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Micronodular basal cell carcinomas

Case study

Mr AB developed a firm rough surface on his medial left cheek. With increasing size his doctor organised a biopsy at the site. Histology showed micronodular basal cell carcinoma (BCC). Tumour was excised with a margin of apparently normal skin. Histology showed tumour at all margins.

Some time later the borders of the skin wound revealed small nodules of obvious recurrence. Further surgery demonstrated tumour at all margins, once again. The wound was clinically clear and the area was managed expectantly. Later recurrence at margins was again apparent.

Following an unsuccessful attempt with topical imiquimod, Mr AB was referred for margin control (slow Mohs) surgery. Mr AB had a large area on his medial left cheek with small nodules resembling a field of smooth bumps (Figure 1). He needed excision with no attempt to close the defect until histologic confirmation of clear margins. After two stages of slow Mohs surgery, the defect on his left cheek was significant (Figure 2). This defect was closed with a large trilobed flap repair with a burrows graft (Figure 3).

Histology identified nodular and micronodular BCC in the dermis associated with a light chronic inflammatory infiltrate (Figure 4). Fortunately, Mr AB did not suffer any tumour invasion of the infraorbital nerve or its branches.

One year later there is no evidence of recurrence. The wound has healed reasonably other than a thickened scar near the border between nose and cheek (Figure 5). Mr AB elected not to have a small scar revision at this stage.

Summary of important points

- Micronodular basal cell carcinomas (BCCs) can look very innocuous. They are often large before they are diagnosed and margins are invariably very difficult to determine. Like morphoeic BCCs, they should be regarded as 'tough' and treated with respect.^{1,2}
- Mohs surgery is the benchmark approach for micronodular BCCs on the face.^{1,3,4}
- Imiquimod may be incorrectly considered for micronodular BCCs because they look thin and flat. Imiquimod is contraindicated for micronodular BCCs and is only indicated for superficial BCCs.⁵⁻⁹



Figure 1. Note small, smooth bubbles appearing on cheek and an old linear scar



Figure 2. A large defect remains following histologic confirmation that tumour is cleared

- Proven residual BCC following surgery is not managed by observation. Some quarters hold to a misguided belief that the inflammatory process following surgery will 'kill off' any residual tumour. While the scar is 'watched', BCCs on the face can invade into many structures including nerves.



Figure 3. A trilobed flap did not close all the defect. A burrows graft completed the closure to the superomedial aspect of the defect

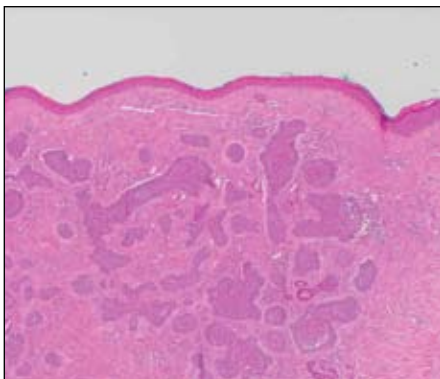


Figure 4. Micronodular and nodular BCC within the dermis
Photo courtesy Melbourne Skin Pathology



Figure 5. 12 months postsurgery

The face is different

From a skin cancer perspective, the face is different in many respects.

Tumours look different: skin on the face is more pilo-sebaceous than elsewhere; the lower nose is especially pilo-sebaceous. This makes tumours often appear more subtle than they actually are. Dermoscopy of face lesions is altered by this pilo-sebaceous character. Pigment networking is often not seen and tumour features are less striking.

Structures are close: nerves, muscle, bone, cartilage, salivary glands and other structures can be very close to the skin surface and can be vulnerable at excision. Proximity also means tumours can invade vital structures if they extend beyond the dermis.

Caution with less invasive treatments: imiquimod and photodynamic therapy (PDT) on the face have special concerns. The therapy can fail while the tumour continues to invade into deeper structures. Sometimes imiquimod or PDT is chosen to 'avoid' surgery only to result in delayed much larger surgery.

Cosmetic features: the face has a myriad of cosmetic zones and features. These lines, borders and structures are always considerations in planning surgery and especially the repair of defects following surgery.¹⁰⁻¹³

Conflict of interest: none declared.

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