Case Report

Total laparoscopic management of lesions involving liver superior-posterior segments

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Abstract: Proven advantages of laparoscopic surgery and advances in medicine technology triggered the increase of laparoscopic hepatic resection therapy. Despite initial skepticism, improved operative results made laparoscopic approach incorporated to surgical practice and operations increased in frequency and complexity. In this video, we aimed to show the laparoscopic resection of liver metastasis located at s7 in a challenging, morbidly obese patient.

Keywords: Laparoscopy; metastasectomy; superior-posterior segments

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Case presentation

A 65-year-old, morbidly obese [body mass index (BMI) =39 kg/m^2) women admitted to our clinic due to rectal bleeding. Sigmoid colon tumor was diagnosed by colonoscopy and two liver metastasis located at s7 and s5 were seen in magnetic resonance imaging (MRI), no other distant metastasis was seen in positron emission tomography-computed tomography (PET-CT). This morbidly obese lady had the chance for curative surgery with laparoscopic sigmoid colon resection and metastasectomy, synchronously. She was discharged at the 4th postoperative day without any complication. Pathology department reported that she had pT3N1M1 colon tumor and adjuvant chemotherapy was concluded in the multidisciplinary board, she took 8 cycles treatment. After 2 years miliary lung metastasis was diagnosed, she is still under chemotherapy at the 3th year of first diagnosed with tumor free liver (*Figure 1*).

Figure 1 Laparoscopic segment 7 metastasectomy video of a sigmoid colon tumour patient with liver metastasis (1). Available online: http://www.asvide.com/article/view/23520

Discussion

Laparoscopic liver surgery is expanding; however, it is limited to anterior-sided (easily accessible), small tumors and left lateral sectionectomy in many centers (2-4) (Louisville categories I and II). Feasibility and safety of laparoscopic metastasectomy from posterior segments are still under-debate because of difficult exposure, limited access, lack of anatomical landmarks and hemorrhage risk. And this may require larger hepatectomies compared to open approach (5). In this video, we show that it could be done with modern concepts of parenchyma sparing surgery, with appropriate oncological outcome. And it is universally accepted that laparoscopic surgery provides benefits as less complication and shorter hospital stays, quicker recovery

times, as in our morbidly obese patient. Intermittent Pringle's maneuver and using sealer divider provide less hemorrhage. In conclusion, this resection is challenging and requires experience and advanced skills in laparoscopic liver surgery and laparoscopic approach can be performed safely and effectively in experienced hands (3).

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Footnote

Conflicts of Interest: The authors have completed the ICMJE uniform disclosure form (available at http://dx.doi.org/10.21037/ls.2018.02.01). The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee(s) and with the Declaration of Helsinki (as revised in 2013). Informed consent was obtained from the patient for publication of this Case Report and any accompanying images.

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References

1. Hacim NA, Oner M, Serin KR. Laparoscopic segment 7 metastasectomy video of a sigmoid colon tumour patient with liver metastasis. Asvide 2018;5:176. Available online: http://www. asvide.com/article/view/23520
2. Buell JF, Cherqui D, Geller DA, et al. The international position on laparoscopic liver surgery: The Louisville Statement, 2008. Ann Surg 2009;250:825-30.
3. Coles SR, Besselink MG, Serin KR, et al. Total laparoscopic management of lesions involving liver segment 7. Surg Endosc 2015;29:3190-5.
4. Abu Hilal M, Aldrighetti L, Dagher I, et al. The Southampton Consensus Guidelines for Laparoscopic Liver Surgery: From Indication to Implementation. Ann Surg 2017. [Epub ahead of print].
5. Cho JY, Han HS, Yoon YS, et al. Feasibility of laparoscopic liver resection for tumors located in the posterosuperior segments of the liver, with a special reference to overcoming current limitations on tumor location. Surgery 2008;144:32-8.

