ANN ARBOR, Mich. - The night before her surgery for tongue cancer, 30-year-old Lisa Bourdon-Krause realized she might never be able to speak to her toddler son again. So she sat up half the night recording messages to him: "Hi, how was your day?," "You're so handsome," "You have a stinky butt. I need to change you." She read two of his favorite books.

"It took me about three times to get through the one story, but I did it and I'm glad I did it. It made me feel safer going into surgery knowing that if something happened to me or if I couldn't speak when I woke up, he would be able to hear my voice and know how much I loved him," Bourdon-Krause says.
The surgery was to remove a cancerous tumor growing near the back of her tongue. Surgeons would remove half of her tongue, an operation that would dramatically affect basic functions such as speech and swallowing.

But by using innovative techniques in oral reconstruction, surgeons at the University of Michigan Comprehensive Cancer Center were able to reconstruct a tongue using skin from Bourdon-Krause's own forearm.

Today - eight years after that surgery - she remains cancer free. But just as importantly, she remains able to swallow, eat and speak to her son.

"Tongue reconstruction in the past would have limited a patient to a soft diet - mostly liquids, some soft solids. At present with the tongue reconstructions that we're performing, patients are able to take a nearly full diet," says Douglas Chepeha, M.D., M.S.P.H., director of microvascular reconstructive surgery and associate professor of otolaryngology at the U-M Medical School.

Chepeha and his team have developed many of the techniques used in tongue reconstruction, including innovative patterns, much like a dress pattern, that help the surgeons determine the size and shape of the skin tissue they'll cut for transplanting. The tissue is taken from another part of the patient's body, often the forearm, so there is not a risk of rejection.

The surgery, which includes removing a portion of the tongue and reconstructing the new tongue, is long and complex, lasting about 10 hours. It requires surgeons to dissect and reattach the blood vessels, just like with a typical organ transplant. The blood vessels are sewn together with tiny sutures, some smaller than a single strand of hair. When patients wake up, their reconstructed tongue is in place.

"In the past, patients who have undergone tongue reconstruction would be very concerned about social interaction. With the type of reconstructions we're performing now, our patients tell us that they're willing to go into a restaurant and order a meal. They have no hesitation whatsoever in asking strangers for directions. They are also able to maintain their employment status and their interactions with friends and family," Chepeha says.

For Bourdin-Krause, the surgery has allowed her to continue working, raising her son and enjoying time with family and friends.

"Now, eight years later, I feel like it's just my normal tongue. I'm used to it. Within a couple weeks, really, I was back to what I considered as normal as I was going to be," she says. "I try very hard not to take anything for granted, because having it almost taken away makes you realize just how special every minute is."

**Tongue cancer statistics:** 10,140 Americans will be diagnosed with tongue cancer this year and 1,880 will die from the disease, according to the American Cancer Society

**Early detection:**

The most common causes of oral cancer are smoking and alcohol consumption, and the risk increases for people who do both. As with most cancers, the earlier a tongue cancer lesion is found, the easier it is to treat. Here are some early signs that could signal tongue cancer:

- Small lump or thick white patch
- Ulcer with firm, raised rim and delicate center that bleeds easily
- Lesion that doesn't heal

"Most mouth lesions will heal within a two-week period. You wouldn't want to be alarmed with a minor canker sore. We're talking about a lesion that's in your mouth, that's been there a couple weeks. It has some firmness to it when you feel it. You can tell there's some thickness to it and it's not healing," Chepeha says.

**Resources:**

U-M Cancer AnswerLine, 800-865-1125

U-M Multidisciplinary Head and Neck Cancer Clinic

[www.cancer.med.umich.edu/cancertreat/headandneck/the_clinic.shtml](http://www.cancer.med.umich.edu/cancertreat/headandneck/the_clinic.shtml)

National Cancer Institute: Oral Cancer


Support for People with Oral and Head and Neck Cancer


**Physicians / Providers**

**News**

[Reconstruction after tonsil cancer surgery makes speaking, eating possible](/news/1307reconstructive-tonsil-cancer-surgery)

[HPV linked to better survival in tonsil, tongue cancer, U-M study finds](/news/237hpv-in-tonsil-tonsil-and-tongue-cancer)
Multimedia

Video: Throat Cancer (/media/19286)

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