Open Access Maced J Med Sci **electronic publication ahead of print,**
published on October 03, 2017 as https://doi.org/10.3889/oamjms.2017.163

ID Design 2012/DOOEL Skopje, Republic of Macedonia
Open Access Macedonian Journal of Medical Sciences.
https://doi.org/10.3889/oamjms.2017.163
eISSN: 1857-9655
Clinical Image

Ulcerated Metatypical Basal Cell Carcinoma of the Forehead

Jose Cardoso[1], Uwe Wollina[2], Georgi Tchernev[3*]

[1]Centro Hospitalar e Universitario de Coimbra EPE, Department of Dermatology and Venereology, Coimbra, Portugal; [2]Krankenhaus Dresden-Friedrichstadt, Department of Dermatology and Venereology, Dresden, Sachsen, Germany; [3]Medical Institute of the Ministry of Interior, Dermatology, Venereology and Dermatologic Surgery; Onkoderma, Private Clinic for Dermatologic Surgery, Dermatology and Surgery, Sofia, Bulgaria

Citation: Cardoso J, Wollina U, Tchernev G. Ulcerated Metatypical Basal Cell Carcinoma of the Forehead. Open Access Maced J Med Sci. https://doi.org/10.3889/oamjms.2017.163

Keywords: basal cell carcinoma; surgery; metatypical; radiation; survival rate.

***Correspondence:** Georgi Tchernev. Medical Institute of the Ministry of Interior, Dermatology, Venereology and Dermatologic Surgery; Onkoderma, private clinic for dermatologic surgery, Dermatology and Surgery. E-mail: georgi_tchernev@yahoo.de

Received: 03-Jul-2017; **Revised:** 13-Jul-2017; **Accepted:** 14-Jul-2017; **Online first:** 03-Oct-2017

Funding: This research did not receive any financial support.

Competing Interests: The authors have declared that no competing interests exist.

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).

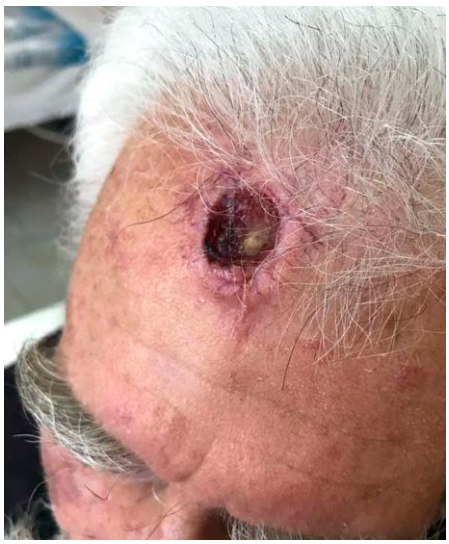

Figure 1a: Ulcerated lesion on the frontal area with erythematous telangiectatic border

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.

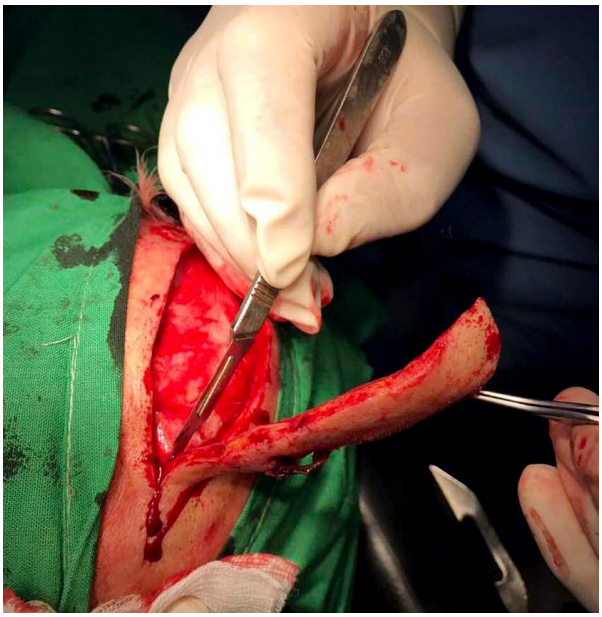

Figure 1b: Excision of the lesion

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).

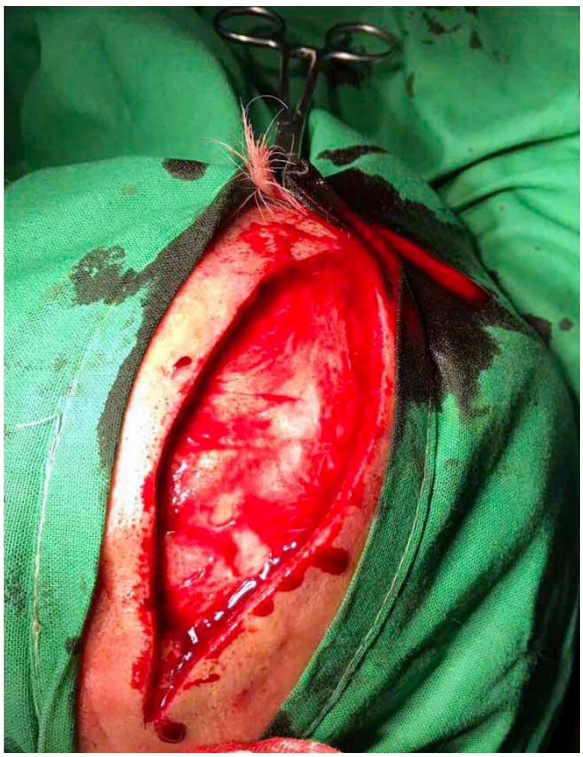

Figure 1c: Resulting surgical defect

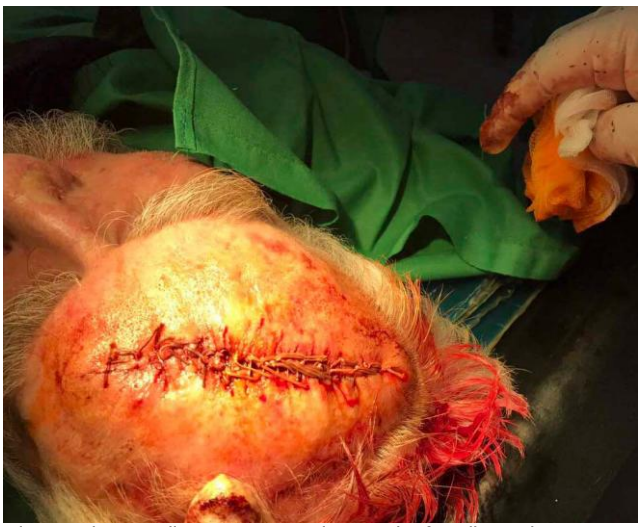

Figure 1d: Immediate post-operative result after direct closure

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.

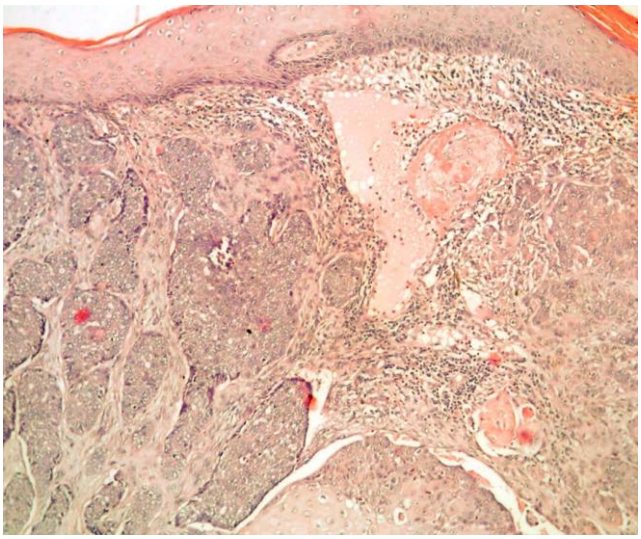

Figure 1e: Epithelial neoplasm in the dermis composed of nodules and strands of basaloid cells (left side), and cells with more abundant eosinophilic cytoplasm and keratinization (right side).

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.

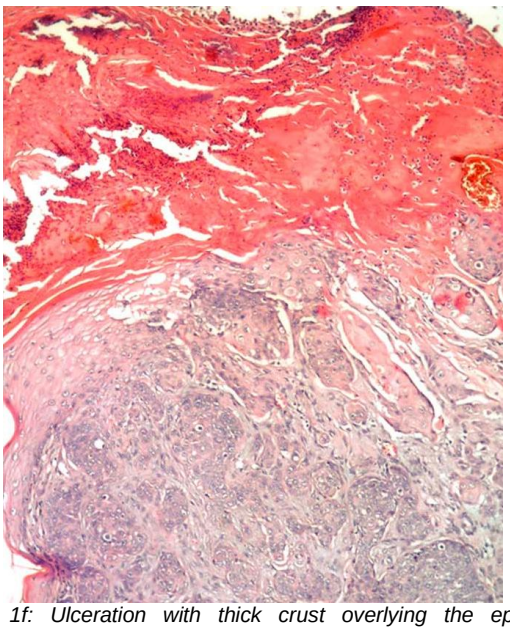

Figure 1f: Ulceration with thick crust overlying the epithelial neoplasm

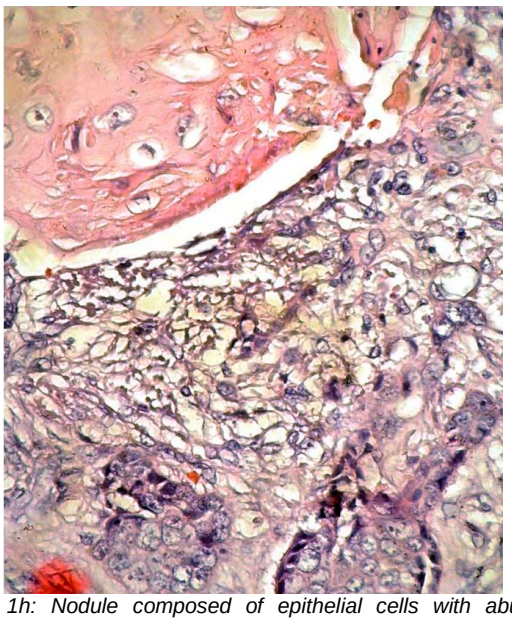

Figure 1h: Nodule composed of epithelial cells with abundant eosinophilic cytoplasm (upper half) and smaller nodules of basaloid cells (lower half)

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].

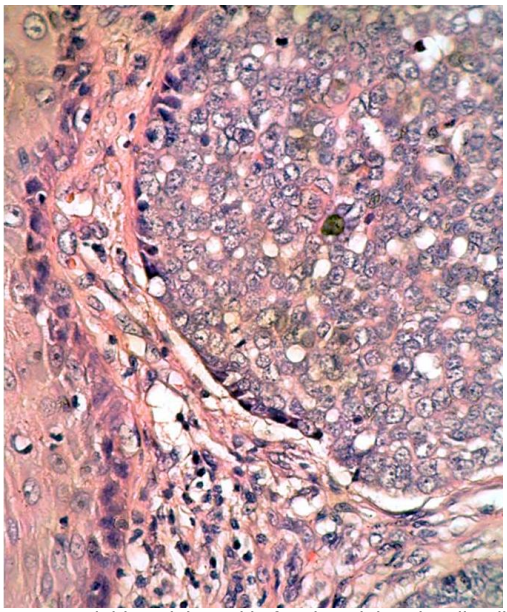

Figure 1g: Basaloid nodules with focal peripheral palisading and retraction artefact

Architecturally, these tumours are often characterized by an infiltrative growth pattern.

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 PMCid:PMC3339122