Penn Dental Medicine

Oral Medicine at Penn Dental Medicine:

Oral Conditions and Treatments

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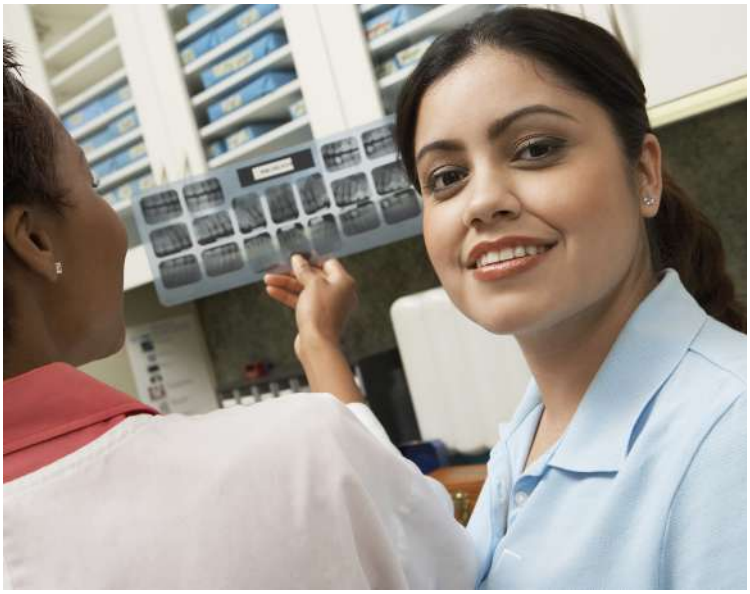
What is Oral Medicine?



Oral medicine sits at the crossroads of medicine and dentistry. Oral medicine concerns the diagnosis and oral health care of patients with disorders of the orofacial region. An oral medicine specialist has advanced training in evaluation and management of **oral mucosal abnormalities** (such as infection, allergies, ulcers, growths, cancers, immune-related disorders), **temporomandibular disorders** ("TMJ"), **salivary gland disorders and dry mouth, facial pain** due to musculoskeletal or neurologic conditions, **taste and smell disorders**, and **oral problems stemming from systemic diseases.**

The difference between oral/maxillofacial surgery and oral medicine is oral medicine's emphasis on non-surgical management of medically-related oral disorders and conditions.

Oral Medicine: Clinical Evaluation

Many of the procedures performed by an oral medicine specialist begin with clinical evaluation.

1. **MEDICAL HISTORY.** Understanding a patient's medical history is a vital first step for any specialist, including those in oral medicine. Typically, this history is obtained through a combination of the patient's self-report (or the report of a caregiver) and through medical and dental records. This information can not only help to identify and understand a current condition, but also to understand the relationship between the condition and potential treatment options and the patient's overall health, current medications, and other important factors.

2 **PHYSICAL EXAMINATION.** While medical history is a key component of diagnosis and treatment, it cannot stand alone. The physical examination is also fundamental to the diagnostic process. This typically includes a thorough inspection of the face, teeth, mouth, and oral cavity.

3 **ORDERING AND INTERPRETATION OF DIAGNOSTIC TESTS.** Tests such as imaging studies (x-rays, CT scans, MRIs), blood and salivary tests, and microbiological investigations are used to diagnose a wide range of conditions:

- **X-rays and CT scans** are used to develop cross-sectional pictures of anatomical structures, such as bones, organs and muscles. CT scans provide three-dimensional images that help to diagnose conditions like impacted teeth and Temporomandibular Joint (TMJ) Disorders.
- **Magnetic Resonance Imaging (MRI)** is used to evaluate and treat TMJ disorders, trauma, disease, and oral cancers. MRIs use magnetism, radio waves, and computer technology to create detailed images of body structures.
- **Blood and saliva testing** can show a variety of problems that assist in diagnosis such as anemia, Vitamin D deficiency, hypothyroidism, Rickets Disease, osteomalacia, bone disease, ulceration, herpes, the mumps virus, and autoimmune disease, to name a few.
- **Microbiological investigations** refer to diagnoses made on the basis of the presence of microorganisms or an observable antibody response. While a variety of tests are included in this category, bacterial and viral cultures are one of the most common. They are used to identify bacterial, fungal, or viral infections.

4 **BIOPSIES.** An oral tissue biopsy is taken when the doctor cannot make a diagnosis for lesions based on history and clinical examinations alone. Approximately 10% of patients examined will have some abnormality of the **oral mucosa**. A biopsy can eliminate the guesswork of making a diagnosis,

including the possibility of malignancy. Lesions that bleed easily, grow rapidly, or are red and white colored should be checked because these symptoms could indicate a serious problem. A biopsy is recommended when an abnormality persists for longer than two - four weeks and other irritants have been removed. Because the tissue can then be microscopically analyzed, a biopsy is the gold standard for diagnosing disease.

Oral Medicine: Medical Management

Oral medicine treats a wide range of conditions with topical and systemic medications. Here are a few examples of the types of problems managed:

1. **MOUTH ULCERS.** These are typically painful, sores that form in the mouth or at the base of the gums. Most mouth ulcers are recurring incidents that are benign. There are a variety of types of ulcers which vary in severity, including cold sores, mouth lesions, tongue inflammation, canker sores, oral thrush, Herpes simplex, and hand, foot and mouth disease (common in children). You should contact your oral medicine doctor if a mouth ulcer lasts more than three weeks, if it is recurring, or if it becomes painful or red, because this could be a sign of bacterial infection.

2. **TMD/ TMJ DISORDERS.** Temporomandibular disorders (TMD) affect the temporo-mandibular joint (TMJ), which connects the jawbone to the skill. These disorders can cause pain when opening and closing the mouth. TMDs can often be treated with a combination of medication, physical therapy and stretching, and mouth guards or oral splints. If conservative treatment options are not effective, your doctor may recommend surgical treatment.

3. **SALIVARY GLAND DISORDERS.** These include dry mouth, salivary gland stones, tumors, and infection. Dry mouth can often be managed by good oral hygiene and sometimes medication, depending on the cause (which can include medications you are already taking). Stones can be removed, but more often they are treated manually with compresses, pain relievers, and methods to trigger saliva production so that they pass on their own. Infections are treated with antibiotics, but a salivary abscess will often need to be surgically managed.

4. **TASTE AND SMELL DISORDERS.** Scientists believe that up to 15% of adults may have a problem with their ability to smell or taste, of which more than 200,000 people visit a doctor each year for help. A taste or smell disorder could have a variety of causes: allergies, upper respiratory/ear infections, radiation therapy, a medication, exposure to certain chemicals, oral hygiene issues, or a head injury. Nutritional deficiencies can also cause diminished taste and smell perception. Taste and smell disorders may be symptoms of other problems in the body, which your oral medicine specialist can help diagnose and treat.

Why Choose Penn Dental Medicine as Your Oral Medicine Provider?

Even a cursory review of the procedures listed above shows the vast range of conditions treated by oral medicine specialists. The mouth is considered a central location within an interconnected system, rather than a separate, isolated part of the body. That's what makes us different from many other health care providers. Penn Dental Medicine hosts a variety of dental disciplines under the same roof, which facilitates our fluid, interdisciplinary, and collaborative approach.

As a practice operating under the wider umbrella of a dental school, we have a responsibility to remain at the forefront of the dental field. In fact, pioneering work in

the field has emerged from research conducted at the University of Pennsylvania! Our student doctors are supervised by the expert, experienced professionals in the field, and must maintain the same high level of knowledge of theory and practice. We believe the historical leadership of our institution is one of the things that makes us stand out in dental care.

Our laboratory and dental technologies also give us an edge in a world where a correct diagnosis means the difference between a clear solution and a long, unnecessary drawn-out process. Our emphasis on accurate diagnosis necessitates access to advanced diagnostic modalities and interpretation by the nation's best and brightest. State-of-the-art technologies can make the difference between a "probable cause" and a certain diagnosis.

Trust your oral health to the experts at Penn Dental Medicine, where we are committed to patient-centered care that is affordable without sacrificing standards of high-quality care. Our oral medicine department treats the above-discussed conditions among many others. We look forward to becoming your practitioner of choice this year and for many years to come.