



# Sixth International Joint Meeting on **THORACIC SURGERY**

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Auditorio Foment del Treball Nacional, Barcelona (Spain)

11<sup>th</sup> International Meeting on General Thoracic Surgery



Hospital  
Universitari  
Sagrat Cor

10<sup>th</sup> International Workshop on Surgical Exploration of the  
Mediastinum and Systematic Nodal Dissection



5<sup>th</sup> Meeting of the Thoracic Oncology, Thoracic  
Surgery, Techniques & Transplant, Respiratory Nursing  
and Respiratory Physiotherapy Areas of the Spanish  
Society of Pneumology and Thoracic Surgery (SEPAR)



3<sup>rd</sup> Joint Meeting of the Spanish Society of  
Thoracic Surgery (SECT)



30<sup>th</sup> Congress of the 'Asociación Iberoamericana  
de Cirugía Torácica' AIAC



10<sup>th</sup> International Workshop on Surgical Exploration of the  
Mediastinum and Systematic Nodal Dissection



## **CT-GUIDED SIMULTANEOUS PERCUTANEOUS BIOPSY COMBINED WITH COAXIAL MICROWAVE ABLATION FOR NEW- ONSET SOLITARY PULMONARY NODULES WITH MALIGNANT TENDENCY ON THE SAME SIDE AFTER SURGICAL RESECTION**

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### Objective

To observe the efficacy and safety of CT-guided percutaneous biopsy combined with coaxial microwave ablation for new-onset solitary pulmonary nodules with malignant tendency on the same side after surgical resection.

### Methods

A total of 42 patients with solitary pulmonary nodule with malignant tendency occurred on the same side of lung cancer after surgical resection were enrolled and randomly divided into observation group and control group, with 21 cases in each group. The observation group underwent microwave ablation through coaxial cannula with the same needle path after CT-guided biopsy, while the control group underwent microwave ablation through cross-needle paths at different puncture points after CT-guided biopsy. The efficacy and complications of the two groups were compared.

### Results

The successful rate, total effective rate and local control rate of puncture biopsy and microwave ablation were 100% in 2 groups. Within 24h after operation, the incidence rates of pneumothorax, hemoptysis and pleural effusion were 19.04% (4/21), 4.76% (1/21) and 4.76% (1/21) in the observation group, and 23.81% (5/21), 14.28% (3/21) and 4.76% (1/21) in the control group, respectively. There were no significant differences among all groups ( $P > 0.05$ ). After 6 months of follow-up, no complications such as needle implant metastasis, pulmonary embolism and bronchopleural fistula was found in both groups.

### Conclusion

CT-guided simultaneous percutaneous biopsy combined with microwave ablation through coaxial cannula was effective and safe in the treatment of single malignant inclined pulmonary nodules on the same side after surgical resection.