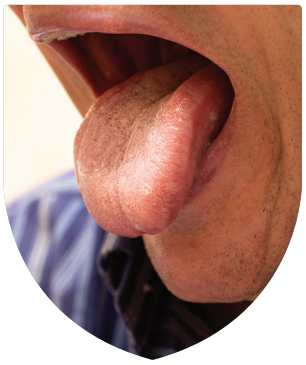
column
oral medicine

ORAL candidosis



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Oral candidosis is a prevalent and opportunistic fungal infection of the oral mucosa. Majority of cases are associated with Candida albicans (which is a component of normal oral flora), with 60% carriage. Often affects the very young or very old, but may occur due to a change in local and systemic immunity

Local factors

1. Hyposalivation
2. Dental appliances
3. Radiation involving salivary glands
4. Ulceration, atrophy of mucosa
5. Local disease e.g. Lichen Planus
6. Topical medications such as steroids

Systemic factors

1. Autoimmune disease: Sjogren's syndrome
2. Other diseases: primary/secondary immune deficiency diseases, leukaemias, lymphomas, diabetes
3. Medications such as: antibiotics, anti-hypertensives, anti-depressants, anti-histamines, anti-psychotics, immunosuppressant drugs etc.
4. Haematinic deficiencies
5. Malnutrition
6. Extremes of age

Clinical presentation

May be pseudo-membranous (acute, chronic) and generally wipes off leaving red surface (Figures 1 & 2), erythematous (e.g. ill-fitting dentures, post antibiotic and generally erythema), chronic hyperplastic which is generally adherent white plaque and may show potential signs of dysplasia, angular cheilitis (Figure 3), median rhomboid glossitis (Figure 4).

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Diagnosis

Clinical and medical history, smear with PAS stain showing the presence of candida hyphae (swabs are not clinically relevant). Blood tests, such as full blood count, haematinics, thyroid, parathyroid and adrenocortical function, to look for certain conditions associated with oral candidosis.

Biopsy may be required for chronic hyperplastic candidosis

Chronic mucocutaneous candidosis (CMC) might have effects of candidosis elsewhere—nails, other organs (may need referral to appropriate medical specialists, immunology, endocrinology). CMC may be associated with impairment of interleukin-17.

Other rare conditions: Severe combined immunodeficiency (SCID), where there is a deficit of the cell-mediated immunity with tumours such as thymoma.

Management

1. Manage predisposing factors- Smoking, haematinic deficiencies, dry mouth, diabetes and other diseases.
2. Improve oral hygiene
3. Topical Miconazole/Nystatin cream, Amphotericin B lozenges for 3-4 weeks
4. Systemic course of anti-fungal medication: Fluconazole, Itraconazole

In general swabs are not clinically relevant, Nystatin drops are not clinically effective. Be aware of staphylococcus being associated with angular cheilitis (Figure 4). Always remember that candidosis is a disease of the diseased and you need to look for possible underlying causes.

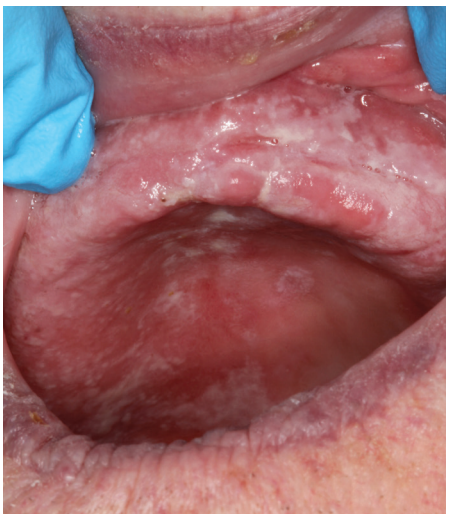

Figure 1

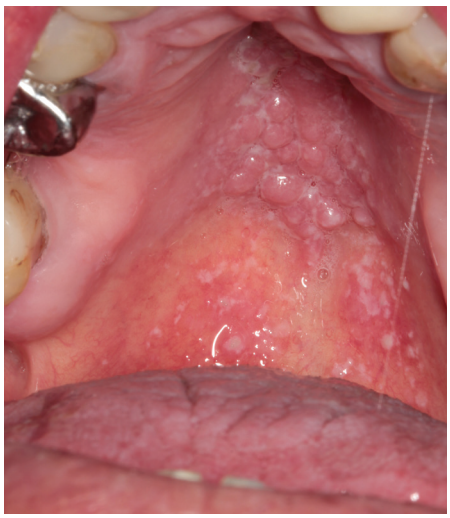

Figure 2

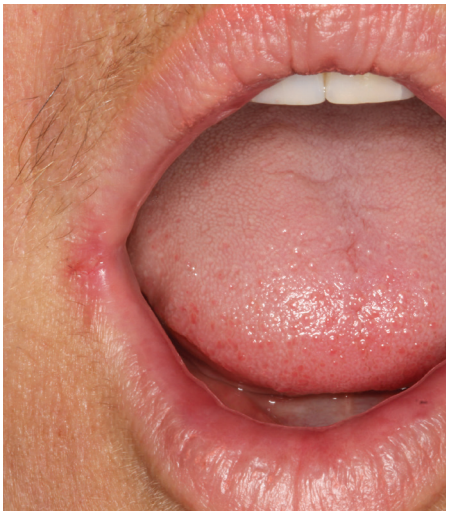

Figure 3

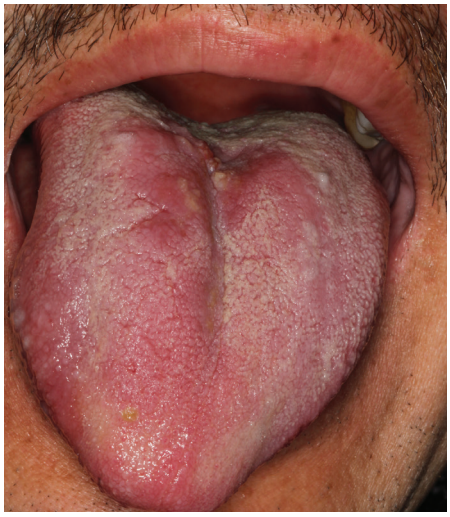

Figure 4