Multi-probe ablation cases

Liver Lesion
- 3.7 cm
- 2 NEUWAVE™ PR Probes
- Complete coverage
- Case courtesy of Dmitri Samoilov, MD

Liver Lesion
- 6.3 cm
- 3 NEUWAVE™ LR Probes
- Complete coverage
- Case courtesy of Fred Lee, MD

Kidney Lesion
- 6.3 cm
- 3 NEUWAVE™ LR Probes
- Complete coverage
- Case courtesy of Neel Patel, MD

Proven benefits of multi-probe synchrony

- Significantly larger ablation zones (Figure 1)
- Rounder, confluent ablation zones (Figure 2)
- Higher, more uniform temperatures across the ablation zone
- 67% decrease in total procedure time

The science of multi-probe synchrony
creating tailored ablations for lesions of many shapes and sizes

Disclaimer: The NEUWAVE™ Microwave Ablation System is cleared for the ablation (coagulation) of soft tissue in percutaneous, open surgical and in conjunction with laparoscopic surgical settings. The NEUWAVE™ Microwave Ablation System is not cleared for treatment of any specific disease or condition. The NEUWAVE™ Microwave Ablation System is not indicated for use in cardiac procedures. The system is designed for facility use and should only be used under the orders of a clinician. Clinicians should exercise their independent medical judgment in use of the system.
Clinical need for multi-probe ablation systems

In a large liver ablation study, approximately 40% of the lesions were ≥ 2.5 cm. Lesions of this size pose significant challenges when attempting to ablate with a single probe. This highlights the need for building an ablation program with a multi-probe system that can tailor ablations to lesions of many different shapes and sizes.

The NEUWAVE™ Microwave Ablation System

A total solution for ablating lesions of many shapes and sizes with consistency and control.

NEUWAVE™ Ablation System

Multi-probe synchrony for consistent, large and confluent ablations

Multi-probe synchrony = in-phase-waves

A single generator produces in-phase waves

Benefits:
- High power (195W)
- In-phase waves create consistent, large ablations

Risks:
- No control of wave phase
- Inconsistent ablations with potential wave amplification or cancellation

Repositioning = no thermal synergy

Repositioning probes creates overlapping ablation zones with inconsistent heat distribution and clefting

Benefits:
- Aggressive temperatures at the periphery
- Rounder ablations compared to ablations with sequential probe activation
- Most procedures completed within 5-10 minutes of ablation time

Risks:
- Decaying temperatures at the periphery
- Clefting may result in an incomplete ablation
- Longer procedures due to repositioning and ablating multiple times to attempt complete coverage

Single probe systems

Using multiple independent generators or repositioning single probes is required for large ablation zones.

Multiple independent generators = no wave phase control

Multiple independent generators; wave phase cannot be controlled

NOTE: Probe placement in the exact center would be required to cover the minimum 3.5 cm with a single probe.

2.5 cm on each side
3.5 - 4.5 cm on each side
0.5 - 1.0 cm on each side

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