



## Video of the month

# Robotic approach for remnant cholelithiasis and CBD exploration for gallstones removal



## Abordaje Robótico para manejo de litiasis del remanente vesicular y exploración de la vía biliar

Aram Rojas,<sup>a,\*</sup> Pierce Paterakos,<sup>a</sup> Sarah B. Hays,<sup>a,b</sup> Melissa E. Hogg<sup>a</sup>

<sup>a</sup> NorthShore University Health System, Department of Surgery, Division of HPB Surgery, Evanston, IL, USA

<sup>b</sup> University of Chicago, Department of Surgery, Chicago, IL, USA

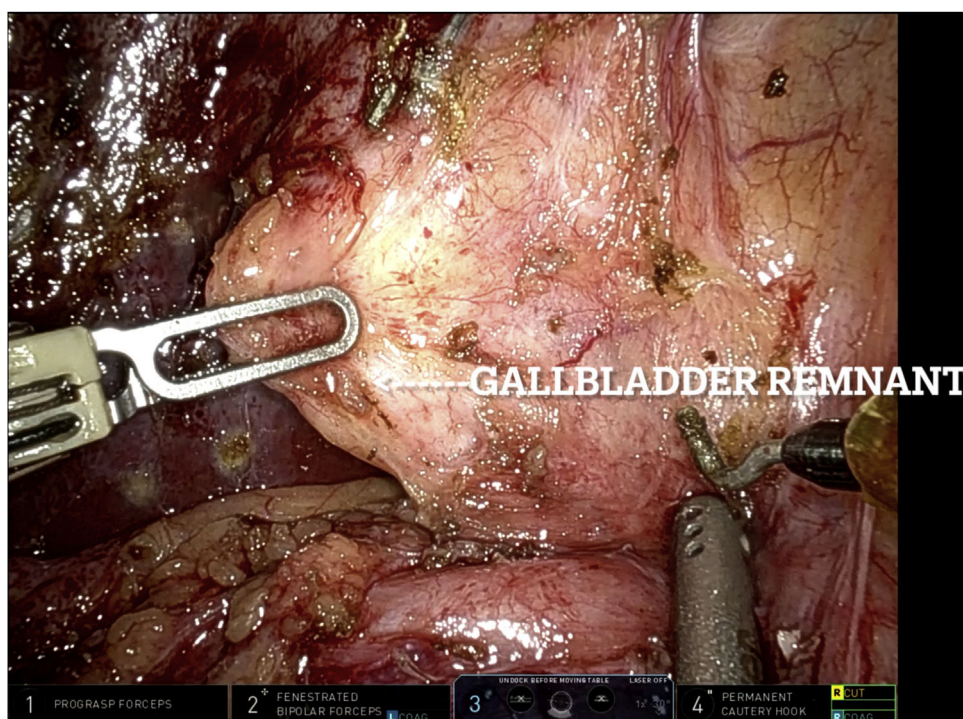


Fig. 1 – Gallbladder Remnant.

\* Corresponding author.

E-mail address: [ARojas@northshore.org](mailto:ARojas@northshore.org) (A. Rojas).

<https://doi.org/10.1016/j.cireng.2024.08.004>

2173-5077/© 2024 AEC. Published by Elsevier España, S.L.U. All rights are reserved, including those for text and data mining, AI training, and similar technologies.

A select number of patients will require a completion cholecystectomy (CC) after a subtotal cholecystectomy to treat recurrent or persistent biliary symptoms. Given the history of a challenging dissection, these cases are typically referred to hepatobiliary surgeons. Even when performed by expert surgeons, a CC is associated with significant morbidity. Every general surgeon will come across a challenging gallbladder during their career; thus it is important for fellows and resident trainees to be familiar with the surgical approaches available. The video showcases the utilization of advanced technologies involving robotic surgery to evaluate, explore, and remove the stones from the bile duct (Fig. 1).

---

### Author contributions

All authors contributed to the concept, and approved the submitted version.

---

### Conflict of interest

None.

---

### Previously copyrighted material

None.

---

### Funding

None.

---

### Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:<https://doi.org/10.1016/j.cireng.2024.08.004>.