

MICROWAVE THERAPEUTIC SYSTEM

SABERWAVE **ECO - 200G**

Tumor &
Endovenous
Ablation System



Break through application boundaries
One Stop service platform for tumor endovenous ablation

THYROID

VARICOSE VEINS

BREAST FIBROADENOMA

LUNGS

KIDNEY

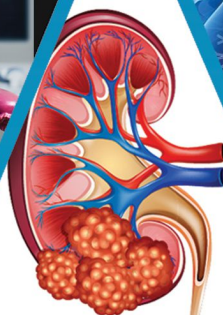
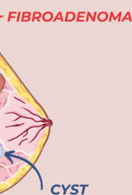
ALL IN ONE



OSTEOID OSTEOMA

LIVER

UTERINE FIBROIDS



With advantages of rapid temperature increase, strong tissues penetration large ablation zone, real time temperature monitoring and accurate curative effect, microwave ablation is widely applied to treat Thyroid, Breast, Lung, Liver, Kidney, Uterine Fibroids, Bone and Varicose vein etc, which is the trend of tumor treatment in 21st century.

MICROWAVE THERAPEUTIC SYSTEM SABERWAVE



Touch Screen
User Interface

For all Parameters & Alert conditions, and Wavelength control for Spherical Ablation zone

Pulse
Mode

Advance software with Track Ablation and Tumescence Application option, Foot control operation

Multiple
Safety
Measures

Cut off Temperature above 45° with Remote Probe monitoring

MODEL 200G

Tumor & Endovenous Ablation System

Foot
Control
Operation

Stable
Microwave
Output

Integrated
Tumescence
Pump

with Intelligent Coolant Failure Detection System

2.45GHz
Operating
Frequency

Max Power of 100W
Power increment 1-5W

Tumor

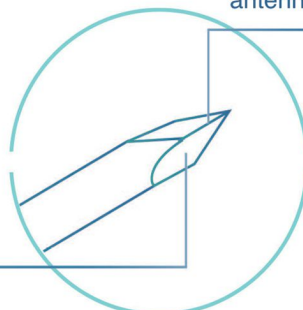
Endovenous
Ablation

DISPOSABLE MICROWAVE THERAPEUTIC ANTENNA

Triangular Pyramid Tip

Each side triangular pyramid makes antenna echogenicity clearer under US guidance

Sharpness of a triangular pyramid tip is higher than regular (cone) tip

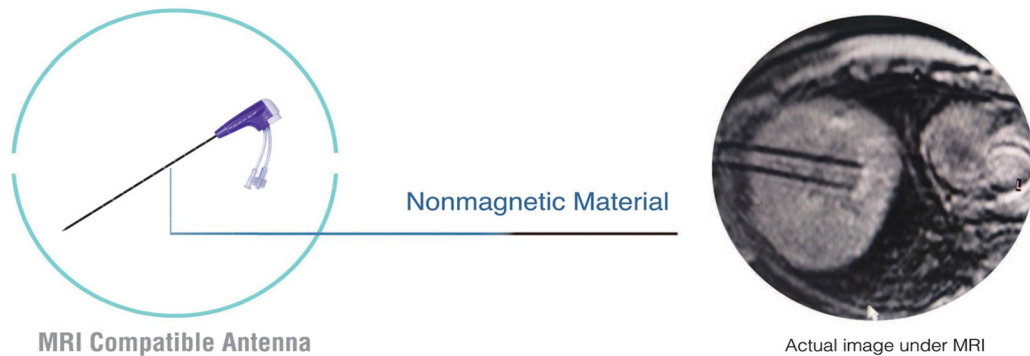


Actual image under ultrasound

Features



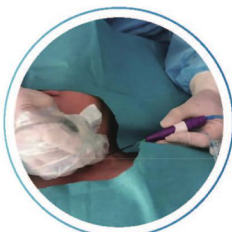
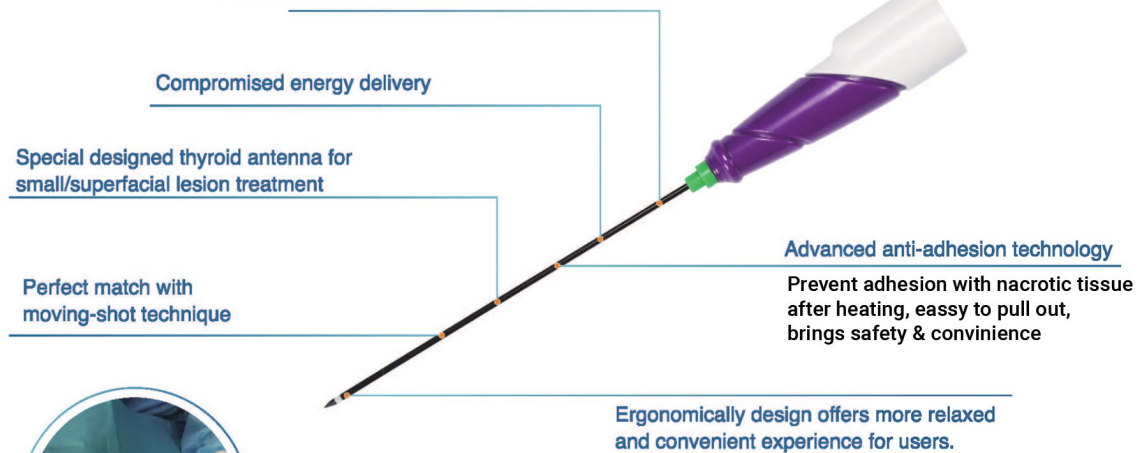
MRI Compatible



Ultra Thin Antenna

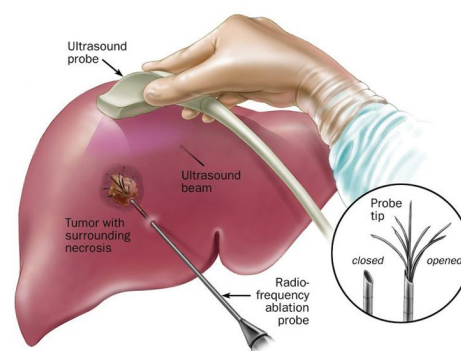
Variety of diameter options available for different clinical needs

14G / 16G / 17G / 18G



Advantage of Microwave Therapy on Liver

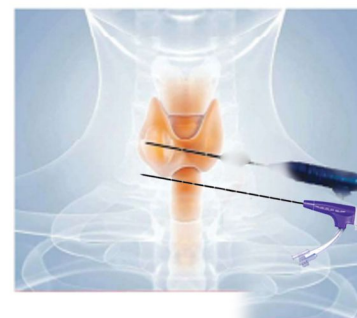
- Minimally invasive treatment, "patient-friendly" procedure;
- Simple operation with short ablation time;
- Fast recovery with very short hospital stay, no scar;
- Large ablation zone of upto 7Cm
- No heat sink effect, Energy travels backward making it safe for use in tumors with close proximity to venous system
- Combined therapy, can also be used intra-operative



Advantage of Microwave Ablation on Thyroid Nodules

The detection rate of thyroid nodules is rising, with 40% detectable by high-resolution ultrasonography. The incidence of thyroid cancer is also increasing rapidly. While surgical removal is common, younger patients prefer treatments that preserve neck aesthetics and normal life.

Minimally invasive tumor ablation techniques, like microwave ablation, meet these needs by offering less trauma, fewer complications, and faster recovery. Microwave ablation, in particular, is promising due to its fast heating rate, strong ablation power, minimal blood flow influence, large ablation zone, and stability. This makes it a leading method in minimally invasive therapy for thyroid nodules.

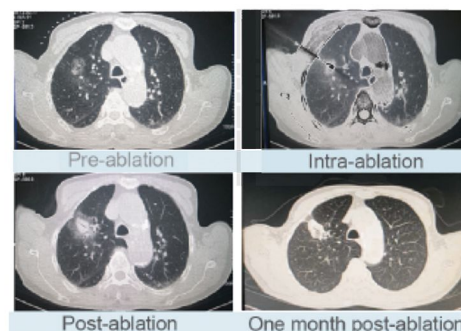


Advantages of thyroid microwave ablation



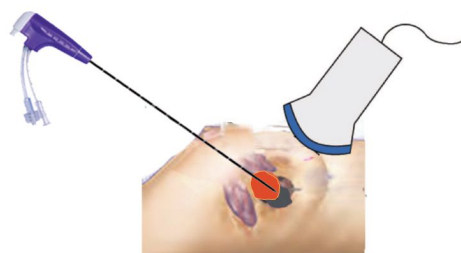
Advantages of Microwave Ablation on lungs

- **High thermal efficiency**
Fast ablation speed and wide ablation zone
- **Minimally invasive treatment**
Minimally invasive, local inactivation, organ function preservation, less complications, to improve "life quality of patients" wide ablation
- **Application**
Both for peripheral and central lung nodules, cancer, GGO
- **Combined therapy**
It can be combined with surgery, radiotherapy and chemotherapy to improve the curative effect



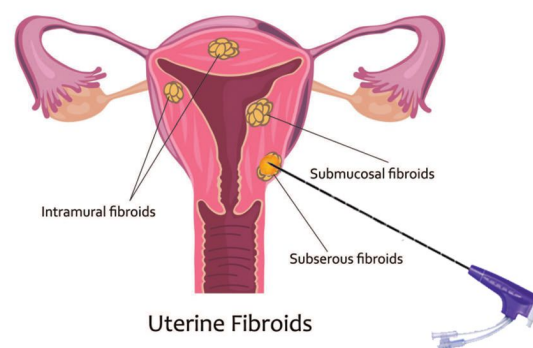
Advantage of Microwave Therapy on Breast Fibroadenoma

- No Surgical Scar
- Minimally Invasive
- Thin Microwave Probe 18G
- No Cosmetic Defect
- Same Day Discharge
- Day Care Procedure
- No General Anesthesia



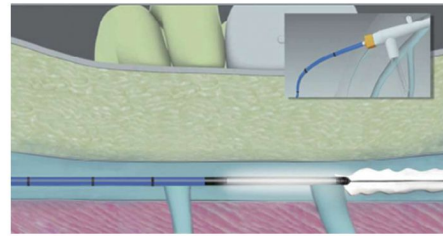
Advantages of microwave ablation in Uterine Fibroids

- Preserve uterus, no damage to pelvic structure. Lesions will be inactivated and significantly reduced in size after ablation, which can improve or eliminate the clinical symptoms (such as dysmenorrhea, large menstrual volume, anemia, etc.).
- Has no effect on ovarian function, menstrual cycle will be normal after ablation.
- No surgery required, can be treated through percutaneous or transvaginal approach.
- Simple operation, short ablation time, less trauma, no scar, safe and effective.
- **Endometrium** : The microwaves destroy the basal layer of the endometrium and the glands by heating them to over 60°C.
- **Adenomyosis** : Ultrasound-guided microwave ablation (MWA) treats adenomyosis by heating tissue to reduce size and symptoms like pain and heavy bleeding, while preserving the uterus and ovarian function. It's a good option for women who want to have children.



Advantage of Microwave Therapy in Varicose Veins

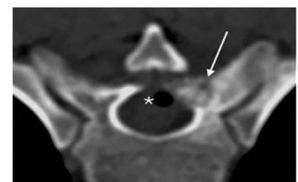
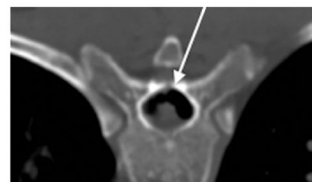
Varicose veins are a common medical condition with a growing global prevalence. Microwave intravascular coagulation therapy represents the latest advancement in minimally invasive treatments for varicose veins. Using a percutaneous approach, a specialized microwave probe is inserted into the great saphenous vein to perform intravenous coagulation.



The microwave energy solidifies the vein, effectively closing it and eliminating the tortuous, elongated, and expanded vein structure, providing a complete cure. This innovative therapy offers numerous advantages over traditional methods, including the absence of surgery, reduced pain, faster recovery, no scarring, lower recurrence rates, shorter treatment duration, fewer complications, and high efficacy. Can be used with Laser or other therapy for better results

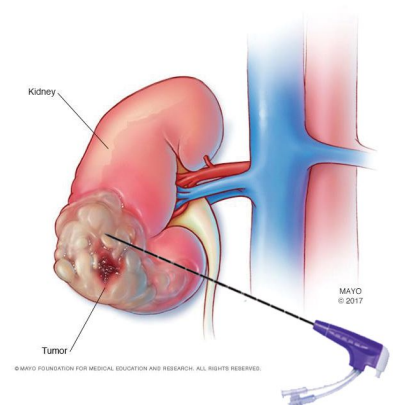
Advantage of Microwave Therapy in Osteoid Osteoma (Fibroids)

Microwave ablation (MWA) is a minimally invasive treatment for osteoid osteomas that offers several advantages over other treatments: it is less invasive than traditional surgery, leading to shorter recovery times and fewer complications; it effectively reduces pain, often providing rapid relief; CT-guided MWA allows for precise targeting of the tumor, minimizing damage to surrounding healthy tissue; patients typically have shorter hospital stays compared to surgery; and studies show a low recurrence rate, making it a reliable option for long-term relief. Overall, MWA is a highly effective and patient-friendly option for treating osteoid osteomas, especially for those looking to avoid the risks and recovery time associated with surgery.



Advantage of Microwave Therapy in Kidney

Microwave ablation (MWA) is a minimally invasive procedure that uses heat to treat small kidney tumors without major surgery. A radiologist makes a small incision, inserts probes into the kidney, and uses microwave energy to destroy the tumor. MWA is suitable for patients with small tumors that haven't spread beyond the kidney or those at high surgical risk, and it can also treat recurrent tumors. This procedure is less invasive and faster than other options, allowing patients to return to normal activities within a few days. Performed under general anesthesia or conscious sedation, MWA uses imaging tests to guide the probes, ensuring precise treatment.



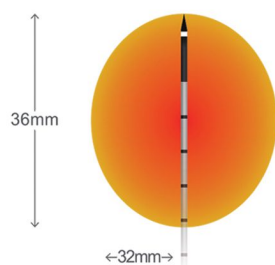


Disposable Microwave Therapeutic Antenna (Ceramic series)

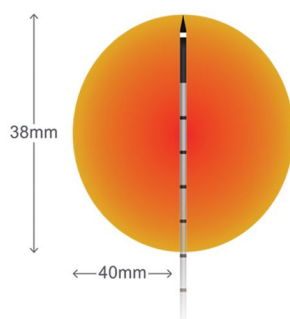
Ex Vivo Porcine Liver Ablation Data

Single Probe

60W 8min

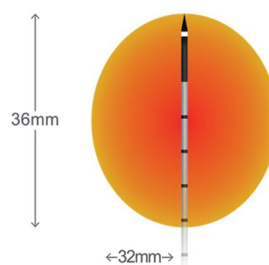


60W 10min

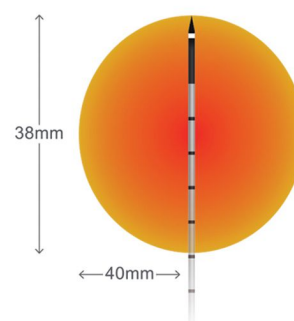


Single Probe

60W 8min



60W 10min

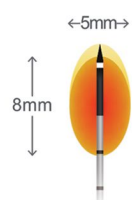


Disposable Microwave Therapeutic Antenna (Thyroid series)

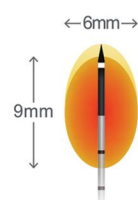
Ex Vivo Porcine Liver Ablation Data

16G - Single Probe

30W 10s

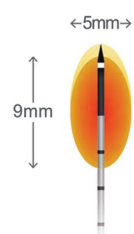


30W 20s

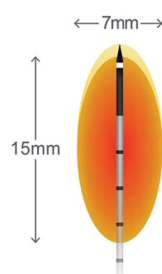


17G - Single Probe

30W 10s

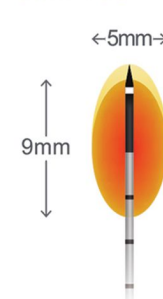


30W 20s

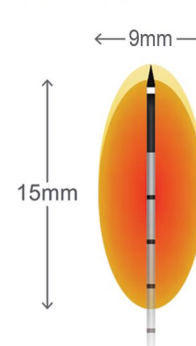


18G - Single Probe

30W 10s



30W 20s

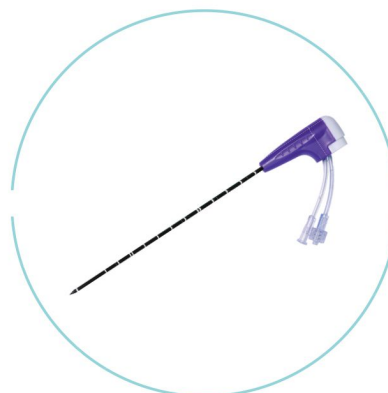


Note: Output power 30W~40W is routinely used in operation, and the continuous working time of a single ablation circle shall not be more than 15min;
The maximum power limit is 50W. It is FORBIDDEN to overpower the antenna.
Single antenna thyroid ablation is generally suitable for lesions within 3cm; If the lesion is larger than 3cm, double antenna ablation is recommended.

Disposable Microwave Therapeutic Antenna



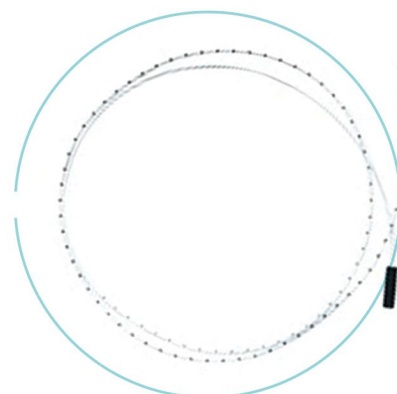
Ceramic Antenna



MRI Antenna



Thyroid Antenna



Soft antenna (for Endovenous Ablation System)

Feature	Benefit
Available in 14G, 15G, 16G, 17G, 18G diameters	Variety of diameter allows user to chose suitable one delivering highly efficient & precise treatment
Available in 10cm, 15cm, 20cm, 25cm lengths	Variety of lengths available for open, percutaneous, and laparoscopic procedures
Detachable cable	Makes antenna placement more convenient
Unique MRI compatible antenna available	To achieve MRI guided ablation procedure
Patented cooling system with thermocouple	Real-time coolant temperature monitoring to minimize the risk to non-targeted tissue burns
High strength shaft material and advanced anti-adhesion technology	Lower tumor core temperature, less charring

Soft Antenna (for Endovenous Ablation System)

6F Antenna Specifications - Cable Details	1500mm antenna length with a 1cm active microwave tip. Round markings by the centimeter with warning marks at 3cm and 13cm.
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 ANTENNA**100MM - METALLIC**

16G X 100mm - Metallic
17G X 100mm - Metallic
18G X 100mm - Metallic

150MM - CERAMIC

14G X 150mm - Ceramic
16G X 150mm - Ceramic

200MM - CERAMIC

14G X 200mm - Ceramic
16G X 200mm - Ceramic

250MM - CERAMIC

14G X 250mm - Ceramic
16G X 250mm - Ceramic

FLEXIBLE ANTENNA

6F X 1200mm - Endovenous Ablation
6F X 1800mm - Bronco Flexible Antenna
6F x 2200 - GI/ Endo Flexible Antenna





Microwave Generator Specifications

Feature	Benefit
Generator Size & Weight	400mm*150mm*410mm(including water pump)/ 14KG N.W.
Portable & Compact Generator	2450 MHz operation frequency, Solid State (SSMW), Power up to 100W, Integrated peristaltic pump, no grounding pad required.
Interactive Touch Screen	7inch LCD display with, Adjustable power (5-100W) & time settings (1–30 minutes). With Touch Screen
Safety Monitoring	Real-time temperature monitoring, multi-safe monitoring design, continuous and pulsed modes.
Remote Temperature Monitoring	14-gauge remote probe for real-time temperature measurements.
Certifications	ISO, USFDA, CE, MDR, & CDSCO certified.
Cooling Pump	Integrated pump for sterile water flow.
Operating Modes	Standard and pulse modes for procedural control.
Preset Programs	4 preset programs including tumor and venous ablation programs. Separate program for Track Ablation & Tumescant Application
Warranty	2 years.

Microwave Tumor Ablation Antenna Specifications

Feature	Benefit
Types	Metallic: 16,17,18G; Ceramic: 14,16G, lengths: 100/150/200/250 mm.
Active Tip	3.5/11/20/38mm
Varicose Vein Antenna	6F antenna, 1500mm length, 1500mm reusable cable, 1cm active tip.
Compatibility	Compatible with respective microwave ablation generator
Operating Frequency	2450 MHz operation.
Cooling Technology	Inbuilt cooling to prevent tissue charring.
Ablation Zone	Spherical zones with 14/15/16/18 gauge for optimal coverage and minimal trauma.
Procedures	Thyroid, breast fibroadenoma ablations with thinner gauges (18G).
Applications	Soft tissue ablation for liver, lung, thyroid, kidney, uterine fibroids, and bone.
Imaging Visibility	High visibility under ultrasound and CT
Safety Features	Self-test, remote monitoring, auto cutoff at 45°C.
Tip Design	Sharp tip for smooth puncturing.
Cable Length	Up to or greater than 2 meters
Temperature Monitoring	Real-time display during procedures.
Operation Modes	Supports pulse and continuous modes for safety.
Cross-visibility	High Visualization Antenna for best visibility under USG/CT



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