Accurate Localization of a GGO Lesion

VERAN MEDICAL TECHNOLOGIES

LOCALIZATION AND RESECTION OF A LLL LESION

Author

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Patient Information: 65 y/o, M

Scan Protocol: Veran Inspiration/Expiration CT Scan Protocol

Nodule: LLL 17mm GGO

Target Motion: 31.1mm

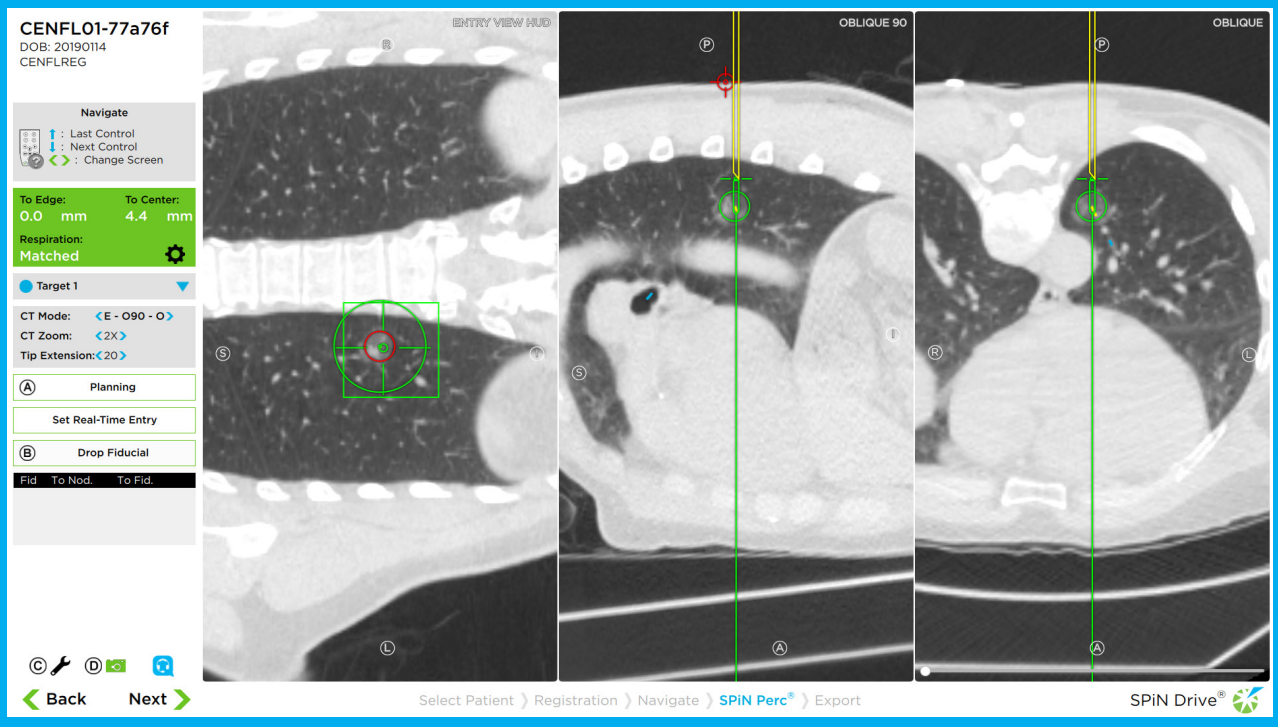
Biopsy Result: Malignant

Instruments Used: SPiN Perc™ & Always-On Tip Tracked® Serrated Forceps

Conclusion: Non-Small Cell T1 Tumor. Routine Follow-up

Observations

"Using robotics, you don't have any tactile sensation and would be doing a blind resection; either guided or based purely on anatomical references from the CT scan. The use of preoperative localization with Veran has facilitated tackling these lesions in an effective and productive manner."



Patient History

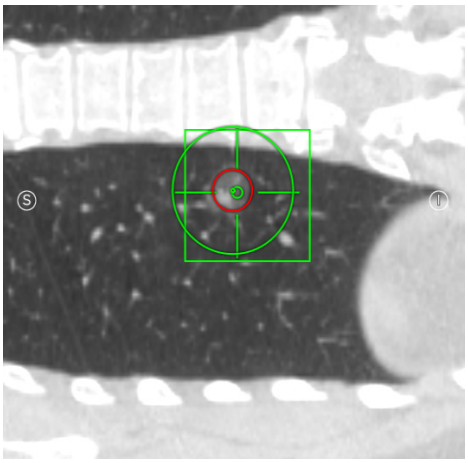
This patient's GGO lesion was discovered during an incidental screening at Central Florida Regional Hospital. Although the patient has been smoking for 45 years, he did not have any symptoms. During a follow-up 1 month later, the lesion increased in size. Dr. Maldonado suspected this could be a T1 lung cancer tumor and noted the difficult location of the lesion in the intra-parenchyma.

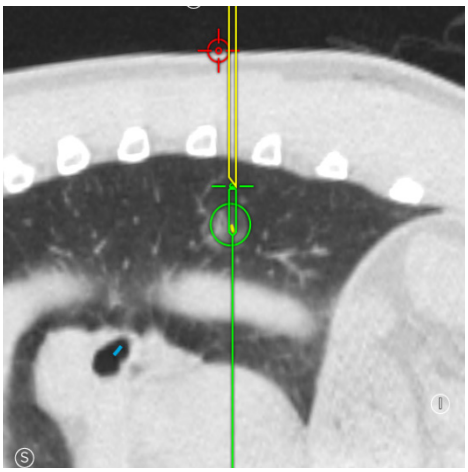
Planning

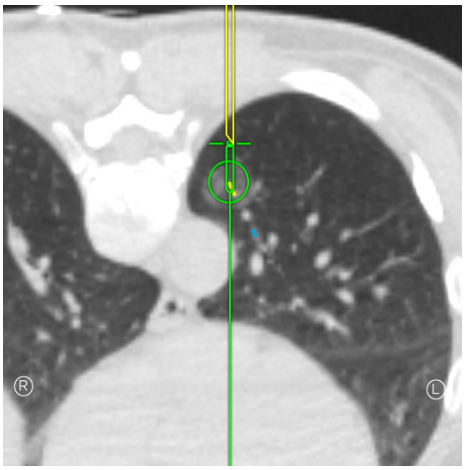
On the day of surgery, the patient was scanned using Veran protocol in the prone position due to the posterior location of the target lesion. Upon review of the CT scan, Dr. Maldonado made a plan to reach the target in the left lower lobe using a percutaneous approach to the left of the patient's spine. Based on location and depth, he determined the 105 mm SPiN Perc™ introducer needle would be needed to mark the nodule for resection.

Procedure

Dr. Maldonado completed initial registration using Always-On Tip Tracked® serrated forceps and transitioned to SPiN Perc™ for the localization. During an expiration breath hold and matched respiratory gating, Dr. Maldonado injected 3cc of dye into the lesion using the SPiN Perc™ introducer needle. This pre-operative localization process took a total time of 10 minutes. Dr. Maldonado transitioned into the robotic resection portion of the procedure, where he was able to quickly identify the dye-marked GGO nodule. Upon resection, pathology confirmed the lesion was malignant with a final pathology of non-small cell T1 tumor with clean margins. The preoperative localization of this lesion allowed Dr. Maldonado to quickly and accurately resect a GGO lesion in a difficult location.







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