

Efficacy of excisional surgery, curettage and combined curettage and electrodesiccation in treatment of basal cell carcinoma

Iran J Dermatol 2012; 15: 66-67

Dear Editor,

Basal Cell Carcinomas (BCCs) are locally invasive skin cancers which are known as the most frequent malignancy in the white population¹. Exposure to UV radiation, genetic predisposition, increased age, previous radiotherapy, male sex and extensive use of sun beds are among the risk factors². Different treatments have been used for the management of BCCs which include excisional surgery, Mohs micrographic surgery, radiotherapy, electrodesiccation and curettage, photodynamic therapy and Imiquimod³.

This study was a randomized trial, conducted at dermatology clinics of Shiraz University of Medical Sciences and was approved by the Committee of Medical Ethics. During 28 months, we evaluated the outcomes of three methods of treatment of BCC in 55 consecutive patients with pathologically confirmed BCC. Tumors with indications for Mohs surgery were excluded from our study. A total of 69 BCC lesions in 55 patients were examined. The patients' population consisted of 31 men and 24 women with an age distribution of 21 to 84 years (mean age: 57.3 yrs). All the tumors were located on the face and scalp. In our study, the cheeks were the most common site affected by BCC (20%). The majority of the lesions were of small sizes. However, the size of the tumors ranged from 3 mm to 2cm. The patients had no signs of metastasis upon the first clinical examination. More than 65% of the patients had a history of excessive sun exposure. Solar keratosis was present on the face of 29.9% of the patients. Moreover, 59.4% of the BCCs were solid type which was the most common histologic type in our study while the least common type was the pigmented type which comprised 7.2% of the tumors.

We used three methods of treatment of BCCs: surgical excision, curettage alone, and electrodesiccation of the lesions after removing the

tumor mass by a curette. After randomizing the patients, each of them was treated using one of the three mentioned therapies.

Twenty of the tumors were curetted, twenty-four were removed by surgical procedures, and the remainder (25 BCCs) underwent electrodesiccation after curetting the bulk of the lesions. In surgical excision, a 4mm margin was also removed. In curettage of the lesions, a small curette was used to remove small pockets of the tumors. After removing the bulk of the tumors, the base of the lesions were also curetted. The disadvantage of this method was that we were unable to examine the margins of the tumors histopathologically. In electrodesiccation of the lesions, after curetting the bulk of the tumor, the base of the lesion was cauterized superficially. Then, the cauterized areas were curetted and cauterized again. The need for electrodesiccation of the margins has been a matter of controversy but margins of 1-2 mm were also cauterized in our study. This method has the same disadvantage as curettage.

In our Study, the short - term (after 28 months) recurrence rate, regardless of the therapeutic modality, was 11.6% (8 of 69 tumors) and recurrence rates of 20%, 8.3% and 8% were calculated for curettage, surgery and combined curettage and cautery, respectively. Rowe et al, in a review of all studies on the recurrence rate of BCC, reported a cumulative recurrence rate of 4.2% for short-term studies (follow-up less than 5 years), whereas 34 long-term studies (follow-up of 5 years) had a cumulative recurrence rate of 8.7%, or more than 2 times as high as the short-term rate. The five-year recurrence rate was 10.1% after surgical excision and 7.7% after curettage and electrodesiccation⁴. In a retrospective study performed by James et al, a 5-year cure rate of 96.03% was reported after curettage alone⁵. It seems that technique of combined curettage and electrosurgery might be a valuable treatment option in properly selected

primary BCCs. This method is economical, effective, and easy to accomplish.

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Conflict of interest: none to declare

Received: August 23, 2011

Accepted: April 6, 2012

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