

Is surgery still the best answer for basal cell carcinoma?

Clinical Question

What are the effects of medical and surgical interventions for basal cell carcinoma (BCC) in immunocompetent adults?

Bottom Line

Surgery remains the most effective treatment modality for BCC in terms of reducing recurrences, and there may be a slightly reduced recurrence rate with Mohs micrographic surgery (MMS) compared to surgical excision (SE). With regard to improvement of participant- and observer-rated cosmetic outcomes, there may be little to no difference between MMS and SE (low-certainty evidence). Radiotherapy is effective but probably worse than surgery in terms of the number of good cosmetic outcomes (moderate-certainty evidence) and is therefore best reserved for tumours not amenable to surgery. Radiotherapy may also lead to increased recurrence compared to SE (low-certainty evidence).

Non-surgical treatments are less effective, but the evidence suggests that recurrence rates are acceptable and they are important options to offer patients. Overall, imiquimod has the best evidence to support its efficacy out of the non-surgical treatments.

Imiquimod probably results in more recurrences than SE (moderate-certainty evidence) and there is probably little to no difference between groups in the number of participant-rated good/excellent cosmetic outcomes (low-certainty evidence). However, imiquimod may increase the number of observer-rated good/excellent cosmetic outcomes compared to SE (low-certainty evidence).

Moderate-certainty evidence indicates that imiquimod probably leads to fewer recurrences than MAL-PDT (a type of photodynamic therapy) and there is probably little to no difference between these treatments in terms of observer-rated good/excellent cosmetic outcomes (participant-rated cosmetic outcomes were not measured in this comparison).

MAL-PDT may result in more recurrences at three years than SE (low-certainty evidence; no useable data for measurement at five years), but probably increases the number of good/excellent cosmetic results (moderate-certainty evidence).

Adverse effects with surgical interventions include wound infections, graft necrosis and post-operative bleeding. Local adverse effects such as itching, weeping, pain and redness occur frequently with non-surgical interventions. Treatment-related adverse effects resulting in study modification or withdrawal occurred with imiquimod and MAL-PDT.

Caveat

The majority of studies have been performed on low-risk histological BCCs, located on low-risk sites, the results of which are probably not applicable to high-risk tumours. Only four studies have looked at high-risk histological subtypes, and three studies looked at BCCs at high-risk facial sites. More studies or subgroup analyses are required for morphoeic tumours.

Context

Basal cell carcinoma (BCC) is a common cancer and the worldwide incidence

is increasing. Although rarely fatal, BCC is associated with significant morbidity and costs. First-line treatment is usually surgical excision, but alternatives are available.

**Cochrane
Systematic
Review**

Thomson J, Hogan S, Leonardi-Bee J, Williams HC, Bath-Hextall FJ. Interventions for basal cell carcinoma of the skin. Cochrane Database of Systematic Reviews 2020, Issue 11. Art. No.: CD003412. DOI: 10.1002/14651858.CD003412.pub3. This review contains 52 trials with a total of 6690 participants.

Pearls No. 668, November 2020, written by Vanessa MB Jordan.

Systematic review link:

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD003412.pub3/full>