

# Oral Candidiasis of palate: A Case Report

Dr. Jogender Kumar Jangra<sup>1</sup>, Dr. Shalini Dhiman<sup>2</sup>

<sup>1</sup>MDS (Oral & Maxillofacial Surgery), Consultant Oral Surgeon at Shri Ganesh Dental Clinic and Maxillofacial Centre Rohtak Haryana

<sup>2</sup>BDS (Consultant Dental Surgeon), Shri Ganesh Dental Clinic and Maxillofacial Centre Rohtak Haryana

## ABSTRACT

Candidiasis is a common opportunistic fungal infection of the oral cavity, caused by Candida species. It presents as creamy white lesions on the oral mucosa. The diagnostic feature of candidiasis is that the white plaques can be removed by gentle scraping leaving behind an underlying erythematous mucosal surface. The most effective first line of treatment of candidiasis is antifungal therapy along with maintenance of good oral hygiene. We hereby present a case of "oral thrush on the palate and maxillary gingiva" in a 56 years old lady with poor oral hygiene.

Key Words: Candidiasis, Oral Thrush, Candid Mouth Paint, leukoplakia.

## INTRODUCTION

Oral candidiasis is also known by the names as Oral candidosis, Oral Thrush, moniliasis, oral mycosis, yeast infection, or Candidal stomatitis. The term Candida originates from the Latin word candid, meaning white. It is a common opportunistic infection that develops in the presence of several predisposing factors and mainly affects the oral mucosa (1, 2). The spores of candida are a commensal, harmless form of a dimorphic fungus that become invasive and pathognomic when there is a disturbance in the balance of flora or in debilitation of the host (4, 5).

Eight species of candida are known to be pathogenic, especially in immunosuppressed persons: Candida albicans, Candida guilliermondii, Candida kefyr, Candida tropicalis, Candida parapslosis, Candida viswanathii and Candida glabrata (Lynch, 1994) (3). Candida albicans is the most common pathogen of this group resulting in Oral candidiasis (1, 2). Infact it is found as the normal component of the oral microflora and around 30% to 50% people carry this organism (7). Candida albicans is also commonly found in the gastrointestinal tract and vagina of the clinically normal persons. Pseudomembranous candidiasis is the most common form of candidiasis (1, 2).

It forms soft, friable and creamy white plaque on the mucosa that can be wiped off, leaving a red, raw or bleeding and painful surface. The buccal mucosa, palate and tongue are common location (2). It can be a frequent and significant source of oral discomfort, pain, loss of taste and aversion to food. Diagnosis of candidiasis is usually based on the clinical criteria. The management includes topical antifungal application like Nystatin, Amphotericin, Clotrimazole, Fluconazole and Ketoconazole (6).

#### CASE REPORT

A 56 years old female patient reported to the Shri Ganesh dental clinic with chief complaint of burning sensation in the mouth for one week. She was relatively asymptomatic 1 week back when she started experiencing burning sensation in the mouth which was sudden in onset with white discoloration of oral cavity. On intraoral examination, diffuse curdy white patches were found on her hard palate and soft palate region, uvula, pterygomandibular region, maxillary gingiva (Figure 1).





Figure 1: Intraoral photograph showing white lesion over palate, gingiva and pterygomandibular region.

Complete routine blood examination reports were found normal. The white patches were scrapable which differentiate it from leukoplakia. Exfoliative cytology and fungal staining was carried out. Complete oral prophylaxis was done. Patient was advised mouth rinsing after every meal and keep good oral hygiene. Candid mouth paint was given for daily for 3 times application for 5 days. The patient was recalled after 1 week. There was complete healing of the lesion with significant relief in burning sensation (Figure 2).



Figure 2: One week after the treatment with complete recovery.

## DISCUSSION

Candidiasis is one of the most common human opportunistic fungal infections of the oral cavity. The incidence of this infection has been increasing over the last decades, especially in developing countries. The increased incidence is associated with the use of dentures, xerostomia, malnutrition, increased longevity of people. Oral candidiasis is classified as (Greenberg et al., 2008) (8)

1. Primary Oral candidiasis

A. Acute Form: Pseudomembranous, erythematous.



B. Chronic Form: Erythematous, Pseudomembranous, Plaque like, nodular. Candida associated lesions: Denture stomatitis, Angular chelosis, Median rhomboid Glossitis.

2. Secondary Oral candidiasis: Familial mucocutaneous candidiasis, diffuse chronic mucocutaneous candidiasis, chronic granulomatous disease, Candidosis endocrinopathy syndrome, acquired immune deficiency syndrome (AIDS). The diagnosis can be confirmed either by staining a smear from the affected area with periodic acid Schiff (PAS) stain or culturing a swab from oral rinse (2). The treatment of oral candidiasis is based on four things: making an early and accurate diagnosis of the infection, correcting the predisposing factors or underlying disease, evaluating the type of candida infection, appropriate use of antifungal drugs, evaluating the efficacy/toxicity ratio in each case (Aguirre Urizar, 2013) (9). Conservative methods like removing dentures esp. at night, promoting good oral hygiene should be done along with drug therapy. Antibacterial rinse with Chlorhexidine 0.2% or topical application of Chlorhexidine gel 1% also help in relieving the symptoms.

Nystatin is the drug of choice as a primary line of treatment and for the mild and localized candidiasis other drugs includes Clotrimazole which is available as lozenges and amphotericin B as Oral suspension (10). Nystatin is available as cream and oral suspensions. It is applied four times a day and allowed to act approximately for two minutes in the oral cavity and then it is to be swallowed. Nystatin shows no significant side effects.

Amphotericin B available as lozenge and oral suspension which is to be applied 3 to 4 times daily. It inhibits the adhesion of candida to epithelial cells. It is a nephrotoxic drug. Clotrimazole reduces the fungal growth. It is available as creams and lozenges. The main side effects of clotrimazole are unpleasant mouth sensation, increase liver enzyme levels, nausea and vomiting. Second line of treatment is used for severe, localized, immune suppressed patients who respond poorly to primary line of treatment. Drugs mainly used are ketoconazole, fluconazole, itraconazole.

#### CONCLUSION

Early diagnosis of the infection and maintenance of good oral hygiene is very important in treatment of oral candidiasis. Proper history and clinical examination followed by appropriate antifungal treatment is used to cure the oral candidiasis.

#### REFERENCES

- [1]. Regezi JA, Sciubba JJ, Jordan RCK (2003) Oral Pathology clinical pathologic correlation. 4<sup>th</sup> edition, Saunders, St. Louis, USA, p. 100-104.
- [2]. Nurdiana, Jusri M (2009) Pseudomembranous candidiasis in patient wearing full denture. Dental Journal 42(2): 60-64.
- [3]. Lynch, DP 1994. Oral candidiasis. History, classification and clinical presentation. Oral Surg Oral Med Oral Pathol. 78:189-93.
- [4]. Verma A, Kumar P, Kaur L, Sharma AK, Mohapatra (2015). Oral thrush on the palate and tongue. International journal of Research in dentistry 5(4): 102-106.
- [5]. Byadarahally Raju S, Rajappa S (2011) isolation and identification of candida from the oral cavity. ISRN Dent 2011: 487921.
- [6]. Pati A, Susmitha HR, Basappa S, Mahesh MS (2016). Drug induced Oral candidiasis: A case Report. IJSS Case report & reviews 2 (12): 1-4.
- [7]. Rao PK 2012. Oral Candidiasis-a review. Scholarly Journal of medicine, 2(2): 26-30.
- [8]. Greenberg MS, Glick M, Ship JA 2008. Burket's Oral Medicine. 11<sup>th</sup> Ed, BC Decker Inc India, p 79.
- [9]. Aguirre Urizar JM 2002. Oral Candidiasis. Rev Iberoam Micol, 19: 17-21.
- [10]. Van Boven JF, de jong-van den Berg IT, Vegter S (21013) Inhaled corticosteroids and the occurrence of oral candidiasis: A prescription sequence symmetry analysis. Drug saf 36 (94): 231-236.