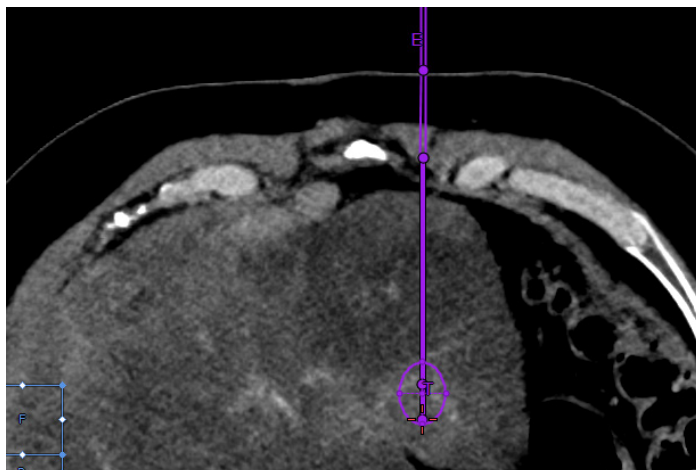


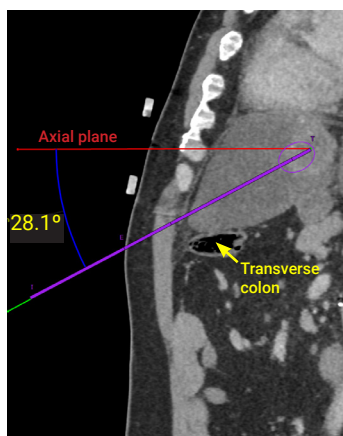
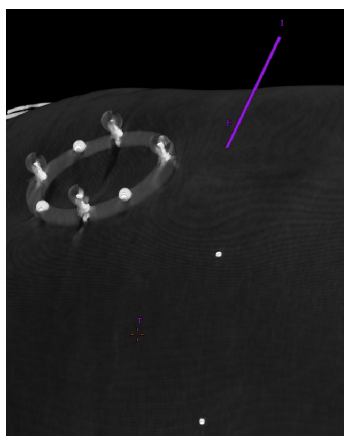


Epione[®] robotic microwave ablation of a hepatic mCRC metastasis

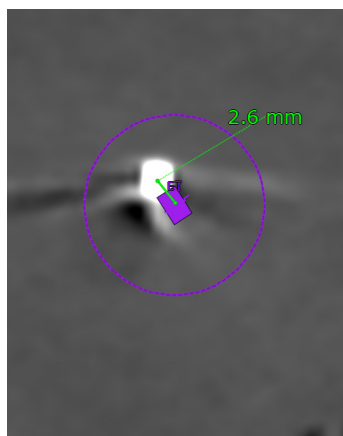
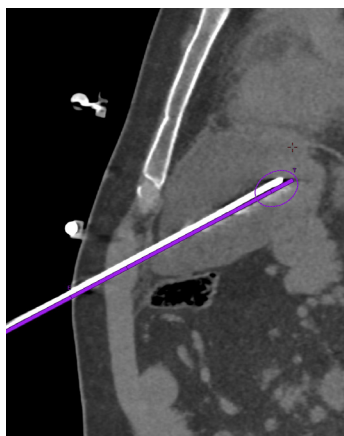
- Difficult-to-access lesion
- Oblique trajectory required
- Insertion time < 1 min



Planned probe trajectory for 2.3cm lesion



3D and 2D representations of optimal oblique angle trajectory



Accuracy of planned vs. actual probe placement: 2.6mm

Patient: 52 year old, Male
Physician: Baptiste Bonnet, Interventional Radiologist
Institution: Gustave Roussy
Location: Villejuif, France

Challenge:

Segment II hepatic 2.3cm diameter metastasis from colorectal cancer. Located in the left liver, in plane access to the lesion was difficult due to obstruction of ribs and chondrocostal cartilage.

Approach:

The patient was treated in the supine position and jet ventilation anesthesia was utilized during the procedure. Using the **Epione[®] System**, one microwave probe was inserted in the center of the lesion.

1 Plan / Target

A single ~14cm depth trajectory at an oblique angle (~28 degrees of cranial angulation from the axial plane) was planned above the transverse colon and through the center of the lesion. Ablation power and time settings were simulated with **Epione[®] Software** to visualize adequate margins in 3D.

2 Deliver

< 1 minute

Following accurate registration of the patient to the imaging, the **Epione[®] Robotic Arm** automatically aligned the needle guide to the planned trajectory and depth of insertion. The physician then inserted the ablation probe to the desired depth in one motion (< 1 min).

3 Confirm

Imaging was performed to confirm proper location of the ablation probe prior to ablation. Accuracy of final probe placement was 2.6mm. **Epione[®] Software** also allows the physician to segment and compare the lesion and ablation zone volumes to confirm adequate margins were achieved.

Outcomes:

Immediate post-procedure clinical success was achieved. Ablation was complete, with no complications reported. The patient experienced neither progression nor recurrence of the lesion 6 months after treatment.