Squamous Cell Cancer Must Always Considered at the Time when Seen Actinic Cheilitis: Case Report

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Abstract

The actinic cheilitis (AC) can be defined as clinical and histological changes induced by sun exposure. It often develops on lower lip in middle-aged people and may turn to squamous cell cancer (SCC) into long-term period. The biopsy is essential for diagnose and treatment. In this case 37 years old female patient applied to dermatologist about two years ago because of the crusty, ulcerated lesion on the lower lip is presented. AC had been diagnosed with biopsy and cryotherapy had been applied twice at intervals. After a rapid growing period of lesion the patient had consulted to plastic surgery clinic. Simple vermilionectomy had been performed and squamous cell carcinoma was reported as pathologically. She followed up for 24 months and determined any evidence of recurrence or metastasis.

Key Words: Actinic cheilitis, squamous cell cancer, vermilionectomy

(Rec.Date: Dec 19, 2013   Accept Date: Feb 13, 2014)

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Introduction

The actinic cheilitis (AC) can be defined as clinical and histological changes induced by sun exposure. It is frequently seen in tropical countries in fair-skinned individuals. It often develops on lower lip in middle-aged people. The superficial changes of the AC may turn to squamous cell carcinoma (SCC) in the long-term period [1-3]. It seems that it is impossible to determine the definite morphologic and biologic characteristics and differentiate thick AC, actinic keratosis and SCC from each other. Dryness, atrophy, crusty, swelling, erythema, ulceration, white and patchy spots must be evaluated carefully by clinicians.

Case

37 years old female patient had admitted to a dermatologist two years ago in another hospital with crusty lesion on her right side of the lower lip. Because of her pregnancy she was treated with antibiotic ointments and had suggested clinical controls. She was treated with kinds of antibiotic ointments approximately for 20 months. After this period, the lesion which located on her right side of the lower lip had healed but at the same time a rapidly growing new lesion had been occurred on her left side of lower lip. Thereupon the patient had been referred to a generic hospital for tissue biopsy and two tissue biopsies had been performed twice. AC was diagnosed pathologically and cryotherapy had been performed twice for treatment. But after the second cryotherapy application a very rapidly growth pattern had been occurred and had referred to our hospital for excision. Big fluffy mass with hemorrhagic and crusts 1 cm rised from the skin extended whole lower lip were present at the admission (Figure 1). She had no palpable lymphadenopathy in his neck region. Although previous biopsies were reported as an AC, SCC was considered firstly and incisional tissue biopsy was repeated again. Incisional tissue biopsy was reported as an AC again (Figure 2). We decided to excise whole lesion because of the mismatch of clinical appearance, response to cryotherapy and biopsy reports. Simple vermilionectomy was performed because of the poor demarcated, large lesion. Then the defect was reconstructed with buccal mucosa advancement by using w-plasty under general anesthesia (Figure 3). The pathology of the lesion was reported as a medium differentiated squamous cell carcinoma with clear margins (Figure 4). After that, re-excision was offered to the patient for border expansion and the neck dissection. But the patient didn't accept the operation and she was referred to radiation oncology for radiation therapy. The
wound on operated lip healed. The reconstruction of vermillion performed successfully (Figure 5). 24 months passed after therapy and she had any metastasis or recurrence during this period. The patient's follow-up is still undergoing.

Figure 1. Tumoral mass on inferior lip, preoperative view.

Figure 2. Hyperkeratosis, acanthosis, papillomatosis formation in epidermis (HE X40).
Figure 3. Intraoperative view of the reconstructed lip defect.

Figure 4. The areas of atypical squamous cells with remarkable nucleolus on the base of the lesion, the focal keratinisation and inflammatory cells (HE X20).
Discussion

The diagnosis of the AC is made by tissue biopsy. 5-fluorouracil, chemical peel, electrocautery, cryotherapy, CO₂ laser vaporization and surgery are the major treatment modalities. The most common preferred treatment modality for the AC is cryotherapy. Cryotherapy is a quite simple procedure but it requires a little experience. Lubritz at all reported the cure rate was 96.2% in 53 cases with the usage of cryotherapy [4]. Electrocautery and the CO₂ laser are other options as non-surgical treatment. Diwan and Skouge had compared the treatment results of the electrocautery and the CO₂ laser and they hadn't found any significant differences between them [5].

Simple vermilionectomy and the usage of the mucosal flaps for the defects are essential applications for large, diffuse as a surgical treatment. In simple vermilionectomy, orbicularis oris muscle is left intact after excision and using the mucosal flaps are recommended to reconstruct the defects. A Kind of flap is defined for vermilion defects [6-9]. We preferred the
Squamous Cell Cancer and Actinic Cheilitis
Case Report

do: 10.5455/medscience. 2014.03.8134

w-plasty for the mucosal defect in our patient (Figure 2). Surgical total excision prevents miss out the diagnosis of SCC, especially in big lesions. Niko at all had performed an important study about AC [10]. Their study had been showed that, different histopathological findings can be determined on vermilion border in large, poor demarcated AC. The findings of the Niko's study are very similar to discussion topic of our case. Comparison between biopsies and the most severe changes on vermillionectomies revealed coincidental changes in ten cases (50%), more severe changes on biopsy occurred in two cases (10%) and in eight cases (40%) the changes on vermillionectomy were more severe. Superficially invasive squamous cell carcinoma was diagnosed in nine cases (45%).

In our case, although multiple incisional biopsies had been performed, SCC can be overlooked in large, poor demarcated AC. For this reason we recommend vermillionectomy for large AC. Vermillionectomy can prevent overlooked diagnosis of the SCC areas, in this regard it avoids to delay in the diagnosis and treatment of cancinoma.

References