The field of oral medicine consists chiefly of the diagnosis and medical management of the patient with complex medical disorders involving the oral mucosa and salivary glands as well as orofacial pain and temporomandibular disorders. Specialists trained in oral medicine also provide dental and oral health care for patients with medical diseases that affect dental treatment, including patients receiving treatment for cancer, diabetes, cardiovascular diseases, and infectious diseases. All dentists receive predoctoral training in these fields, but the complex patient requires a clinician with specialized training in these fields. The American Academy of Oral Medicine defines the field as follows:

Oral medicine is the specialty of dentistry that is concerned with the oral health care of medically compromised patients and with the diagnosis and nonsurgical management of medically related disorders or conditions affecting the oral and maxillofacial region. Oral medicine specialists are concerned with the nonsurgical medical aspects of dentistry. These specialists are involved in the primary diagnosis and treatment of oral diseases that do not respond to conventional dental or maxillofacial surgical procedures. The practice of oral medicine will provide optimal health to all people through the diagnosis and management of oral diseases. Fundamental to this vision are the following:

1. Recognition of the interaction of oral and systematic health
2. Integration of medical and oral health care
3. Management of pharmacotherapeutics necessary for treatment of oral and systemic diseases
4. Investigation of the etiology and treatment of oral diseases through basic science and clinical research
5. Research, teaching, and patient care
6. Provision of care for medically complex patients and for those undergoing cancer therapy
7. Prevention, definition and management of the following disorders:
   — Salivary gland disease
   — Orofacial pain and other neurosensory disorders
   — Disorders of the oral mucosa membranes

The Third World Workshop on Oral Medicine (Chicago, 1998) was charged with updating and summarizing the state of the field in four major areas: (1) diseases of the oral mucosa, (2) infectious diseases of the orofacial region, (3) orofacial pain, and (4) salivary gland and chemosensory disorders. The American Board of Oral Medicine, the group charged with approving programs in the field, has fully or preliminarily approved approximately 10 postdoctoral residency programs in the United States. The graduates of these programs are found in universities, medical centers, and private practices throughout the country and provide needed oral health consultation services to local dentists and physicians.

▼ ORAL MEDICINE IN THE HOSPITAL

The hospital is frequently the setting for the most complex cases in oral medicine. Hospitalized patients are most likely to have oral or dental complications of bone marrow transplantation, hematologic malignancies, poorly controlled diabetes, major bleeding disorders, and advanced heart disease. The hospital that wishes to provide the highest level of care for its patients must have a dental department.

The hospital dental department should serve as a community referral center by providing the highest level of dental treatment for patients with severe systemic disease and management of the most medically complex patients is best performed in the hospital because of the availability of sophisticated diagnostic and life-sustaining equipment and the proximity of expert consultants in all areas of health care.

Hospital patients with oral medical problems may be seen by the dentist in three ways:

1. The patient may be admitted as an inpatient to the dental service. This is done most frequently for patients who require dental care and who also have severe medical problems.
2. The patient may be seen as a hospital outpatient. This is the common procedure for the majority of patients with diagnostic problems of the oral mucosa, jaws, and salivary glands.
3. The patient may be seen by consultation at the request of another department of the hospital. Some of the most difficult and unusual problems evaluated by the hospital dentist are seen as consultations.

Examples of problems or needs that are rarely seen in outpatient practice but are commonly seen in hospitalized patients are oral ulcers, oral bleeding, and oral infection secondary to blood dyscrasias or chemotherapy; acute parotitis in debilitated patients; dental care to prevent osteoradionecrosis prior to radiotherapy; and dental care to prevent infection prior to organ transplantation or open heart surgery.

To handle consultations properly, the dentist must be familiar with the proper method of requesting and answering consultations. Hospitals may differ in the form used, but there is a universally accepted method that should be followed.

Requesting Information

The standard format used to request medical information from other departments is simple. The difficulty arises in deciding what medical information is necessary for a particular patient. This requires experience as well as knowledge of how a medical problem may change dental treatment.

When requesting information from other departments, it is necessary to write only two or three sentences containing the following data: age and sex of the patient, dental treatment to be performed, and medical information required. A typical consultation request is as follows:

The patient is a 35-year-old male who requires multiple dental extractions under local anesthesia. A history of a possible heart murmur was elicited. Is a murmur present, and if so, is it functional or organic?

Two points can be made concerning the above theoretic consultation request to a cardiologist. First, the request is brief. Detailed descriptions of the nuances of dental therapy are unnecessary, but information regarding surgery or extensive treatment should be included. Second, the request is specific. The cardiologist is asked for medical information concerning the presence of an organic heart murmur. He or she is not asked to give “clearance” for treatment. When a request sent to a physician asks vague questions such as “Is it all right to treat the patient?” the physician may not understand the information required and may send a vague or noncommittal reply. These vague replies are often stored in a patient’s chart as alleged legal protection, but they rarely assist the dentist in treating the patient effectively. The chief rule in requesting a consultation is be aware of what medical information is required, and request the specific information, not “clearance.”

Answering Consultations

There is a standard format that should be followed when answering consultations from other hospital departments. Consultations that are answered only by short phrases such as “denture adjusted” or “tooth extracted” are unsatisfactory since the physician who hospitalized the patient for a medical problem is not given sufficient information. This information may be important in the management of the patient. Below is an uncomplicated consultation concerning a patient who developed dental pain while being hospitalized for a medical problem.

The patient is a 55-year-old male who was hospitalized 5 days ago because of an acute onset of severe chest pains. A diagnosis of acute myocardial infarction was made, and the
The patient is now being treated with complete bed rest and heparin. The patient began complaining of pain in the maxillary left molar region yesterday. He states that the pain is made worse when cold fluids are placed into his mouth. Examination at bedside shows no asymmetries, masses, or lesions of the neck, skin of the face, or salivary glands. There are two marble-sized left submandibular lymph nodes that are not tender and that are freely movable. The patient states that they have been present, unchanged in size, for many years. The temporomandibular joint is normal. The left buccal mucosa has a small 5 mm × 3 mm shallow ulcer opposite the maxillary first molar. There is no induration present around the ulcer. This same tooth has a large carious lesion and a sharp edge of enamel. No other dental or oral mucosal lesions are noted.

Impressions:
1. Dental pain secondary to pulpitis of a maxillary molar. There is no indication that this is referred chest pain, especially since cold locally applied exacerbates the pain.
2. Traumatic ulcer of buccal mucosa secondary to sharp tooth.

Recommendations:
1. Place sedative temporary filling in tooth and smooth rough edge at bedside to minimize stress to patient at this time.
2. Follow oral ulcer for healing; should see significant healing within 1 week or will re-evaluate to exclude carcinoma.
3. After acute phase of myocardial infarction, permanently treat tooth. Observe patient to ascertain whether pain disappears with above management or whether further treatment is necessary. Recommend minimal treatment at this time because of medical condition and anticoagulant therapy.

A brief summary has several functions. First, the consultation becomes a complete entity; when another clinician reads the consultation, he or she will immediately understand the case. Second, a consulting dentist must read the medical chart before making a diagnosis or recommending treatment. A patient with oral lesions may also have skin, genital, anal, or eye lesions that will make the diagnosis easier. The chart will often have information such as physical or laboratory findings that will affect the type of dental treatment that should be recommended.

Having to write an intelligent opening statement encourages a rushed clinician to read the entire chart before writing the consultation. A good medical summary makes it clear to the requesting physician that the dentist has read the chart and has taken its contents into consideration when making recommendations.

The second portion of the consultation is a summary of examination findings. It should contain comments regarding the neck, face, salivary glands, temporomandibular joint, oral mucosa, gingiva, and teeth. A description of abnormalities—not a diagnosis—should be made in this section. The diagnosis may be wrong, but at least an accurate description of the condition is available for reference when the patient is examined at a later date. It is also important to remember not to use dental jargon or symbols when writing consultations; it is easier, but the physician may not understand their meaning.

The last portion of the consultation is labeled “Recommendations” and is an important procedure in hospital etiquette. All treatment for a hospitalized patient must be approved by the admitting clinician, who is ultimately responsible for the patient. Therefore, recommendations for treatment are made by the dentist, but the admitting physician has the authority to accept or reject them.

**MANAGEMENT OF DENTAL PATIENTS WITH SEVERE MEDICAL PROBLEMS**

For several reasons, a dentist may choose to hospitalize a patient with severe medical problems. Important considerations are the availability of emergency resuscitation supplies; nursing care before and after the dental procedure; consultations with other medical disciplines; clinical laboratory facilities before and after the dental procedure; and operating rooms and anesthesiologists. Several medical insurance plans now cover hospitalization for patients with severe medical problems who are admitted for dental treatment.

Once the dentist decides that a patient should be treated in a hospital, the dentist should consider whether the dental procedure should be done on an inpatient or outpatient basis. The reason for using the hospital determines this choice. For example, if the hospital is being used for a patient with severe heart disease because of the resuscitation equipment available, hospitalization before and after the procedure may be unnecessary, and outpatient hospital management will accomplish the objectives. Conversely, a patient with hemophilia may require factor concentrates to elevate factor VIII levels prior to oral surgery. In this case, the hospital setting becomes more important for preoperative management and postoperative observation than for the procedure.

The dentist may choose to hospitalize patients for dental treatment of the following disorders:
1. Bleeding disorders due to hereditary disease, bone marrow suppression or extensive liver disease
2. Susceptibility to shock due to adrenocortical insufficiency or uncontrolled diabetes
3. Severe cardiovascular disease
4. Susceptibility to infection due to primary or secondary immunodeficiency
5. Need of heavy sedation or general anesthesia
6. Neuromuscular or other physical disability requiring special dental equipment for proper management

Most hospitals allow single-day admissions and have day surgery or short procedure units. Such a schedule is convenient for patients who require heavy sedation or general anesthesia but who do not require extensive pre- or postoperative care.

Dental patients who are admitted to the hospital should have a complete medical history and a head and neck examination noted on the chart by a member of the dental staff. Most hospitals require a physical examination by a physician or an oral surgeon, but this does not excuse the hospital dentist from writing a history and regional examination findings on the chart. There are many 2-year general-practice residencies and some oral medicine specialty programs that train dentists to perform competent screening and complete physical examinations.

Dentists who admit patients to a hospital may not be able to perform a complete physical examination, but they must be capable of understanding the implications of the physician’s examination and its relationship to the dental procedure to be performed. If the physician writes “PMI 6th ICS AAL gr iv/vi systolic in mitral region radiating to axilla” under “heart examination,” the dentist should understand that the heart is enlarged and that a probable organic murmur is present. In this case, further evaluation such as a cardiology consultation may be necessary before dental surgery is performed.

The hospital dentist should write the necessary orders for patients he or she admits, including orders regarding diet, frequency of vital signs, bed rest, medications, and laboratory tests. The dentist should be able to interpret the results of the tests he or she orders.

In summary, the hospital dentist is responsible for the total welfare of the hospitalized patients he or she admits. The dentist may be unable to treat all problems that arise, but he or she must know whom to consult to treat these problems. The dentist must also be trained to answer complex consultations regarding oral disease that are requested from other departments.

Hospital general-practice residency programs in dentistry train residents in physical diagnosis, laboratory diagnosis, and advanced oral medicine, to help them manage dental patients with severe medical problems. Residencies in oral medicine train dentists to provide oral health and dental care for patients with complex medical disorders as well as difficult diagnostic problems of the mouth and jaws. The future of dentistry and oral medicine in the hospital rests with the men and women being trained in these programs. Their training not only will benefit the dental profession but (more important) will also raise the level of oral health care available to patients with compromised health.