LESS BLEEDING. 1-3,†
LESS TISSUE DAMAGE. 4-6
MORE EFFICIENT TONSILLECTOMY. 1,7-10,‡

Three surgeons discuss how the BiZact™ tonsillectomy device allows them to finish cases in half the time — with better results

Dr. Per Attner never had a patient call to say how happy they were with their tonsillectomy. Until he used the BiZact™ device.

Dr. Eng Ooi never saw a tonsil bed look so clean and healthy immediately after a procedure. Until he used the BiZact™ device.

Dr. Ron Karni never felt like he had the right tool for tonsillectomy procedures. Until he used the BiZact™ device.

Three surgeons from three different countries — each with their own preferred tonsillectomy technique — trialed the BiZact™ device.

Each trialed the device in over 30 procedures and they all say they’ll use it for their cases moving forward.

"It’s so effective both in hemostasis and in surgical performance, when it comes to time and blood loss."
— Dr. Per Attner
Department of Oto-RhinoLaryngology
Sophiahemmet Hospital, Stockholm, Sweden

†Average intraoperative bleeding in 17 cases was 7.3 mL for BiZact™ device, compared to published literature results for Coblator™ device (10.83 mL) and electrocautery (27.08 mL) and cold knife (125 mL).
‡Average procedure time in 17 cases for the BiZact™ tonsillectomy device was 9.35 minutes, compared to published literature results for electrocautery (14.8 minutes pediatric, 20.5 minutes adult) and the Coblator™ device (16.52 minutes).
Dr. Karni, Dr. Ooi, and Dr. Attner all report increased procedural efficiency with the BiZact™ device in their hands. Much of that comes from the fact that the BiZact™ device is designed specifically for tonsillectomy procedures.

“Surgeons, once they experience this, will immediately think that this feels like a better tool — a more appropriate tool,” says Dr. Karni, Chief of the Division of Head & Neck Surgical Oncology at Memorial Hermann in Houston, Texas.

The BiZact™ device allows surgeons to both seal and transect tonsil tissues and vessels in one step. Procedural efficiency is also realized through the reliability of the seals — they withstand three times normal systolic blood pressure.¹ That may eliminate the need to go back and stop any bleeding or cleanup the tonsil bed.

“From the first patient we had the same speed, or even faster, than what we’re used to, at minimum to zero blood loss, and no need for any follow up hemostasis,” says Dr. Attner, a diathermy scissors user in the Department of Oto-Rhino-Laryngology, at Sophiahemmet Hospital in Stockholm, Sweden.

“The sequence and the choreography of surgery has changed before our eyes, naturally lent itself to more efficiency,” Dr. Karni says. “When we do the BiZact™ tonsillectomy, there’s no bleeding. We just remove the tonsil.”

As a result, the surgeons are finishing cases in four to five minutes on average.

Quick, easy setup
A plug-and-play system, the BiZact™ device is fast and easy to set up. You simply plug it into a Valleylab™ energy platform and it’s ready to use.

“The nurses are very happy with it,” remarks Dr. Ooi, head of the Otolaryngology Head and Neck Surgery Unit at Flinders Medical Centre and associate professor, Flinders University, Adelaide, Australia. “It’s a very simple plug in, and away we go.”

“Using the BiZact™ device, you don’t have to make sure the foot pedal is hooked up, and you don’t have any settings. You plug it in, and that’s it,” Dr. Attner says. “That’s obviously a huge advantage.”

“If you’re comparing it to another powered technique, like the Coblator™ device, that’s a completely different story,” Dr. Attner adds. “I used Coblation™ a lot before. That setup process is far more demanding.”

Dr. Ooi concurs. “It’s quicker than the Coblator™ when you consider the setup time is easier.”

Anesthesiologists are also happy with it, Dr. Ooi says, because the BiZact™ device eliminates the need for irrigation fluid. Whereas with the Coblator™ device, anesthesiologists have to be careful that the irrigation fluid doesn’t go down the trachea.

Less time under anesthesia improves OR turnaround times
The efficiency of the BiZact™ tonsillectomy procedure is a win-win situation, the surgeons say.

“The patient is under a general anesthetic for a shorter time,” Dr. Ooi says. “It also improves turnover, so you can get through more cases in the same OR time. That could potentially reduce waiting times for patients.”

Dr. Karni uses this example:

“Think about a surgeon who does seven tonsillectomies in a day, with patients undergoing a 45 minute anesthetic each time. Maybe the anesthetic will now be 25 minutes instead of 45 minutes.”

“I think that anesthesia ultimately causes a lot of nausea and recovery,” Dr. Karni says. “We know shorter anesthesia also mean less money, less cost.”
“BiZact” rules!”

That was the subject line of an email Dr. Attner sent during his trial. It included a picture (top right) his colleague took to document the lack of blood after a peritonsillitis tonsillectomy she performed with the BiZact™ device.

“More often than not, there’s no need to do any cleanup afterwards,” Dr. Attner says. “We didn’t have a perfect score of zero residual bleeding once the tonsils were removed, but we’ve all been able to use the BiZact™ device to cauterize the remaining small bleeders.”

“This tool makes it one and done,” Dr. Karni says. “It’s rare for the tonsil to be bleeding because you’ve cauterized as you’re going through.”

“It seals the blood vessels very well,” Dr. Ooi says.

“Excellent.” “Healthy.” “Beautiful.” Those are just three of the words the surgeons use to describe the appearance of the tonsil bed after using the BiZact™ device.

“The tonsil fossa and the pharyngeal muscles look excellent. They look like they’ve hardly been touched, injured, or damaged at the end of surgery,” Dr. Ooi says.

“Using the BiZact™ device, the tissue looks very healthy, pinkish, which is a very good sign,” Dr. Attner adds.

There are two reasons for this:

• The reliability of the seals and the subsequent lack of intraoperative bleeding to cauterize
• The BiZact™ device is powered by Valleylab™ energy platforms that minimize thermal spread

This translates to reduced interoperative bleeding1-3,† and time savings compared to other techniques.7-9

“If you look at the tonsillar bed after a typical tonsillectomy, you’ll see one or two places where there was bleeding and there was an intense amount of energy applied, or there’s a black char there, essentially, to control some bleeding,” Dr. Karni says. “You’re pouring energy until you’ve cooked that tissue. It’s a lot of energy, a lot of heat, and it probably has implications in terms of pain. That’s the typical wound bed of a tonsillectomy.”

“Here, you won’t find a lot of evidence of burn. You’ll just see the muscle.”

PERMANENT SEALS
MINIMAL THERMAL SPREAD4-6

The BiZact™ device is powered by Valleylab™ energy platforms that measure impedance of clamped tissue, to deliver the exact energy needed to create a permanent seal. Valleylab™ energy platforms also automatically stop energy delivery when the seal is complete. This minimizes thermal spread.

It’s made possible by TissueFect™ tissue-sensing technology, which is built into Valleylab™ energy platforms.

BiZact™ device seals withstand 3X normal systolic blood pressure11
LOW THERMAL DAMAGE MAY DECREASE POSTOPERATIVE PAIN

While controlled studies will help determine if the BiZact™ device reduces pain compared to other techniques, initial feedback suggests that it may.

“Our anecdotal experience is that it probably does, but it will take us quite a lot of patients to really identify a significant improvement in pain,” Dr. Karni says. “The reason we suspect that it does decrease the pain is that we’re not sitting there with that Bovie, after the tonsil’s been removed, sitting on that muscle, trying to stop bleeding, and pouring a lot of energy where it’s not needed.”

The typical healing process for tonsillectomy takes about two weeks, and many patients experience an increase in pain around day five or six.

“A lot of patients actually contact us during that period to try to have some extra treatment, because the pain is more or less unbearable,” Dr. Attner says.

The surgeons’ experience with BiZact™ device may signal a shift, though.

Dr. Attner says, “In the 30 cases of BiZact™ tonsillectomies, we would probably expect five to seven to contact us with pain, if we would have been using the bipolar scissors. But none actually did.”

“Some of them even spontaneously contacted us and said that it was much less painful than they expected.”

Returning to normal activities sooner

Dr. Attner says the majority of his patients were returning to normal activities sooner than expected.

“This hasn’t been systematic, so it’s kind of anecdotal, but at least the vast majority of patients said they were returning to normal daily activities and normal consummation of foodstuff quicker than they expected — and even I expected,” Dr. Attner says.

Some were off all painkillers and back to work after eight and nine days.

“One of my colleagues even got an email from a patient that was so happy that she was back at work after just one week,” Dr. Attner says. “We’ve had some really good feedback, some of it even spontaneously.”

§Low thermal damage has been shown in studies to result in less postoperative pain. The BiZact™ device has been shown to produce <1 mm thermal spread, but has not been directly evaluated for pain reduction.
PREFERRED METHOD

The efficiency, reliability, and benefits for patients have convinced these surgeons that the BiZact™ device is the right tool for tonsillectomy.

Even for Dr. Attner and his colleagues, who consider the diathermy scissors their gold standard, due to its speed and low cost.

“When we compare it to what we’re using today, we have a very high standard to reach,” he says. “Some of my colleagues, if they had the choice, would prefer to use the BiZact™ device, because they felt that it was the more preferred method for them.”

Dr. Ooi says he would like to continue using the BiZact™ device. There’s no turning back for Dr. Karni, either.

“When you can remove the tonsil in a clean plane and there’s not really a drop of blood in the field, it’s dry, the tissue doesn’t seem terribly burned, and it takes a minute or two, it seems efficient,” Dr. Karni says.

“There will be a good proportion of American and worldwide tonsillectomy surgeons who will immediately identify that on their own like we did, and will come over to this paradigm for surgery.”

— Dr. Ron J. Karni
Surgeon: Dr. Per Attner  
Affiliation: Department of Oto-RhinoLaryngology, Sophiahemmet Hospital, Stockholm, Sweden  
Previous technique: Diathermy scissors  
Favorite thing about the BiZact™ device: “We like doing the surgery with it. It’s fast, it’s effective, and it seems like it’s less bothersome for the patients.”

Surgeon: Dr. Eng Ooi  
Affiliation: Head of Otolaryngology Head and Neck Surgery Unit at Flinders Medical Centre and Associate Professor, Flinders University, Adelaide, Australia  
Previous technique: Coblator™ device  
Favorite thing about the BiZact™ device: “It does a really nice clean dissection tonsillectomy. The tonsil fossa and the pharyngeal muscles look excellent. They look like they’ve hardly been touched, injured, or damaged at the end of surgery.”

Surgeon: Dr. Ron J. Karni  
Affiliation: Chief, Division of Head & Neck Surgical Oncology, Memorial Hermann, Houston, Texas  
Previous technique: Electrosurgery  
Favorite thing about the BiZact™ device: “This wasn’t designed for belly surgery or for any other orifice in the human body. This was designed for tonsillectomy.”

References