**THE CLINICAL QUESTION**

- What is the effect of an implantable therapeutics platform using a minimally invasive laparoscopic electrothermal mucosectomy navigation bronchoscopy on the clinical outcomes for lung nodules with digital telesurgery (connected navigational bronchoscopy)?

**TAKE HOME MESSAGE**

This study achieves higher diagnostic yield for pulmonary nodules with the use of minimally invasive laparoscopy.

**BACKGROUND**

The diagnostic unit yield patterns for pulmonary nodules usually range around 50% even with technically successful navigation. This may due to the human error in the difference between pre-procedural location of nodule and its actual location during the presentant, presence or absence of bleeding artery, as the effect of potential fear of cancer. With the new technology, it is possible to improve the diagnostic yield of DBM bronchoscopy.

This paper highlighted the role of digital bronchoscopy/telesurgery in DBM and assured the possibility of improving diagnostic yield.

**STUDY DESIGN**

Type of study: Retrospective study comparing the use of DBM before and after the advent of the new device.

Setting: Six academic medical centers (Cleveland, OH; Minneapolis, MN; Chicago, IL; Los Angeles, CA; and New York, NY) from April 2015 to August 2016.

Endpoints: Primary outcome - Comparison of the diagnostic yield between DBM with and without the new device.

**POPULATION**

- Type of consecutive EBMP procedures during the study period
- Asian, 10

Baseline Characteristics: 3.6

- Age 65 or older: 4
- Current smoker: 3
- Medical history: 5
- 63 target lesions to biopsy: 12

**OUTCOMES**

Primary outcome: Diagnostic yield with DBM and without DBM is 0.02.

Secondary outcomes:
- 80% accuracy for malignant lesions.
- 90% accuracy for malignant lesions.
- 80% accuracy for malignant lesions.
- 90% accuracy for malignant lesions.

**COMMENTARY**

The study suggests that using digital telesurgery for more accurate localization of target lesions may improve diagnostic yield from bronchoscopy procedures, and the safety profile as compared to a traditional bronchoscopy.

The retrospective single-center design of this study may be associated with selection bias, which may be a potential limitation for broader application. However, any biases may also be minimized.

**FUNDING**

- No specific funding is listed.

**SUGGESTED READING**