OU Medicine is Oklahoma’s leader in providing da Vinci robotic surgery, offering treatments options in many different adult and pediatric specialties. To learn more about this and other da Vinci surgeries, visit: www.OUrobotics.com.

The Condition: Throat Cancer

Cancer that occurs in the larynx (voice box) and pharynx (throat), which includes the base of the tongue and tonsils, is commonly called throat cancer. It usually develops in adults over 50; men are 10 times more likely to develop the disease. Worldwide, there are about 290,000 cases of throat cancer each year. A neck and throat exam may show the presence of cancer. The sputum (what is coughed up) may appear bloody and a lump may appear on the outside of the neck. Symptoms may include abnormal-sounding breathing; coughing; neck or throat pain; or difficulty swallowing. It is important to be aware of the signs and symptoms of throat cancer since it is highly curable when found early. Studies show people with a history of tobacco and alcohol dependence have a higher rate of throat cancer. Smokeless tobacco products are not a safe substitute for smoking; harmful health effects may include throat cancer.
After a diagnosis is made and the stage (extent) of the cancer determined, your doctor will suggest appropriate treatment options. The goal of treatment is to eradicate the cancer and prevent it from spreading. Treatment options include surgery, chemotherapy and radiation, often applied in combination. In some cases, high-dose chemoradiation is given without surgery. This treatment is non-invasive but the resulting side effects may permanently impact your long-term ability to speak, swallow and eat normally. In fact, up to 30% of patients treated with chemoradiation alone may require a permanent feeding tube.

If your doctor recommends surgery, there are two primary types: open and transoral (through the mouth). Tumor size, stage and location determine the type of surgery required.

Traditional open surgery to remove throat cancer typically requires your surgeon to make a long incision through the jaw and throat. Your surgeon may also need to break the jawbone to access the tumor. This approach can result in disfigurement as well as difficulty eating, speaking and swallowing. Reconstructive or plastic surgery may be needed to rebuild the bones or tissues removed during treatment.

Transoral laser surgery may provide a much less invasive treatment option. Using a surgical camera and microscope passed through the mouth, the surgeon directs the laser to the tumor location - avoiding the need for facial disfigurement and tracheotomy. This approach also may minimize or eliminate the need for chemoradiation and its potential side-effects. However, surgeons are limited by line-of-sight, instrumentation and optics - which means this approach may not be appropriate for all cases.

If your doctor recommends surgery, you may be a candidate for da Vinci Transoral Surgery — a safe and effective minimally invasive procedure. The da Vinci System enables your doctor to perform this delicate operation for early-to-moderate stage cancer. da Vinci provides your surgeon with superior vision, precision, dexterity and improved access. It thereby avoids the disfiguring and traumatic aspects of traditional surgery.

da Vinci Surgery offers throat cancer patients numerous potential benefits over traditional treatments, including:

- Significantly less blood loss
- No visible scarring or disfigurement
- No tracheotomy
- Minimization or elimination of need for chemoradiation therapy
- Fewer complications
- Shorter hospital stay
- Fast recovery, return to normal speech and swallowing
- Excellent cancer control

As with any surgery, these benefits cannot be guaranteed, as surgery is patient and procedure-specific.

**The Enabling Technology: da Vinci Surgical System**

The da Vinci Surgical System is designed to provide surgeons with enhanced capabilities, including high-definition 3D vision and a magnified view. Your doctor controls the da Vinci System, which translates his or her hand movements into smaller, more precise movements of tiny instruments inside your body.

Though it is often called a “robot,” da Vinci cannot act on its own. Instead, the surgery is performed entirely by your doctor. Together, da Vinci technology allows your doctor to perform complex procedures through just a few tiny openings. As a result, you may be able to get back to life faster without the usual recovery following major surgery.

The da Vinci System has been used successfully worldwide in hundreds of thousands of procedures to date.