Baek Advocates Benefits of Ultrasound and Electromagnetic Tracking Technology

“In radiofrequency ablation, monitoring the electrode tip during ablation of a thyroid nodule with the VirtuTRAX™ technique is feasible and helpful to increase safety of the procedure.”

Q. How did you become interested in the ultrasound field?

I am fascinated with ultrasound-guided minimally invasive procedures such as thyroid biopsy or radiofrequency ablation (RFA) because the outcomes of the procedures absolutely depend on the operators’ skill. Therefore, we, our thyroid team, have developed these techniques for thyroid disease.

Q. How did you become interested in using CIVCO’s eTRAX™ Needle Tip Tracking and VirtuTRAX™ Instrument Navigator guidance systems?

My Italian friend and colleague, Professor Turtulici, applied the VirtuTRAX needle tracking system to his thyroid patients. I then found that this technique is useful for my patients. We are going to develop this technique for both beginners and experts in the field.

Q. What procedures do you most commonly perform when using needle tracking?

I primarily perform radiofrequency ablation of thyroid and neck tumors.

Q. Describe a time when needle tracking helped you avoid or reduce challenges or complications.

When we initialize a thyroid radiofrequency ablation, the transient hyperechoic zone disturbs visualization of the electrode tip. During the insertion of the electrode into the thyroid nodule, the VirtuTRAX Instrument Navigator allows continuous monitoring of the electrode tip.

Q. With regards to needle tracking technology, what advice would you offer physicians entering the profession?

The VirtuTRAX device could increase the accuracy and the outcome of thyroid radiofrequency ablation while reducing the complication rate, shortening the procedure time and learning curve. Therefore, we recommend this system for beginners as well as experts in this field.

Q. In your professional opinion, where do you think the future of ultrasound is headed?

In radiofrequency ablation, monitoring the electrode tip during ablation of a thyroid nodule with electromagnetic technique (VirtuTRAX) is feasible and helpful to increase the safety of the procedure.