Dysphonia International hosted a webinar on May 24, 2023 with Dr. Jürgen Konczak titled Laryngeal Vibration Can Reduce Voice Symptoms of Laryngeal Dystonia. Questions submitted by participants were answered live both through discussion and in written format. Below are the responses from Divya Bhaskaran, PhD, Researcher and Coordinator of Vibro-Tactile Stimulation (VTS) clinical trials, and Arash Mahnan, PhD, Lead of the abductor VTS.

View the webinar recording by clicking or scanning here:



Q: Can the vibration work for a person receiving Botox treatment?

A: Our clinical trial had participants who received Botox two weeks prior to enrolling. We saw similar reactions from those who did and did not receive Botox.

Dr. Divya Bhaskaran

Q: Do you recommend Botox?

A: We encourage you to continue with the treatment that has been successful for you. At this stage, VTS is a complementary treatment approach.

Dr. Arash Mahnan

Q: As one of the ABSD experiment participants that did not experience any positive effect from VTS, I would like to know if you have any ideas on what factors might lead to such variance in results. Such as, does vibrational frequency need to be adapted per individual?

A: Thank you for participating. As it does not have any negative effects, we could change up the frequency and see if that might have a stronger effect. Another thing we would change would be to apply for a longer time or daily application. These are questions we would like to explore if possible.

Dr. Divya Bhaskaran

Q: You mentioned there was a wide range of responses. Do you have any ideas or hypotheses as to what could be causing the differences in responses?

A: We have not been able to pinpoint any category of people who seem to have the most beneficial effect. But we do see a trend of people with more disease severity seem to benefit the most compared to those with mild severity or so.

Dr. Divya Bhaskaran



Q: Might a massage vibrator device placed against the larynx be effective?

A: You need to be mindful of the vibrators, their stimulation frequency, and the location of the stimulation.

Dr. Arash Mahnan

Q: What are the possibilities of everyday at-home use or permanent use for VTS? What are electromagnetic field effects?

A: There is a very small electromagnetic effect. The vibrators work with a very low level of voltage and current.

Dr. Arash Mahnan

Q: My voice sounds very similar, but I believe it is a physical malady not brain. Am I am correct?

A: The brain sends signals to the vocal cords to close or open. So, in the case of laryngeal dystonia, the vocal cords are stimulated by the brain to either open for longer, or close longer than they should.

Dr. Divya Bhaskaran

Q: Can you describe why you typically choose gabapentin over Lyrica? It seems to be the drug of choice and there are so many individuals who have had memory loss with this drug.

A: Gabapentin can have side effects as well as pre-gabapentin. Pre-gabapentin is often not covered by insurance for similar indications. I know the neurologist will prescribe very high doses, but I also note that side effects such as confusion are a common complaint.

Q: Is the vibration bothersome in any way?

A: Some participants say it feels like a light massage, one or two were annoyed with the sound of vibration. Most of the people were not bothered by it. It will feel and sound like a phone vibrating.

Dr. Divya Bhaskaran

Q: Will there be more studies looking at the effect of different strengths, or any other variables?

A: We have already explored different ranges for strength and frequencies. We are now looking to investigate the long-term effect of the VTS across different centers.

Dr. Arash Mahnan

Q: Are you planning future studies to further refine the best possible strength and frequency? If so, where, and when?

A: Yes, the team is planning to work on the next step of the clinical trials that are going to be conducted in multiple centers. You will hear from our team as soon as we start the new round.

Dr. Arash Mahnan

Q: Do I understand correctly that after stimulation, Botox treatments will work as expected?

A: VTS does not have any adverse effect on the Botox treatment. You can continue having Botox treatment.

Dr. Arash Mahnan

Q: Did any of the participants have tremor in addition to spasm and how did they respond to the stimulation?

A: Yes, for some of the participants, VTS improved the vocalization effort. It got easier for them to speak. However, we did not systematically look into tremor.

Dr. Arash Mahnan

Q: Would massage therapy be an option for those that react positively to touch stimulation?

A: Massage therapy might or might not work. It really depends on the individual. However, the type of stimulation is different between massage therapy and VTA.

Dr. Arash Mahnan

Q: For cervical dystonia where are the sensors placed?

A: On the muscles that are affected by cervical dystonia.

Dr. Arash Mahnan

Q: Will you be trying to get these devices FDA approved any time soon? The VTS or the collar.

A: We are in the process for more clinical trials that will potentially lead to FDA submission.

Dr. Arash Mahnan