

## Effective Laparoscopic Management Lymph Node Dissection for Gallbladder Cancer

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### ABSTRACT

**Background.** Part of optimal prognostication of gallbladder cancer is optimal lymph node staging.<sup>1,2</sup> Accurate laparoscopic lymph node staging is dependent on a systematic approach to sampling N1 and N2 lymph node stations.<sup>3</sup> Stations with the highest risk of involvement are 12a, b, p and c, 13 and 16, as well as 8 and 9.<sup>4</sup>

**Patient.** A 59-year-old man underwent stem cell transplantation for acute myeloid leukemia. Thirty-nine days later he developed acute cholecystitis, which was managed with a cholecystostomy tube. Two months later, a laparoscopic cholecystectomy was performed where a T2 well- to moderately-differentiated gallbladder cancer was detected, along with an uninvolved lymph node in station 12c, and cystic duct stump negative for cancer.

**Technique.** With the patient in the French position, wide Kocherization allowed for sampling of lymph node stations 13 (retropancreatic) and 16 (aortocaval). Thereafter, a portal lymphadenectomy of stations 12a, b, c and p was performed. A partial resection of segments 4b and 5, as well as sampling of the cystic duct stump, completed the procedure.

**Conclusion.** Accurate prognostication is one of the major goals of oncologic re-resection of incidentally discovered gallbladder cancer. This can be achieved via a systematic

and complete dissection of portal, aortocaval and retropancreatic lymph node stations. Targeting of stations 16 and 13 requires wide Kocherization, and complete portal lymphadenectomy of stations 12a, c, p, and b necessitates safe, minimally invasive dissection of the hepatoduodenal ligament.

**DISCLOSURES** Eduardo A. Vega, Suguru Yamashita, Yun Shin Chun, Michael Kim, Jason B. Fleming, Matthew H. Katz, Ching-Wei Tzeng, Kanwal P. Raghav, Jean-Nicolas Vauthey, Jeffrey E. Lee, and Claudius Conrad have declared no conflicts of interest.

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