BCC metastasis: a very rare sequela of a common disease— a case report documenting lymphatic invasion and a literature review

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DESCRIPTION

Basal cell carcinoma (BCC) is the most common skin cancer worldwide, accounting for approximately 80% of non-melanoma skin cancers. BCC metastasis is an extremely rare sequela with an estimated incidence of 0.0028%–0.5% among all BCC diagnoses.

We describe a case of an 82-year-old man with a history of multiple previous BCC excisions. Comorbidities included chronic obstructive pulmonary disease and transient ischaemic attacks. His medications included aspirin, dipyridamole, lansoprazole, perindopril, salbutamol, fluticasone with salmeterol, amlodipine and simvastatin.

He was referred to the Mohs surgical service at the Mersey Regional Plastic Surgery Unit with a 15 mm sclerosing lesion on his right temple, which had been present for some years. There was no palpable regional lymphadenopathy. Biopsy confirmed morphoeic BCC. The patient underwent Mohs micrographical excision of the lesion with same day reconstruction. For those unfamiliar with the procedure, our standard Mohs technique involves immediate preparation of the specimen with colour coding, embedding in cryomatrix, horizontal sectioning and staining.¹ This allows for same day examination of 100% of the surgical margin by both the Mohs surgeon and a consultant pathologist. This histopathology examination

Figure 2 A photomicrograph showing a frozen section histopathology slide demonstrating basal cell carcinoma clusters invading lymphatic vessels. Local Docs/(<http://casereports.bmj.com/instructions-for-authors/copyright.pdf>).

Figure 1 A photomicrograph showing the main lesion paraffin section x20.

revealed two apparent clusters of BCC lying within a lymphatic channel. The slides were re-examined by three senior histopathologists and the lymphatic invasion confirmed (figures 1 and 2). No basosquamous differentiation was identified. The case was discussed in the regional specialist skin cancer multi-disciplinary team meeting. He underwent adjuvant radiotherapy with 5-year follow-up planned. At 18 months postsurgery, the patient remains well with no evidence of metastasis.

A literature review was undertaken with support from the clinical library service at St Helens and Knowsley Teaching Hospitals National Health Service Trust. This found less than 300 case reports of metastatic BCC.^{2,3} To our knowledge, this is the first published photomicrograph of actual BCC clusters in a vessel lumen. There is evidence that metastatic BCC is linked to poor prognosis with a mean survival of 8 months. Spread is almost invariably lymphatic, with regional lymphadenopathy the most common development. No long-term follow-up was described in the available literature.

Metastatic BCC, although exceedingly rare, is a serious complication that needs to be considered

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during the clinical examination, counselling, education, histopathological examination and follow-up of the patient.

Radiotherapy and Hedgehog signalling pathway inhibitors (eg, vismodegib) have both been used to manage metastatic BCC.

Learning points

- ▶ Metastatic basal cell carcinoma (BCC) is a rare but potentially serious sequela of BCC.
- ▶ Metastatic BCC is associated with poor prognosis.
- ▶ Metastatic BCC should be kept in mind throughout the management especially with regards to clinical examination, histological examination and patient counselling.

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