

Oral candidiasis - Perleche Mimicking Malignancy

Rahman MH¹, Hadiuzzaman M², Islam N³, Islam MS⁴, Mumu SA⁵, Sharmin A⁶

Abstract

Candida species inhabit the mucosal surfaces of healthy individuals. Major forms of oral candidiasis are pseudomembranous and atrophic form, but chronic hyperplastic candidiasis (CHC) is rarely seen. We encountered a case of whitish plaque with nodule and ulceration. When an intraoral nodule is observed, the possibility of CHC should be taken into consideration. Biopsy of the lesion failed to show any signs of malignancy, and patient responded well to oral fluconazole therapy only.

CBMJ 2014 January: Vol. 03 No. 01 P: 53-55

Keywords: Oral candidiasis, Chronic hyperplastic, Perleche, Malignancy, Oral Fluconazole

Introduction

Angular cheilitis is a common inflammatory condition affecting the corners of the mouth or oral commissures. Depending on underlying causes, it may last a few days or persist indefinitely. It is also called angular stomatitis, cheilosis or perleche. Angular cheilitis is due to dribble of saliva, vitamin deficiencies, proliferation of bacteria, yeasts or virus etc. common and affects children and adults, especially when they are in poor health¹. Predisposing factors include: oral thrush: infancy, old age, diabetes, systemic corticosteroid or antibiotic use, dentures, especially if they are poor fitting, and there is associated gum recession, poor nutrition: coeliac disease, iron deficiency, riboflavin deficiency, systemic illness, particularly inflammatory bowel disease (ulcerative colitis and Crohn's disease), sensitive skin, especially atopic dermatitis. It is made worse by licking the lips. Angular cheilitis may result in the following symptoms and signs at the corners of the mouth: painful cracks / fissures, blisters / erosions / ooze / crusting, redness, bleeding. It may progress to more widespread impetigo or candidal skin infection on the adjacent skin and elsewhere. Culture of swabs taken from the corners of the mouth may reveal: *Candida albicans*, *Staphylococcus aureus*, *Herpes simplex*. Skin biopsy is not usually necessary. In many cases, no treatment is needed and angular cheilitis resolves by itself. Depending on the specific cause, the following treatments may be useful: lip balm or thick emollient ointment, applied frequently, topical

antiseptics, topical or oral antistaphylococcal antibiotic, topical antifungal cream, oral antifungal medication, topical steroid ointment, nutritional supplements¹.

Case report

A man, aged 58, referred to us because of trouble with the right corner of the mouth of three months duration. There was pain with discomfort feeling which result difficulty in taking foods. Clinical examination showed single wedge-shaped, deeply fissured areas of dermatitis having white plaque and nodule. A portion of the process extended over the mucous membranes also from the commissures; it resembled leukoplakia.

1. Prof. Dr. M Hasibur Rahman
Head of the Department of Dermatology & VD
Community Based Medical College, Bangladesh
2. Dr. Md. Hadiuzzaman
Associate Professor of Department of Dermatology & VD
Community Based Medical College, Bangladesh
3. Dr. Nahida Islam
Assistant Professor of Department of Dermatology & VD
Community Based Medical College, Bangladesh
4. Dr. Md. Shahidul Islam
Assistant Professor of Department of Dermatology & VD
Community Based Medical College, Bangladesh
5. Dr. Sabrina Alam Mumu
Assistant Registrar of Department of Dermatology & VD
Community Based Medical College Hospital, Bangladesh
6. Dr. Atia Sharmin
Medical Officer of Department of Dermatology & VD
Community Based Medical College Hospital, Bangladesh

*Address of correspondence

Email : dr_cosmoderma@yahoo.com
Mobile: 01711318709

At first the patient was treated by dermatologist considering it as verruca with salicylic acid & lactic acid resulting contact dermatitis. Then he was referred to ENT specialist where two times biopsy were taken which revealed only dysplastic changes only without malignancy. Since the lesion recurred as the same he was advised to consult with us for further management. The patient was non-smoker, non-diabetic and his liver and renal function test were normal. We considered it as a case of oral candidiasis Perleche and treated with high dose of oral Fluconazole 200mg daily for 2 weeks. At the same time we sent the sample from there for fungal culture. After 2 weeks the patient was found completely cured by anti fungal only and culture report also revealed the growth of *Candida albicans*. There was no recurrence after the follow up period of 3 months.

Discussion

Angular cheilitis is a fairly non-specific term which describes the presence of a lesion in a specific anatomic site (i.e. the corner of the mouth). As there are different possible causes and contributing factors from one person to the next, the appearance of the lesion is somewhat variable. The lesions are more commonly symmetrically present on both sides of the mouth², but sometimes only one side may be affected. In some cases, the lesion may be confined to the mucosa of the lips, and in other cases the lesion may extend past the vermilion border (the edge where the lining on the lips becomes the skin on the face) onto the facial skin. Initially, the corners of the mouth develop a gray-white thickening and adjacent erythema (redness)³. Later, the usual appearance is a roughly triangular area of erythema, edema (swelling) and maceration at either corner of the mouth^{2,3}.

The mucosa of the lip may become fissured (cracked), crusted, ulcerated or atrophied^{2,3}. There is not usually any bleeding⁴. In chronic angular cheilitis, there may be suppuration (pus formation), exfoliation (scaling) and formation of granulation tissue^{2,3}.



Figure-1: showing Perleche at the right angle of mouth



Figure-2: showing recovery after oral anti fungal drug

Candida albicans usually causes superficial infections that are characterised by epithelial hyperplasia as a result of direct mucosal invasion. Most cases of muco-cutaneous candidiasis are superficial, but they can be invasive when they present with systemic manifestations of fever, chills, and malaise⁵. On the other hand, generally the verrucous carcinoma occurs in elderly and tumors of the tongue, gum and buccal mucosa are more common among females⁶. The etiological factor of verrucous carcinoma in the oral cavity is not completely established, although the lesion had been associated with tobacco use and human papilloma virus (HPV)⁷. The role of biopsy is controversial, but it is justifiable if there is suspicion of a malignancy, as in this case, or of any other serious systemic disease, or if there is incomplete response to adequate therapy. The confirmation of a fungal infection can be derived from a histological evaluation. In borderline cases, cultures and cytology can be obtained by brush cytology has an advantage

over biopsy in the diagnosis of mild cases because it is a less invasive procedure. However, the importance of biopsy should not be underestimated, and it can be considered when a suspected fungal or bacterial infection is not responding to treatment. The possibility still remains that the patient might be suffering from a malignancy and an infection at the same time; a biopsy can help rule this out. Even the diagnosis of the verrucous carcinoma may be difficult, requiring, in some cases, several biopsies. This lesion has a special propensity to mimic of benign tumors of the oral cavity. The clinical and histopathological differential diagnosis should include pseudoepitheliomatous hyperplasia, well-differentiated squamous cell carcinoma, chronic candidiasis, and condyloma accuminatum. The definitive diagnosis obviously requires concurrence between the clinician's appreciation of the tumor and the pathologist's identification of the microscopic criteria described by Ackerman^{8,9}. The histopathological diagnosis of verrucous carcinoma cannot be made if superficial biopsy is performed in the oral lesion. Treatment of oropharyngeal candidiasis has mainly been conservative, involving various anti-fungal drugs from intravenous amphotericin to oral fluconazole or ketoconazole to topical nystatin, based on the severity of the disease¹⁰. The duration of treatment can vary from 10 to 30 days depending on the extent of clinical improvement.

Potential reservoirs of infection inside the mouth are identified and treated¹¹. Oral [HYPERLINK "http://en.wikipedia.org/wiki/Oral_candidiasis] candidiasis, especially denture-related stomatitis is often found to be present where there is angular cheilitis, and if it is not treated, the sores at the corners of the mouth may often recur¹². Improved denture hygiene is often required thereafter, including not wearing the denture during sleep and cleaning it daily. Finally, if the condition appears resistant to treatment, investigations for underlying causes such as anemia or nutrient deficiencies or HIV infection¹¹. Identification of the underlying cause is essential for treating chronic cases. Most cases of angular cheilitis respond quickly when antifungal

treatment is used¹³. In more long standing cases, the severity of the condition often follows a relapsing and remitting course over time¹⁴. The condition can be difficult to treat and can be prolonged.

Conclusion

Although angular stomatitis or perleche is a common disease but may sometimes become confusing and doubtful in decision making. Keeping in mind all possibilities we can start even noninvasive treatment before going for the invasive procedure for the patient management.

References

1. Amanda Oakley, Dermatologist, Hamilton, New Zealand; Facts about the skin from DermNet New Zealand Trust. Topic index: created 2010, last update 29 Dec 2013;
2. Scully, Crispian (2008). Oral and maxillofacial medicine : the basis of diagnosis and treatment (2nd ed.). Edinburgh: Churchill Livingstone. pp. 147-148.
3. Park, KK; Brodell, RT, Helms, SE (June 2011). "Angular HYPERLINK "http://www.skinandallergynews.com/fileadmin/qhi_archive/ArticlePDF/CT/087060289.pdf"cheilitisHYPERLINK "http://www.skinandallergynews.com/fileadmin/qhi_archive/ArticlePDF/CT/087060289.pdf", part 1: local etiologies.". *Cutis; cutaneous medicine for the practitioner* 87 (6): 289-95.
4. Wood, NK; Goaz, PW (1997). Differential diagnosis of oral and maxillofacial lesions (5th ed.). St. Louis [u.a.]: Mosby. pp. 64, 65, 85
5. Henry LR, Packer MD, Brennan J. Airway-obstructing laryngeal candidiasis in an immunocompetent host. *Otolaryngol Head Neck Surg.* 2005;133(5):808-810.
6. B. B. Koch, D. K. Trask, H. T. Hoffman, et al., "National survey of head and neck verrucous carcinoma," *Cancer*, vol. 92, pp. 110-120, 2001.
7. E. Eisenberg, B. Rosenberg, and D. J. Krutchkoff, "Verrucous carcinoma: a possible viral pathogenesis," *Oral Surgery Oral Medicine and Oral Pathology*, vol. 59, no. 1, pp. 52-57, 1985.
8. Spiro RH. Verrucous carcinoma, then and now. *American Journal of Surgery.* 1998;176(5):393-397.
9. Ackerman LV. Verrucous carcinoma of the oral cavity. *Surgery.* 1948;23(4):670-678.
10. Nunes FP, Bishop T, Prasad ML, Madison JM, Kim DY. Laryngeal candidiasis mimicking malignancy. *Laryngosco*" Samaranayake, LP (2009). *Essential microbiology for dentistry* (3rd ed.). Elsevier. pp. 296, 297
11. Peter C. Schalock, M.D., Jeffrey T. S. Hsu, M.D., Kenneth A. Arndt (ed.). *Primary Care Dermatology*. Lippincott Williams & Wilkins, 2010. p. 265.
12. Greenberg MS, Glick M (2003). *Burket's oral medicine diagnosis & treatment* (10th ed.). Hamilton, Ont.: BC Decker. pp. 97,98"
13. Neville BW, Damm DD, Allen CA, Bouquot JE. (2002). *Oral & maxillofacial pathology* (2nd ed.). Philadelphia: W.B. Saunders. pp. 100, 192, 196, 266.