

Reference of TCM dentistry

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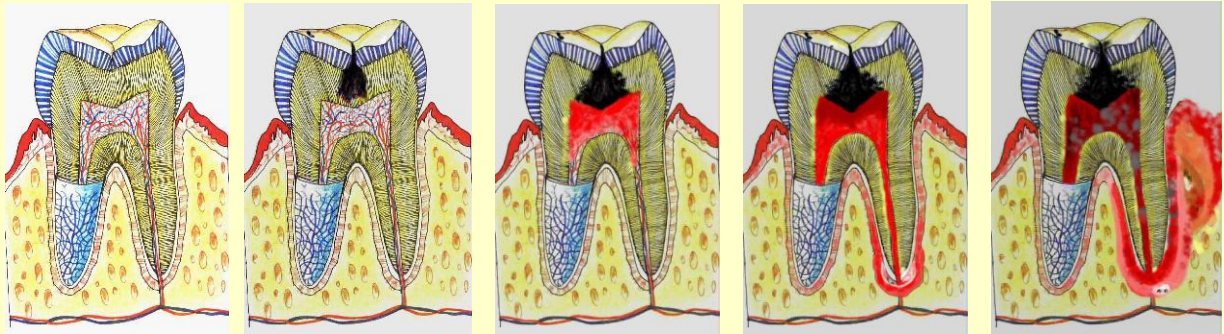
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1. Pulpitis 牙髓炎

Inflammation of the dental pulp.

Pulpal disease (pulpitis) and its local sequelae--necrosis of the pulp, apical periodontitis, periapical abscess, cellulitis, and osteomyelitis of the jaw--can occur when caries progresses deeply in the dentin, when a tooth requires multiple invasive procedures, or when trauma disrupts the lymphatic and blood supply to the pulp. Inflammation that would easily subside in other parts of the body leads to necrosis in the rigidly encased (by the dentin) pulp because edema cannot occur there without compromising circulation.



From left to right: healthy tooth, cavity, pulpitis, apical lesion, periodontal involved.

If dental infection spreads from maxillary teeth, it may cause purulent sinusitis, meningitis, brain abscess, orbital cellulitis, and cavernous sinus thrombosis. Infection from the mandibular teeth may cause Ludwig's angina, parapharyngeal abscess, mediastinitis, pericarditis, empyema, and jugular thrombophlebitis.

Symptoms and Diagnosis

In **reversible pulpitis**, pain is felt when a stimulus (usually cold or sweets) is applied to the tooth. When the stimulus is removed, the pain ceases within a few seconds.

Irreversible pulpitis produces pain that lingers for minutes after the stimulus is removed or that occurs spontaneously. A patient may have difficulty locating the precise tooth that is the source of the pain, even confusing the maxillary and mandibular arches (but not the left and right sides of the mouth) because the pulp has no proprioceptive fibers. The pain may then cease for several days because of pulpal necrosis. When bacteria or their metabolites exit through the apical foramen, thereby causing inflammation in the adjacent periodontal ligament, the tooth becomes exquisitely sensitive to pressure and percussion. As a periapical (dentoalveolar) abscess forms, the tooth is elevated from its socket and feels "high" when biting.

2. Periodontitis 牙周炎



Moderate Periodontitis



Healthy gums and teeth

Periodontitis is inflammation of the periodontium, which comprises the periodontal ligament, gingiva, cementum, and alveolar bone. Typically, it is first diagnosed when a patient is > 35 yr old. The etiology of periodontitis is similar to that of gingivitis, but in periodontitis, the presence of specific organisms in the plaque may be more important than the total amount of plaque. Faulty occlusion causing an excessive functional load on teeth may contribute to disease progression.

Symptoms and Signs

Periodontitis usually begins with gingivitis. Abundant calculus deposits beneath the gingival margin are characteristic. The gingivae progressively lose their attachment to the teeth, and bone loss begins so that the periodontal pockets deepen. Destruction of the supporting osseous tissue is evident radiographically. With progressive bone loss, teeth may loosen and gingivae recede. Tooth migration is common in later stages. Pain is usually absent unless an acute infection (eg, abscess formation in one or more periodontal pockets) supervenes. Impaction of food in the pockets can cause discomfort and pain at meals.

3. Mumps



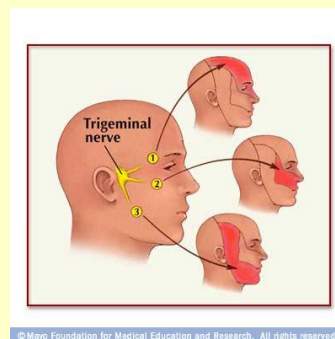
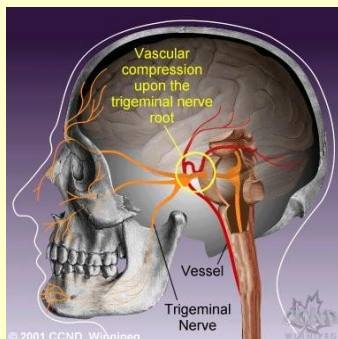
Mumps is a contagious viral infection that causes painful enlargement of the salivary glands; the infection may also affect the testes, brain, and pancreas, especially in adults.

Children become infected with mumps by breathing in small airborne droplets of moisture coughed out by an infected person or by having direct contact with objects contaminated by infected saliva. Although the infection may occur at any age, most cases occur in children 5 to 15 years old. The infection is unusual in children younger than 2 years. One infection with the mumps virus usually provides lifelong immunity.

Symptoms begin 14 to 24 days after infection. Most children develop chills, headache, poor appetite, a general feeling of illness (malaise), and a low to moderate fever. These symptoms are followed in 12 to 24 hours by swelling of the salivary glands, which is most prominent on the second day. Some children simply have swelling of the salivary glands without the other symptoms; this results in pain when chewing or swallowing, particularly when swallowing acidic liquids, such as citrus fruit juices. The glands are tender when touched. At this stage, the temperature usually rises to 103 or 104° F.

About 20% of men who become infected after puberty develop inflammation of one or both testes (orchitis). Inflammation of the testes produces severe pain. On healing, the affected testis may be smaller. If both testes are damaged, sterility may result. Mumps leads to viral inflammation of the brain or its covering (meningoencephalitis) in 10% of people.

4. Trigeminal neuralgia



Trigeminal neuralgia (tic douloureux) is pain due to malfunction of cranial nerve V (trigeminal nerve), which carries sensory information from the face to the brain and controls the muscles involved in chewing. Trigeminal neuralgia usually occurs in middle-aged and older people. It is more common among women. Occasionally in younger people, trigeminal neuralgia results from nerve damage due to multiple sclerosis. Rarely, trigeminal neuralgia results from damage due to herpes zoster (a viral infection) or compression by a tumor.

Symptoms: The pain can occur spontaneously but is often triggered by touching a particular spot (called a trigger point) on the face, lips, or tongue or by an activity such as brushing the teeth or chewing. Repeated short, lightning-like bursts of excruciating stabbing pain can be felt in any part of the lower portion of the face but are most often felt in the cheek next to the nose or in the jaw. Usually, only one side of the face is affected. The pain usually lasts seconds but may last up to 2 minutes. Recurring as often as 100 times a day, the pain can be incapacitating. Because the pain is intense, people tend to wince, and thus the disorder is sometimes called a tic. The disorder commonly resolves on its own, but bouts of the disorder often recur after a long pain-free interval.

5. Oral thrush 鵝口瘡



Oral thrush is a disorder caused by infection of the mouth with the fungus (yeast) *Candida albicans*.

The mouth normally contains many microorganisms. One of these normal microorganisms is the fungus *Candida albicans*, which is the same fungus associated with vaginal yeast infections or other *Candida* infections. The growth of *Candida* is normally kept under control by the presence of normal bacteria.

Uncontrolled overgrowth of *Candida* in the mouth may be caused by factors that reduce the natural resistance, such as illness, stress, long-term use of corticosteroids or medications that suppress the immune system, and immune disorders such as (AIDS). It may also be caused by conditions that upset the balance of normal microorganisms in the mouth due to use of antibiotics, but it may also occur with uncontrolled diabetes mellitus and with the hormonal changes associated with pregnancy or the use of birth control pills.

Oral thrush is most common in infants and toddlers, in the elderly, and in people who are debilitated or whose immune system has been suppressed by disease or medical treatments. Thrush in infants is common and is usually not associated with other diseases. Infant thrush that resists treatment or recurs frequently should raise suspicions for an underlying disorder. In adolescents, young adults, and middle age adults, an oral *Candida* infection should always be viewed as a possible symptom of an underlying medical problem, such as diabetes or HIV infection, and should be evaluated.

Symptoms

- Ulcer/skin lesion in the mouth (usually on the tongue or inner cheeks)
 - Painful
 - Slightly raised area

- Creamy white appearance
- May appear curd-like ("cottage cheese" appearance)
- Dry mouth

6. Mouth ulcers



Mouth ulcers are sores or open lesions within the mouth caused by various disorders. (See also mouth sores or aphthous ulcer.)

Causes, incidence, and risk factors

Mouth ulcers are caused by many disorders. These include canker sores, leukoplakia, gingivostomatitis, oral cancer, oral lichen planus, oral thrush, herpes simplex, and other disorders. The skin lesion of histoplasmosis may also appear as a mouth ulcer. Aphthous ulcer is more common in young adults than in children or older adults.

Symptoms

- Pain or discomfort in the mouth
- Presence of open sores in the mouth

The appearance and exact location of lesions varies with the specific disorder.

Signs and tests

A health care provider or dentist usually diagnoses the type of mouth ulcer based on the appearance and location of the lesion. A skin biopsy of the ulcer or blood tests may be needed to confirm the disorder causing the problem.

7. Oral leukoplakia 口腔白斑病



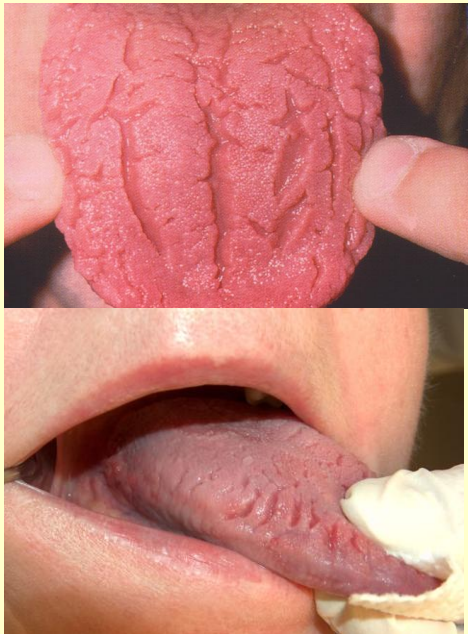
Leukoplakia is a whitish patch or plaque that cannot be characterized clinically or pathologically as any other disease, and is not associated with any physical or chemical causative agent, except the use of tobacco. Patients with idiopathic leukoplakia have the highest risk of developing cancer. In studies of these patients, 4-17% had malignant transformation of the lesions in less than 20 years. The risk of developing malignancies at lesion sites is 5 times greater in patients with leukoplakia

than in patients without leukoplakia. In the US oral leukoplakia is uncommon, possibly occurring in less than 1% of adults.

Leukoplakias are white lesions that cannot be removed with a gauze swab.

- Most leukoplakias are smooth, white plaques (homogeneous leukoplakias).
- Most leukoplakias occur on the lip, the buccal mucosae, or the gingivae.
- Some leukoplakias are white and warty (verrucous leukoplakia).
- Some leukoplakias are mixed white and red lesions (erythroleukoplakias or speckled leukoplakias).
- Dysplastic lesions do not have any specific clinical appearance; however, where erythroplasia is present, dysplasia, carcinoma in situ, and frank carcinomas are more likely to be seen.
 - The site of the lesion is relevant; leukoplakias on the floor of the mouth or on the ventrum of the tongue and the lip are sinister.
 - The size of the lesion appears to be irrelevant. Even small dysplastic lesions may lead to multiple carcinomas and a fatal outcome.

8. Fissured tongue



INTRODUCTION

Background: Fissured tongue is a condition frequently seen in the general population that is characterized by grooves that vary in depth and are noted along the dorsal and lateral aspects of the tongue. Although a definitive etiology is unknown, a polygenic mode of inheritance is suspected because the condition is seen clustering in families who are affected. Patients are usually asymptomatic, and the condition is initially noted on routine intraoral examination as an incidental finding. Fissured tongue is also seen in Melkersson-Rosenthal syndrome and Down syndrome and in frequent association with benign migratory glossitis (geographic tongue).

On clinical examination, fissured tongue affects the dorsum and often extends to the lateral borders of the tongue. The depth of the fissures varies but has been noted to be up to 6 mm in diameter. When particularly prominent, the fissures or grooves may be interconnected, separating the tongue dorsum into what may appear to be several lobules.