

See Article page 532.



## Commentary: Preoperative localization: Another tool in the box

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Fan and colleagues<sup>1</sup> review their experience using a novel percutaneous device that they developed for preoperative localization of small pulmonary nodules. This device was designed to ameliorate some of the disadvantages of hookwire localization, which had been their previously preferred method. They evaluated the safety and success of this device in a prospective trial across 4 centers. They had a 96.7% success rate with localization of 90 nodules in 80 patients.

Localization techniques for small pulmonary nodules have been increasingly reported over the last decade, and the need for localization is expected to increase with the expansion of lung cancer screening. Preoperative and intraoperative techniques using hookwires, methylene blue, microcoils and radiotracers are described in the literature. Most have a high success rate, and each has advantages and disadvantages; therefore, no technique is universally preferred.

The authors designed this new device to replace the traditional hookwire, which has a lower success rate and greater complication rate than other techniques.<sup>2</sup> An anchor-shaped claw and a soft suture that is pushed into the pleural cavity is designed to decrease the chance of dislodgment, which is a flaw with the traditional hookwire design. In addition, a scale helps determine the depth of the nodule. The inability to gauge depth is a disadvantage of most of the other localization techniques except for radiotracer localization. Therefore, this device has an intriguing design that makes it a good option to replace the traditional hookwire.

### CENTRAL MESSAGE

A new percutaneous localization device may ameliorate the disadvantages of the traditional hookwire technique. This adds another tool to the armamentarium of localization methods.

Like all other localization methods, this device has some disadvantages as well. There was an 8.9% pneumothorax rate, and it was unclear whether any of these patients required intervention. The device also has the disadvantage of requiring a preoperative localization procedure in the radiology department, which may not be as cost effective as other methods.

Thoracic surgeons have a wide range of localization techniques from which to choose, each with advantages and disadvantages. One's preferred method will depend on local expertise and available resources. We now have another tool in the box from which to choose.

### References

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