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## **Oral and Maxillofacial Surgery**

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Oral surgery and maxillofacial surgery are general terms for surgery of the mouth (oral) and of the upper jaw and face (maxillofacial). Specially trained dentists, known as oral and maxillofacial surgeons, perform this type of surgery. Otorhinolaryngologists (ear, nose, and throat specialists) also perform certain oral and maxillofacial surgeries, as do cosmetic, or plastic, surgeons. Surgeons use oral and maxillofacial surgery to treat a wide range of injuries, defects, and diseases.

Depending on the purpose of the surgery and where the surgery takes place, oral and maxillofacial surgery may be called simply mouth surgery or, more specifically, primary tumor resection, maxillectomy, laryngectomy, neck dissection, or reconstructive surgery.

Surgery is a common treatment to remove or destroy oral cancer, or mouth cancer, a general term that includes cancer of the lips, mouth, gums, salivary glands, tongue, face, neck, jaws, and hard and soft palates (roof of the mouth). The most common cause of oral cancer is smoking or chewing tobacco.

In treating cancer, doctors use oral and maxillofacial surgery most often to destroy or remove cancerous tumors. In some cases, doctors use oral and maxillofacial surgery to repair or reconstruct parts of the jaw and other bony structures of the face and throat to help patients speak or swallow better, or to restore a patient's appearance following surgery or an injury.

What happens before oral and maxillofacial surgery to remove or destroy a tumor depends on where the tumor is. Patients who are undernourished because chewing or swallowing is difficult, owing to the site of the tumor, receive fluids intravenously to build up their strength before the operation. Generally, patients are instructed not to eat or drink anything eight hours before the procedure. Because various general and local anesthetics are used during the surgery, patients need to inform their doctors of substances they are allergic to. Surgeons sometimes perform oral and maxillofacial surgery in their operatory, so patients need to arrange for a ride home after the procedure. Nurses help hospital patients prepare for their surgery.

Because tumors can develop in so many sites in the mouth and face, and because surgeons may either destroy or remove the tumor, surgical procedures vary widely. For example, surgeons remove early-stage tumors of the tongue with a laser instrument operated directly through the mouth. In cases where the cancer has spread to the neck lymph nodes, a common occurrence, surgeons remove the affected lymph nodes, a procedure known as a neck dissection. Following this primary surgery, surgeons may have to perform additional operations to restore normal function to the patient's neck, shoulder, or other nearby parts of the body. In some cases, surgeons have to perform secondary surgery to restore nerve function. In many cases, oral and maxillofacial surgery disfigures the patient's face or neck. When that happens, surgeons perform restorative, or reconstructive, surgery to restore the patient's appearance. Such secondary surgery includes the use of tissue flaps to restore soft tissue, skin grafts, bone grafts, and prostheses, metal or plastic parts to replace original body parts.

Whatever the type of surgery, patients receive, as needed, a combination of anesthetics, medicines that put the patient to sleep, relax the patient, and block pain.

Following surgery, care varies for each patient, depending on the type of surgery and the location and extent of the cancer. Some patients may return home several hours after surgery.

Others may have to stay in the hospital for several days. Postoperative care and rehabilitation may include additional surgery, speech therapy, dietary guidance, and psychological counseling.

Risks from oral and maxillofacial surgery include harmful reactions to anesthetics and medications, wound infection, excessive bleeding, and slow healing, which are common to most surgeries. More specifically, oral and maxillofacial surgery can adversely affect a variety of body functions including speaking, chewing, swallowing, and controlling the flow of saliva. These risks depend on the size and location of the tumor. Sometimes when destroying or removing a tumor, surgeons destroy or remove surrounding tissue or structures in the mouth. In addition, some patients disfigured by oral and maxillofacial surgery experience psychological problems because of the change to their appearance. Coupled with a severe illness or aggressive treatment, a changed look creates mental and social problems for some patients.

Typically, the earlier oral cancer is detected and treated, the better the chances of survival. When a tumor is destroyed or removed in the early stages of the cancer, and the cancer has not spread, the five-year relative survival rate for patients is about 81 percent; the five-year relative survival rate for all stages of oral cancer is about 59 percent, according to the American Cancer Society. This does not mean that five-year survivors are cancer free or that the cancer will not reappear.