Burning Scar Carcinoma (A Report of 11 Cases)
Ye-Xing Tao, Xi-Ti Re, Gong-Li Wang

[Abstract] Carcinoma of eschar is not rarely seen in China, which sum up to 105 cases since Jian-Qiu Sun first reported in 1963. Our department had admitted 11 cases of carcinoma of eschar from January, 1977 to March 1990. Editors discuss about the clinical finding, pathologic type, prevention, early diagnosis, and treatment.

Clinical Information

Eleven cases in this group are consisting of 8 males and 3 females. Age ranges from 27 to 55 years old. Time intervals from get burned to carcinomation are 15 to 52 years. Lesions: 2 cases on upper extremities, 9 cases on lower extremities (which include 2 cases on popliteal fossa, 3 cases on leg, 2 cases on dorsum pedis, 2 cases on heel)

Local findings and pathological types: Mostly are post burning cicaterization, ulcerations that initiate by trauma, friction, pruritus, a progressively and recurrently chronic process. Minimal ulcer is 1.5 x 2.5 cm, maximum is 6 x 11 cm, mostly are vegetating clusters, puruloid, stench, friable granulation, and mostly have firm scars surround lesions with pigmentation. Among 11 cases in this group for pathological biopsy, 10 are squamous cell carcinoma and 1 is verrucoid carcinoma.

Discussion:

Ⅰ Prevention of Carcinoma of Eschar: Time intervals diverse for the canceration of eschar, mostly are chronic process. Chemical and radiant injury would cancerate earlier, from a few months to several years. Although carcinoma of eschar belongs to low malignancy, yet can develop into fascia, muscle, even bone tissue, and might recurrent after surgery with possibility of lymph metastasis. Thus, prevention held a great significance, procedures are:

1. Deep burns, especially lesions on lower extremities joints and feet, should be positively treated to eliminate lesions promptly and to decline eschar granulation. Early debridement and repair should be performed in case of inappropriate treatment results in unstable scars on those parts. [4]

2. Total debridement and skin grafts should be performed earlier in case of ulcerations on scars. Indetermination and delayed treatment should be avoided to prevent canceration.

3. Higher intention to canceration in chemical and radiant injury. Earlier debridement and skin grafts should be performed to avoid scar granulation.

Ⅱ Early diagnosis of carcinoma of eschar: Highly caution for the canceration if ulcerations of the eschar cause by burns under through positive treatment, such as
decumbency and dressing change, for 2-3 months without turning better, even ulcers getting larger. If local part already had more typical pathological changes, such as vegetating cluster ulcerations, stench and etc., then no matter the biopsy can diagnose or not, all should be treated as carcinoma of eschar. One case of burning ulcers with typical pathological changes in this group, twice preoperational biopsy revealed without cancreration, yet the surgery confine still been chosen based on the carcinoma of eschar. All the removal tissue under through pathological exam revealed highly differentiates squamous cell carcinoma.

Ⅲ Treatment of carcinoma of eschar: Surgery is the major treatment, which are local extensive excision and amputation.

All 11 cases in this group underwent local excessive excision because of no reveal of lymph metastasis. Only two cases underwent local cutis graft, while others underwent medium-thickness free graft. Two cases had local recurrent, both at proximal of the original lesion, in 1 to 2 years post-operationally. One of them had lymph and abdominal metastasis, not well outcome underwent chemical and radiant therapy, another one without metastasis thus underwent local extensive excision with grafting, and without recurrence in 3 years follow-up.

The recurrent is often seen in local extensive excision cases, therefore, excision should be extensive and should be confined over 4cm from the neoplasm and the depth should reach fascia or muscular layer, even bone tissue if necessary, especially the central part. Most carcinoma of eschar are chronic, late metastasis and low malignancy, therefore, perform local extensive excision as much as possible. Strictly control the performance of amputation that none in this group under through.

Reference

3. Li Zeng-Dong: Internal Information of Carcinoma of Eschar( 12 cases, including 3 cases reported by Yao Bing-Li) 1974

Department of Editor: Xin Jiang People's Hospital Dept. of Burns and Plastic Surgery