

Technical Write-up

Solero Applicator

Microwave Tissue Ablation (MTA) System consists of Solero Microwave generator and a set of Solero applicators. It is used for ablating (cooking) malignant cells in various organs.

The specialist would find out the location of the lesion through a CT scan or Ultrasound. Under CT/ Ultrasound guidance he may insert the Solero applicator to the target tissue and when he reaches the lesion he turns on the generator which emits microwave energy. This Microwave energy generates heat, which would ablate the tissue in to gaseous form.

The method used here is to access the diseased cancerous tissue and create a zone of ablation without destroying the surrounding healthy tissue. Once the applicator is inserted under ultrasound or CT guidance and the Microwave generator is activated to deliver the microwave energy, the procedure is completed within a few minutes. Because of the high energy output it requires a coolant system, to ensure that the ablation is limited only to the targeted zone.

This procedure is a minimally invasive procedure and can be done as an outpatient procedure. It saves money and morbidity to the patient against painful resection and Intra-arterial chemotherapy.

End use Report: The end user is an Interventional Radiologist or Surgical Gastroenterologist/ Oncologist in a Cancer Hospital who normally treats tumours in soft tissues like, Liver, Kidney, Lung and Bone tumours.