Laparoscopic Partial Splenectomy for Unknown Primary Cancer: A Stepwise Approach

Eduardo A. Vega, MD¹, Suguru Yamashita, MD, PhD¹, Chun Yun Shin, MD¹, Michael Kim, MD¹, Jason B. Fleming, MD¹, Mathew H. Katz, MD¹, Kanwal P. S. Raghav, MD², Jean-Nicolas Vauthey, MD¹, Jeffrey E. Lee, MD¹, and Claudius Conrad, MD, PhD¹

¹Section of Hepato-Pancreato-Biliary Surgery, Department of Surgical Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX; ²Department of Gastrointestinal Medical Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX

ABSTRACT

Background. Laparoscopic partial splenectomy (LPS) for focal splenic lesions is technically demanding and carries risk of hemorrhage. Nevertheless, it can be a valuable option, particularly for children and adults in whom attempt at preservation of splenic immunologic function outweighs risk associated with organ preservation.

Patient. A 58-year-old man was diagnosed with a focal splenic lesion at the upper splenic pole on surveillance imaging following axillary lymph node metastasis for cancer of unknown primary origin (CUP). After an interval of 8 months, repeat FDG-PET showed increase in size and PET-avidity without any evidence of new lesions. Due to isolated site and history of CUP, the patient was considered for a LPS.

Technique. With the patient in reversed modified French position, the upper pole splenic vessels were controlled and a well-defined area of ischemia encompassing the lesion identified. Under intermittent inflow occlusion and ultrasonography guidance, the parenchymal transection was performed. Total operative time was 180 min, estimated blood loss was 175 cc, the patient was discharged on postoperative day 2, and final pathology confirmed

an Epstein-Barr virus associated inflammatory pseudotumor.^{1,2}

Conclusion. Safe LPS requires systematic pre-operative assessment of hilar vascular anatomy and a stepwise approach to controlling the vessels intra-operatively. Anatomic parenchymal transection and intermittent vascular isolation for lesions close to the demarcation zone minimizes blood loss. Risk/benefit stratification of LPS may be beneficial in select patients only. Whether in patients with CUP LPS may aid in preserving innate and adaptive immunity with potential clinical, including oncologic, benefits will require further investigations.^{3–5}

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Electronic supplementary material The online version of this article (doi:10.1245/s10434-016-5664-7) contains supplementary material, which is available to authorized users.

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First Received: 23 July 2016;

Published Online: 9 December 2016

C. Conrad, MD, PhD

e-mail: cconrad1@mdanderson.org