

W-plasty in reconstructing post-excision defects of T2 facial skin tumors

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Introduction – Objective:

Skin malignancies are the most common malignancies amongst caucasians¹. The most frequent skin tumors are basal (BCC) and squamous (SCC) cell carcinomas². An estimated 4.2% yearly average increase in cases of both types has been observed through the last decades making certain authors talking about an epidemic of non-melanoma skin cancer (NMCC)³. Facial skin is the most common site of origin of skin cancer for both genders⁴, the excess of BCC and SCC on the face having been estimated more than 20-fold compared to other body units⁵. The incidence of treated NMCC in Australia in 2002 was more than five times the incidence of all other cancers combined⁴. Numerous techniques are in use in the treatment of defects caused by the excision of such tumors. This paper aims at presenting our experience with the use of W-plasty.

Method:

The excision of aT2 BCC or SCC of facial skin along with safe margin usually results in a round defect frustrating the surgeon both practically and the aesthetically. W-shaped incisions are drawn taking into account the RST-lines of the region. The incisions are drawn to create 60 degree triangles. The necessary extra healthy skin is excised. The surface of the required skin excision with W-plasty is less than the one necessarily excised when converting a round defect into an elliptical wound⁶. The greater the drawn angles, the greater the reduction of the tension, though they should not exceed the 60 degrees, since this may cause ischemia⁷. The incisions are meticulously primarily closed. (Photopresentation of the treatment of a T2 SCC of the right cheek)

Results:

The procedure is less traumatic and less time-consuming than procedures involving flaps. The technical points that have to be kept in mind are two: the bases of the drawn triangles have to be perpendicular to an RST-line and the tips of the opposing triangles parallel to an RST-line. If these are not overruled the aesthetic outcome is by far more acceptable than the one caused by other procedures.

Conclusion:

W-plasty, if precisely planned, drawn and executed, is extremely effective in the reconstruction of medium sized defects of the face, as well as aesthetically accepted by any patient.

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