#### CASE REPORTOPEN ACCESS



# Actinic Cheilitis- The Unnoticed Inflammatory Disorder

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### ABSTRACT

Actinic Cheilitis is one of the common disease conditions of lip but many of the time it will gounnoticed and undiagnosed. As this is commonly observed among poor population, the serious consideration of this lesion plays an important role. The risk of malignant transformation is comparatively higher in this disease if the prior preventive steps are not taken. The importance of every such lesions or diseases needs to be understood by every practitioner who come across the oral diseases.

**Keywords:** Actinic Cheilitis, Ultraviolent light, Malignancy, Acute, Chronic.

## INTRODUCTION

The chronic inflammatory disorder that affects most commonly the lip is the Actinic Cheilitis (AC) [1]. The synonyms of AC are actinic keratosis, solar cheilosis, sailor's lip and farmer's lip [2]. The location of lip make it get frequently exposed [3]. Actinic cheilitis is one such example for precancerous lesion which is most commonly seen due to excess exposure to the ultraviolent light [4]. The burn resembling disease can transform from premalignant condition to malignant lesion that is the Squamous Cell Carcinoma [2]. The risk of malignant transformation will be more among the smokers and alcohol consumers.5The global prevalence of AC ranges from 15.5% to 43.2% [5]. There are 2 clinical forms of AC: Acute & Chronic variants. Acute form shows erythema, fissures, ulcerations and crusts. The Chronic form shows swelling, loss of the border between the lip mucosa and leukoplastic plaques [5].

#### **Case Report**

A 60 years old female patient reported with the complaint of ulcer over the lower lip for the period of 3 months. Initially it started with the formation of vesicles over the lower lip and later with time the vesicles started rupturing and formed the ulcer over the lower lip. And with the course of time, it was associated with bleeding and aggravated when the lesion gets exposed to the bright sunlight. The increase in the extent of the size of the lesion made excessively painful for the patient to open the mouth. Patient had applied few kinds of home remedies which did not fetch her any relief. On taking history it was informed to us that the patient was a agriculturist and used to work under the bright sunlight for longer time as they were harvesting the crop. Examination revealed well defined solitary ulceration which was associated with inflammation of the lower lip concentrated mainly in the midline region. The labial mucosa was involved and extended about 1 cm away from angle of mouth on both the sides to the midline, lesion was crossing the vermilion border and involving the lower labial mucosa measuring about 2.5 at its greatest dimension. The involved region was having

blood encrustations and also it was associated with the areas of bleeding. Intraorallysolitary ulceration was covered with slough. Palpation revealed the lesion was soft and tender in consistency, evidence of profuse bleeding was observed on mild manipulation. The induration was absent in association with the lesion. Right submandibular lymph nodes were tender 2 in number mobile and soft in consistency. No other changes noted with the involved area and the associated structures. Clinically diagnosed as Actinic Cheilitis of the lower lip was given, differentials were given as allergic contact cheilitis, CheilitisGlandularis and Carcinoma. Patient was treated with the following medications for the relief of the pain as well as the cause of the lesion. Triamcinolone Acetonide Oral Paste, thrice a day for the period of 7 days, Tab Aceclofenac of 100mg was advised to consume if the patient was facing the unbearable pain. Along with the medications patient was instructed to cover the face while especially lip and also to keep it hydrated by applying any of the lip care products. Patient was recalled after 7 days to evaluate the condition. Patient was examined after the period of 10 days, there was complete subsiding of the lesion was observed without any areas of the ulceration, slough or the bleeding areas noted with a minimal of the healing scar noted in the involved region with good prognosis. Patient has followed all the instructions which were given to them and this gives the confirmation of the lesion and to attain to the final diagnosis of Actinic Cheilitis of lower lip.



Image 1: Location of the lesion and its appearance



Image II: Mesio Distal extension



Image III: Extension to the labial mucosa



**Image IV: The encrustations** 



Image V: Healing after 10 days

### **DISCUSSION**

Actinic cheilitis is a lesion which is potentially malignant and most commonly it affects the lips. AC is a degenerative disease which affects mainly the lining epithelium, most commonly caused by the additive effect of solar ultraviolet radiation. The lower lip is most commonly affected region because of the anatomical position and leads to the greater exposure to the solar radiation. It is explained that most of the cases of AC leads to squamous cell carcinoma of the lip, it's become important in creating awareness among the public about the disease [5]. The frequency of exposure to the sun light without adequate and proper protection, the intensity of solar radiation and the skin pigmentation also leads

to the development of this condition [6]. The risk of malignant transformation of AC may even be higher in the presence of other factors, such as smoking and alcohol drinking [5].

It is difficult to predict whether and when actinic cheilitis will leads to the formation of squamous cell carcinoma.7Prevention of actinic cheilitis can be achieved by reducing cumulative exposure to UVB radiation. The use of protective clothing, reduced outdoor activities, and the use of sunscreens should be introduced early in childhood and continued throughout life [7].

Actinic cheilitis preliminarily occurs as an asymptomatic dry and cracked lips affecting most commonly the vermilion of lower lip. It primarily affects the lower lip of male individuals over the age of 50, and its clinical features include dryness, atrophy, scaling, erythema, ulceration, and a poorly demarcated border [8]. The attack frequently begins with a group of vesicles on the vermillion surface of the lower lip, which soon becomes confluent, crusted, and scaling inflammation sometimes with swelling [1].

The diagnosis of such casesis mainly by the clinical examination and the history of exposure to bright sun. In this case the patient was a farmer which causes prolonged exposure to sunlight. As there was no deleterious habit reported and trauma from the opposing tooth was also ruled out, a diagnosis of actinic cheilitis was made [1].

The treatment of AC is considerably difficult due to its position. There is no accurate management for this condition so the optimal approach is considered. Surgical intervention appears a definitive treatment, but it has other adverse effects like scarring and sensory changes or the quality functioning of the lip appears to be altered. Other physical treatments include cryosurgery, electrodessication or laser therapy. Photodynamic therapy demonstrated satisfactory outcomes [8].

Topical treatments include chemo or immunotherapy such as 5-fluorouracil (5-FU), imiquimod, diclofenac or trichloroacetic acid [9]. The follow-up of these individuals and their awareness with respect to precautions and preventive measures with the use of sunscreen and hats are essential [4]. Regardless of the treatment modality used for actinic cheilitis, regular clinical follow-up is essential [7].

#### **CONCLUSION**

Considering all together at a time, the results of this inquiry identified variables like skin colour, gender, patient's educational level and kind of work due to which the duration of sun exposure considered playa a significant role in the prevalence of actinic cheilitis. These findings highlight the need for educational and health intervention strategies. To alert them about the etiology of actinic cheilitis and the preventive measures to control the disease, certain home remedies such as the usage of lip balm with sun protection factor, sunscreen, and a wide edge hat or umbrella. This case report provides the inputs about the risk factors for the development of actinic cheilitis among people who are exposed to the sunlight for prolonged duration. The early diagnosis of the disease, helps in early detection of the condition and prevent the further exacerbation of the disease to the worser condition. The appropriate management also helps in haling of the disease among the population who perform outdoor occupations comparatively higher than other population.

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