UNCOMMON LEFT S1+2 VATS SEGMENTECTOMY WITH 3D PLANNING

Santiago Figueroa; Andrea Calderón; Raquel Herrera; Borja García; Genaro Galán
Hospital Clínico Universitario de Valencia, Thoracic Surgery Department

Introduction
Sublobar lung resections are becoming a common procedure for surgical treatment of early-stage lung carcinoma, with survival results equivalent to lobectomy. However, they are usually a surgical challenge due to the great anatomical variability. In this context, 3D preoperative planning is a very helpful tool. We present a case in which the planned procedure was safely performed thanks to this technological resource, Indication of the technique 58 y.o. female patient with incidental finding of a 9 mm pulmonary nodule in the left upper lobe, hypermetabolic on PET-CT, highly suspicious for malignancy. Direct surgical resection was considered. The size and location of the lesion led us to propose a S1+2 VATS segmentectomy as initial strategy.

Description of the technique
Preoperative analysis of the 3D model showed a very uncommon configuration of the left upper lobe segments, with an apico-anterior S1+2 and a posterior S3. The anatomical information obtained from the model allowed us to accurately perform the S1+2 segmentectomy, as confirmed by marking the intersegmental plane with indocyanine green.

Conclusion
3D planning is an essential tool in sublobar lung resection surgery, allowing procedures to be carried out with safety guarantees even in the presence of very uncommon anatomical variations.
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