

Surgeons Pioneer Voice-saving Surgery

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Tulane surgeons have developed a new, less-invasive procedure to preserve speech and swallowing functions in patients being treated for head and neck cancers.



Dr. Ernest Chiu, an expert in facial aesthetic and reconstructive surgery, and other Tulane doctors have developed a voice-saving surgical technique. (Photo by George Long)

[Dr. Ernest Chiu](#), associate professor and director of plastic surgery research, and [Dr. Paul Friedlander](#), chair of otolaryngology and head and neck surgery, have developed a surgical technique that uses a small blood vessel within a flap of skin from the shoulder to reconstruct the pharyngeal and esophageal lining of patients who have had a significant portion of their neck and larynx removed in cancer treatment. Without restoration of this critical anatomical area, patients are unable to swallow or speak.

Typically, operations following treatment for these types of cancers use the patient's

own tissue transplanted from the small intestine, arm or leg for reconstruction.

Traditional techniques are much more invasive and carry higher risks of complications, Chiu says. The new technique reduces surgery time by up to 40 percent, results in faster recovery and restores swallowing function in two to three weeks. A quicker recovery allows patients to continue additional cancer treatment therapies more rapidly.

Patients are eligible for placement of a prosthesis that can preserve speech function without having to use an electro-larynx, which is a medical device patients touch to their neck to speak.

"This new surgical approach offers patients an alternative reconstructive surgery technique that is safe and less invasive without the longer operative and recovery time in traditional free tissue transplant techniques," says Chiu, who has performed the technique since 2007.

Each year, 75,000 new cases of head and neck cancers are diagnosed in the United States. Laryngeal and pharyngeal cancers represent approximately 20 percent of new cases annually.

Chiu details his results in an [article](#) that appears in the January 2010 issue of *Plastic & Reconstructive Surgery*, the official journal of the American Society of Plastic Surgeons. Friedlander is co-author of the article along with four other Tulane doctors.