Discussion

The combination of a melanocytic nevus with other tumor of epidermal or adnexal origin has been described before, but still the co-existence of two different neoplasms within a lesion is still uncommon^{4,5}. Most common combinations basal cell carcinoma and melanocytic nevus or one of them together with a seborrheic keratosis⁶.

To our knowledge the present case represents the only confirmed basal cell carcinoma arising in a pre-existing common mole of the skin. Ancillary studies including immunohistochemistry, comparative genomic hybridization, and fluorescence in situ hybridization has proved promising to help distinguish melanocytic from nonmelanocytic lesions, but sensitivity and specificity of studies are not ideal⁷.

From the clinical history of the patient, malignant change of the pigmented cellular nevus was suspected. Surprisingly, no nevus cells were detected in the tissues and only a clinical basal cell carcinoma was obvious. Generally, the tumor may form a solid mass of cells, in which case it tends to remain localized for a long time, or it may form columns or trabeculae when it shows a much more invasive quality. The former variety is closely allied to congenital abnormalities of skin or “naevi”. The latter is the form that has given the tumor its synonym “rodent ulcer”⁸.

Conclusions

BCC, even if unusual, should be considered in the differential diagnosis of pigmented skin lesions. The diagnosis of BCC requires a good clinical history and an appropriate cutaneous biopsy, allowing an accurate histopathological evaluation. This should be followed by a subsequent appropriate surgical excision.

Conflict of interest

The authors declare that no funding was received for this work and the authors have no special interest of any sort.

References

1. Medeiros PM, Alves NR, Silva CC, Faria PC, Barcaui CB, Piñeiro-Maceira J. Collision of malignant neoplasms of the skin: basosquamous cell carcinoma associated with melanoma. *An Bras Dermatol*. 2015; 90: 39-42.
2. Ferrara G, Argenziano G, Soyer HP, Corona R, Sera F, Brunetti B, et al. Dermatoscopic and histopathologic diagnosis of equivocal melanocytic skin lesions: an interdisciplinary study on 107 cases. *Cancer* 2002; 95:1094–100.
3. Bauer J, Leinweber B, Metzler G, Blum A, Hofmann-Wellenhof R, Leitz N, et al. Correlation with digital dermoscopic images can help dermatopathologists to diagnose equivocal skin tumors. *Br J Dermatol* 2006; 155:546–51.

4. Banerjee SS, Bishop PW, Nicholson CM, Eyden BP. Malignant melanoma showing smooth muscle differentiation. *J Clin Pathol* 1996; 49(11): 950-951.
5. Braun-Falco M. Combined malignant melanoma and basal cell carcinoma tumor of the intermingled type. *J Cutan Pathol*. 2007; 34(9): 731-735.
6. González-Vela MC, Val-Bernal JF, González-López MA, Novell M, Fernández-Llaca H. Collision of pigmented benign tumors: a possible simulator of melanoma. *Acta Derm Venereol*. 2008; 88(1): 92-93.
7. Filiberto A, Fuller C, Rhodes J. Atypical Spitz Nevi: A Case Report and Review of the Literature. *Eplasty*. 2015; 16:15:e40.
8. Fecher LA, Sharfman WH. Advanced basal cell carcinoma, the hedgehog pathway, and treatment options - role of smoothened inhibitors. *Biologics*. 2015 Nov 6; 9:129-40.

4/19/2016