Ulcerated Metatypical Basal Cell Carcinoma of the Forehead

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Abstract

An 81-year-old male presented with an ulcerated lesion on the frontal area. The lesion had started three years before with a small ulceration and was initially treated with a cream of betamethasone and fusidic acid twice daily for several months. The clinical impression was ulcerated basal cell carcinoma (BCC). The histopathological findings after surgical excision were consistent with metatypical or basosquamous carcinoma. The importance of metatypical and basosquamous carcinomas is their potential for a more aggressive behaviour than conventional BCC, both regarding local recurrences and metastatic disease. Clinicians should be aware of the more aggressive behaviour of metatypical BCC since it may influence the protocols of follow-up of these patients to timely detect local recurrences and/or metastatic disease.

An 81-year-old male presented with an ulcerated lesion on the frontal area. The lesion had started three years before with a small ulceration and was initially treated with a cream of betamethasone and fusidic acid twice daily for several months. Later, silver sulphadiazine cream was also applied. No investigations had been performed before the patient presented to the Dermatology Department, namely a biopsy. Examination disclosed an ulcerated lesion with a large depressed central area covered with a haemorrhagic crust and surrounded by an elevated border with a mildly erythematous colour and telangiectasia (Figure 1a).

The clinical impression was ulcerated basal cell carcinoma (BCC). Previous medical history was only remarkable for benign prostate hyperplasia without any other significant comorbidities. Excision of the lesion was performed under local anaesthesia followed by direct closure with tissue expansion (Figures 1b, 1c, and 1d).

Figure 1a: Ulcerated lesion on the frontal area with erythematous telangiectatic border
Histopathological examination of the excision specimen revealed an ulcerated epithelial neoplasm composed of nodules and strands containing medium-sized basophilic cells with scant cytoplasm and round to oval nuclei with retraction artefact and only a focal hint of peripheral palisading.

The centre of the epithelial structures frequently contained larger cells with more abundant eosinophilic cytoplasm, more pleomorphic nuclei and central keratinization (Figures 1e, 1f, 1g and 1h).

These findings were consistent with metatypical or basosquamous carcinoma. The patient had no palpable lymphadenopathy, and an ultrasound of the head/neck, axillary and inguinal regions did not reveal any enlarged lymph nodes. A complete blood count and blood chemistry panel were unremarkable.

The patient has been under follow-up for four months, and no sign of recurrence was detected to date.

The terms metatypical BCC and basosquamous carcinoma are often used interchangeably to describe tumours with features of BCC with foci of neoplastic squamous differentiation, i.e., tumours with intermediate or mixed features of BCC and squamous cell carcinoma (SCC). This is not to be confused with BCC with keratinization or keratotic BCC, which is a rather more common occurrence in comparison to metatypical BCC.
However, some authors reserve the term metatypical BCC to tumours with typical areas of BCC merging with areas containing cells with intermediate features between BCC and SCC, namely a more abundant cytoplasm and higher grade atypia but, notably, no significant keratinisation. For these authors, the term basosquamous carcinoma should be reserved for BCC with differentiation towards areas indistinguishable from SCC, including keratinisation, with intermediate (metatypical) areas between the two [1, 2].

The importance of metatypical and basosquamous carcinomas is their potential for a more aggressive behaviour than conventional BCC, both regarding local recurrences and metastatic disease [3]. A significant proportion of cases of metastatic BCC are found to display features of basosquamous carcinoma [4, 5]. Metatypical BCC is more common among giant non-melanoma skin cancers [5].

Clinicians should be aware of the more aggressive behaviour of metatypical BCC since it may influence the protocols of follow-up of these patients to timely detect local recurrences and/or metastatic disease.

References
1. Carr RA, Taibjee SM, Sanders DSA. Basaloid skin tumours: basal cell carcinoma. Curr Diagn Pathol. 2007; 13: 252-272. https://doi.org/10.1016/j.cdip.2007.05.005
2. Wollina U, Pabst F, Krönert C, Schorcht J, Haroske G, Klemm E, Kittner T. High-risk basal cell carcinoma: An update. Exp Rev Dermatol. 2010; 5(3): 357-368. https://doi.org/10.1586/edm.10.27
3. Martin 2nd RC, Edwards MJ, Cawte TG, Sewell CL, McMasters KM. Basosquamous carcinoma: analysis of prognostic factors influencing recurrence. Cancer. 2000; 88: 1365–1369. https://doi.org/10.1002/(SICI)1097-0142(20000315)88:6<1365::AID-CNCR13>3.0.CO;2-Y
4. Nguyen-Nielsen M, Wang L, Pedersen L, et al. The incidence of metastatic basal cell carcinoma (mBCC) in Denmark, 1997-2010. Eur J Dermatol. 2015; 25(5): 463-468. PMid:26105129
5. Wollina U, Bayyoud Y, Krönert C, Nowak A. Giant epithelial malignancies (Basal cell carcinoma, squamous cell carcinoma): a series of 20 tumours from a single center. J Cutan Aesthet Surg. 2012; 5(1): 12-19. https://doi.org/10.4103/0974-2077.94328 PMid:22557850 PM CID:PMC3339122