



Imai Discusses Clinical Benefits of Ultrasound and Needle Guide Technology

Disposable Ultra-Pro II™ Needle Guide Improves Infection Control in Busy Gastroenterology Department while VirtuTRAX™ Use Expands to Academic Medical Centers in Japan

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

A. I had the opportunity to learn abdominal diagnosis using ultrasound in 1984 when I was a resident. I was impressed when I found a lesion with ultrasound and envisioned a time when ultrasound would be used rather than surgery. I felt diagnostic abdominal ultrasound would eventually be utilized because it is a non-invasive treatment method.

Q. How did you become interested in using CIVCO's Ultra-Pro II needle guidance system?

A. Previously, the probe utilized in our facility had to be sterilized following each use, so there was a limitation on the number of treatments that could be performed each day. After Ultra-Pro II was adopted by our facility, there was no limitation and improved the waiting period for each patient. The disposable guide is ideal for infection control. We commonly perform radiofrequency ablations and biopsies with the assistance of needle guidance.

Q. How did you become interested in using CIVCO's VirtuTRAX Instrument Navigator guidance system?

A. Depending on the type of needle, it is sometimes difficult to visualize the tip under ultrasound. I like to visualize a guideline for simulation of free-hand puncture. Also, the radiofrequency ablation needle is always challenging to detect the needle tip and VirtuTRAX is a solution to this clinical problem.

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

A. I typically perform radiofrequency ablation procedures and liver biopsies each week. Additionally, it would be feasible for central venous catheterization as well. At our facility, we do 2-3 procedures per week, with additional procedures performed in gastrointestinal surgery.

BACKGROUND

Physician:
Yasuharu Imai, MD
Professor, Gastroenterology

Facility:
Tokyo Medical University
Hachioji Medical Center

Featured Product:
Ultra-Pro II & VirtuTRAX



Q. Describe your current role at your facility and how you approach education of clinicians when using ultrasound.

A. I am the Manager of Gastroenterological Medicine. We let our residents observe ultrasound-guided punctures and then perform them under the direction of a specialist. At our facility we utilize high-end ultrasound systems from leading manufacturers including: Hitachi Aloka, Philips and Toshiba and are continuously reviewing new technology and providing inputs to the OEMs.

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

A. At this point in Japan, facilities utilizing VirtuTRAX are relatively major academic center so there is discussion at society meetings but with continued expansion in the market, we will discuss a study group in Tokyo.

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

A. It is important to be aware that VirtuTRAX provides only a virtual needle path and you must visualize the actual needle tip in the ultrasound image.

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

A. It would be ideal to offer all ultrasound users a real-time three dimensional ultrasound probes that provides good image quality. Furthermore, some sort of automatic detection of the target and needle path guideline by the ultrasound system itself would be beneficial.

