

Stomatitis-An Overview

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Abstract :-

Stomatitis is an inflammation of the lining of any of the soft-tissue structures of the mouth. Poor oral hygiene, poorly fitted dentures, mouth burns, allergy and infections are the probable causes for the onset of infection. Stomatitis remains a common oral mucosal disorder in most communities of the world. Hence, it is important for dental clinicians to know about the clinical features, causes, diagnostic techniques, and the treatment and management of stomatitis. Considerable amount of research has been done to elucidate the causes of stomatitis ; local factors, systemic factors, genetic factors, microbial factors, immunologic factors, etc., but to date, no principal etiology has been discovered. There are various lines of treatment suggested for the management of stomatitis but the treatment generally given is symptomatic. This review gives an up-to-date view of the disease. It is done to enhance the knowledge about stomatitis and take necessary precautions in protecting us from this condition.

Keywords:- Stomatitis, Disease, Inflammation, Infection, Ulceration.

INTRODUCTION:-

Stomatitis refers to inflammation of the mucous membrane of the mouth, including the inner aspect of the lips, cheeks, gums, tongue and throat. It is a type of mucositis. It can be acute or chronic, mild or serious. Stomatitis can severely affect speech; eating ability, nutrition, body image, sleep and overall quality of life. The ulceration causes pain, bleeding and infection. It affects all age groups from infant to elderly (1).

HOW DOES IT APPEAR:-

They are invariably painful associated with redness, swelling and occasional bleeding from affected area and painful ulcers (single or multiple). Less commonly, whitish lesions form, and, rarely, the mouth appears normal (burning mouth syndrome) despite significant symptoms which hinder eating, leading to dehydration and malnutrition (2). Secondary infection occasionally occurs, especially in immunocompromised patients. Some conditions are recurrent. Bad breath (halitosis) also accompany the condition. The inflammation is produced due to various factors present in the mouth such as poor hygiene, from burns, or by conditions that affect the entire body, such as medications, allergic reactions, or infections (3).

TYPES OF STOMATITIS:-

There are various types of stomatitis . They are :-

- * Canker sores (Aphthous stomatitis)
- * Cold sores (Fever blisters)
- * Mouth irritation
- * Herpes stomatitis
- * Angular stomatitis
- * Denture related stomatitis
- * Stomatitis nicotina
- * Chronic stomatitis
- * Necrotising ulcerative gingivostomatitis

APHTHOUS STOMATITIS (CANKER SORES):-

Canker sore or aphthous stomatitis is a single pale or yellow ulcer with a red outer ring. It is also present as group of ulcers in the mouth, commonly on the inner aspect of the cheeks, tongue, or inner aspect of the lip. They are not contagious . It may reoccur(4).

COLD SORES:-

Cold sores or fever blisters are fluid filled sores that occurs on or around the lips. They will later crust over with a scab and are commonly associated with burning, tenderness, or tingling prior to the appearance of the actual sores. Cold sores are caused by a virus called herpes simplex type 1. Cold sores are contagious from the moment the blister bursts to the moment it has fully healed. The primary infection happens before adulthood (4). If the person is infected with the virus, it remains latent in the body and reactivated by certain conditions such as fever, trauma, stress, exposure to sunlight, and hormonal changes.

MOUTH IRRITATION :-

It is caused by

- * Biting your cheek, tongue, or lip
- * Having gum disease or some other kind of mouth infection
- * Wearing braces or having a pointed, broken tooth
- * Being extremely sensitive to certain foods or medications
- * Chewing tobacco
- * Burning your mouth from hot foods or drinks
- * Having specific autoimmune diseases (4)

HERPES STOMATITIS:-

Herpes Stomatitis is a viral infection of the mouth that cause sores and ulcers. Usually in age children between six months to five years aged. Herpes simplex1 (HSV1) virus is the cause of infection(4).

ANGULAR STOMATITIS:-

Inflammation of the corners (angles) of the lips is termed angular stomatitis or angular cheilitis. In children a frequent cause is repeated lip-licking, and in adults it may be a sign of underlying iron deficiency anaemia, vitamin B deficiencies which in turn may be evidence of poor diets or malnutrition such as celiac disease (5). It can be caused by a patient's jaws at rest being 'overclosed' due to edentulous dentition causing the jaws to come to rest closer together than if the complete/unaffected dentition were present.

DENTURE RELATED STOMATITIS:-

This is a common condition present in denture wearers. It appears as erythematous, reddened and painless mucosa beneath the denture. 90% of cases are produced due to *Candida* species. It is the most common type of oral candidiasis. Treatment is by prescribing an anti-fungal medication and improved oral hygiene, such as not wearing the denture during sleep (6).

STOMATITIS NICOTINA:-

Stomatitis nicotina is also referred to as smoker's palatal keratosis. This condition predominantly occurs in smokers, especially pipe smokers. The palate appears dry, cracked, and white from keratosis. The minor salivary glands appear as small, red and swollen bumps (8). It is not a pre-malignant condition, and the appearance reverses if the smoking is stopped.

CHRONIC ULCERATIVE STOMATITIS:-

Chronic ulcerative stomatitis (CUS) is a recently described mucocutaneous disease characterized by involvement of mucosal surfaces and skin. The disease usually presents in the form of painful oral ulcers and has been seen predominantly among older women (9,10). Clinically, these patients may exhibit erosive or ulcerative lesions of oral mucosa resembling erosive lichen planus and/or other vesiculobullous lesions.

NECROTISING ULCERATIVE STOMATITIS:-

It is an inflammatory disease of oral cavity characterized by destruction of oral epithelium, connective tissue and papillae. It may cause loss of periodontal attachment and destruction of bone tissue. In advanced stages, it may lead to cancrum oris with exposed alveolar bone (11).

CAUSES :-

Various causes for stomatitis are mentioned in the below: (12)

- * Bacteria/Virus (Herpes Simplex type-1).
- * Nutritional deficiency (Vitamin B12, Folic acid, Iron or Zinc).
- * Sudden weight loss.
- * Food sensitivities to potatoes, citrus, fruits, strawberries, chocolate, eggs, cheese or nuts.
- * Inflammatory bowel disease.
- * HIV/ AIDS.
- * Weak immune system.
- * Hormonal changes.
- * Stress and lack of sleep.

* Use of certain medications such as Chemotherapy, Diuretics, Anticholinergics, Antihistamines and decongestants, Steroids, Antidepressants.

- * Allergic reaction.
- * Accidental injury.
- * Sharp tooth surface, dental braces or retainers.
- * Tobacco or irritating foods or chemicals.

SIGNS AND SYMPTOMS:-

There are different types of signs and symptoms for stomatitis disease are mentioned in the below: (13,14)

- * Blister over gums, palate, cheek, tongue or lip
- * Difficulty of eating, drinking and swallowing
- * Drooling, pain and swelling
- * Irritation
- * Fever
- * Red patches
- * Oral dysaesthesia
- * Burning mouth syndrome

INVESTIGATIONS:-

Diagnosis of stomatitis can be difficult. A patient's history may disclose a dietary deficiency, systemic disease, or contact with materials causing an allergic reaction. A physical examination is done to evaluate oral lesions and other skin problems. Blood tests may be done to determine if any infection is present. Scrapings of lining of mouth may be sent to the laboratory for microscopic evaluation, or cultures of mouth may be done to determine if an infectious agent may cause the problem (15).

TREATMENT:-

The treatment of stomatitis is based upon the problem causing it. For all types, local cleansing and good oral hygiene is fundamental. Sharp-edged foods such as peanuts, tacos, and potato chips should be avoided. A soft-bristled toothbrush should be used, and the teeth and gums should be brushed carefully. If toothbrushing is too painful, the patient should rinse out his mouth with plain water after each meal. Local factors, such as sharp teeth or braces, can be addressed by a dentist or orthodontist (16,17).

If it is due to allergy to a medication, the medication must be promptly stopped. However, it may be necessary to continue a causative medication when stomatitis arises as an expected adverse reaction to chemotherapy.

Infections may require specific treatment such as antibiotics for streptococcal pharyngitis, topical anti-fungal or oral anti-fungal agent for candida infection.

Nutritional deficiencies should be identified and corrected, for example, folic acid can reduce methotrexate-induced stomatitis.

Immunobullous diseases may be treated with systemic corticosteroids or other immunosuppressive treatments (18).

Symptomatic treatment may include:

- * Antiseptic mouthwash
- * Protective pastes
- * Local anaesthetic mouthwash or spray
- * Oral analgesics (pain killers)

* Topical corticosteroids

ALTERNATIVE TREATMENT:-

Placing a spent tea bag on a canker sore may provide comfort. Sodium lauryl sulfate (SLS), a component of some toothpastes, is a potential cause of canker sores. In one study, most recurrent canker sores were eliminated just by avoiding SLS-containing toothpaste for three months (19).

PREVENTION:-

Various types of prevention for stomatitis disease are given in the below:(20)

- * Wash hands frequently
- * Keep toys, brush clean and don't share with others
- * Don't share dishes, cups, or eating utensils
- * Don't kiss affected person

CONCLUSION:-

From this review , we conclude that stomatitis is one prevalently occurring condition. So , we must have sound knowledge on the ways of safeguarding us from this condition.

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