



Potential benefit of superior to inferior dissection during laparoscopic extended right hemicolectomy

Dae Ro Lim

Division of Colon and Rectal Surgery, Department of Surgery, Soonchunhyang University Bucheon Hospital, Soonchunhyang University College of Medicine, Bucheon, Korea

Various approaches can be used for performing laparoscopic right hemicolectomy for right-sided colon cancer. However, laparoscopic complete mesocolic excision with central vessel ligation using these approaches may sometimes present with difficulties of various factors. This video article presents a laparoscopic extended right hemicolectomy using a superior-to-inferior approach. The superior approach has potential benefits in that it exposes the superior mesenteric vessels and gastrocolic trunk.

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Corresponding author

Dae Ro Lim

Division of Colon and Rectal Surgery, Department of Surgery, Soonchunhyang University Bucheon Hospital, 170 Jomaru-ro, Wonmi-gu, Bucheon 14584, Korea

Tel: +82-32-621-6267

Fax: +82-32-621-6950

E-mail: limdaero@schmc.ac.kr

ORCID:

<https://orcid.org/0000-0002-3076-1391>

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Complete mesocolic excision (CME) with central vessel ligation (CVL) is an important technique when performing a right hemicolectomy for right-sided colon cancer. This surgical technique has been introduced as a concept similar to total mesorectal excision for rectal cancer surgery and is based on oncologic resection with shape dissection of the mesocolon along the embryological tissue plane. This results in a colon and mesocolon specimen lined by intact fascia of the tumor and containing blood vessels, lymphatic vessels, lymph nodes, and surrounding soft tissue, which may contain disseminated cancer cells [1]. CVL has also shown that transection of supplying vessels at their origin and removal of the entire mesocolon lead to crucial surgical planes for curative colonic resection [2]. Various approaches can be used

for CME and ligation of vessels at their origin, including a medial to lateral, lateral to medial, inferior to superior, and superior to inferior approach [3]. As laparoscopic surgery has numerous advantages, most colon cancer surgeries are performed laparoscopically. Mostly, laparoscopic CMEs have been performed with soft tissue dissection surrounding the superior mesenteric vessels and gastrocolic trunk from the medial to lateral or inferior to superior approach to exposure the origin of ileocolic, right colic, and middle colic vessels for ligation [4–7]. Currently, this is the most common method used. However, with these approaches, dissection can be challenging depending on obesity, tissue condition, anatomy variation, and surgical assistant's skill. This video article demonstrates a laparoscopic extended right hemicolectomy

using a superior-to-inferior approach. The superior approach is can expose gastrocolic trunk from the peripheral portion earlier than other approaches, which may reduce the risk of iatrogenic injury and makes the control of bleeding easier.

This video article in this issue of *Journal of Minimally Invasive Surgery* [8] describes the superior to inferior approach and offers explanations on other various methods of dissection, as well as reports how the superior to inferior approach may be preferable to the other approaches in some cases.

NOTES

Conflict of interest

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