## **MULTIMEDIA ARTICLE**





## Laparoscopic Resection in Segment VIII: Diamond Technique

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The laparoscopic resection of liver lesions located in the postero-superior segments can be challenging <sup>1</sup>. Hence, they are considered by the Iwate criteria as resections with an intermediate or advanced difficulty <sup>2</sup>. Cipriani et al. <sup>3</sup> have described a technique for non-anatomical liver resection on postero-superior segments with good results and making this surgical resection easier.

We present the case of a 45-year-old woman with a metastatic breast cancer lesion in segment VIII. Resection following the Diamond technique principles was proposed.

Laparoscopic VIII subgmentectomy was performed with the diamond technique as Cipriani et al. described using an inverted L-shaped port placement. A resection from medial to lateral followed by inferior to superior margin was followed. Suprahepatic veins were exposed without injury with a total surgical time of 195 min, pringle lasted 40 min, and blood losses were 100 ml. Pathology showed a 2.1-cm-wide lesion with R0 margin. The patient was discharged on day 3 without complications.

Laparoscopic liver resection of postero-superior segments is feasible using the Diamond technique achieving R0 margins and avoiding suprahepatic vein injury. Supplementary Information The online version contains supplementary material available at https://doi.org/10.1007/s11605-021-05210-y.

## Declarations

**Disclosures** Drs. Víctor Molina, Manuel Rodríguez-Blanco, and Santiago Sánchez-Cabús have no conflict of interest or financial ties to disclose.

## References

- Abu Hilal M, Tschuor C, Kuemmerli C, López-Ben S, Lesurtel M, Rotellar F. Laparoscopic posterior segmental resections: How I do it: Tips and pitfalls. *Int J Surg.* 2020 Oct;82S:178-186.
- Tanaka S, Kawaguchi, Y, Kubo, S, Kanazawa A, Takeda, Y, Hirokawa F, et al. Validation of index-based IWATE criteria as an improved difficulty scoring system for laparoscopic liver resection. *Surgery*. 2019; 165(4):731-740
- Cipriani F, Shelat VG, Rawashdeh M, Francone E, Aldrighetti, L, Takhar A, et al. Laparoscopic Parenchymal-Sparing Resections for Nonperipheral Liver Lesions, the Diamond Technique: Technical Aspects, Clinical Outcomes, and Oncologic Efficiency. J Am Coll Surg. 2015;221:265–272

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