

English Abstract Session

📅 2025年11月14日(金) 9:20 ~ 10:20 🏢 第10会場

[E2] English Abstract Session 2 Colorectal Surgery 1

Moderator: Atsushi Hamabe (Department of Gastroenterological Surgery Graduate School of Medicine, The University of Osaka), Mina Ming-yin Shen (Department of Surgery, China Medical University Hsinchu Hospital, Taiwan)

[E2-1] Outcomes of NOSES vs TLRH for Right-Sided Colon Cancer: A Propensity Score-Matched Study

Zheng Xu, Yueyang Zhang, Xu Guan, Yihang Shi, Haipeng Chen, Zhixun Zhao, Zhaoxu Zheng, Haitao Zhou, Xishan Wang (Department of Colorectal Surgery, National Cancer Center/National Clinical Research Center for Cancer/Cancer Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College)

Background: Small-incision assisted laparoscopic right hemicolectomy with intracorporeal anastomosis, commonly referred to as totally laparoscopic right hemicolectomy (TLRH), represents an advanced minimally invasive technique for the treatment of right-sided colon cancer. Recently, natural orifice specimen extraction surgery (NOSES), using transvaginal or transrectal routes, has emerged as an advancement that potentially minimizes abdominal wall trauma. This study compares the perioperative and long-term outcomes of NOSES and TLRH.

Methods: A retrospective cohort of 349 patients with stage I-III right-sided colon cancer who underwent curative laparoscopic resection from January 2018 to January 2023 was analyzed. Using propensity score matching (1:1), 115 NOSES cases were matched with 115 TLRH cases based on age, BMI, tumor size, neoadjuvant therapy, and T stage. Outcomes included perioperative recovery, fatigue, complications, pelvic floor function, and oncologic results.

Results: Post-matching, baseline characteristics were balanced. Operative time and blood loss were comparable. NOSES patients reported significantly less pain from postoperative days 1-3 ($p < 0.001$), reduced analgesic use ($p < 0.001$) and lower fatigue levels ($p < 0.001$). Learning curves for transvaginal and transrectal NOSES stabilized after 57 and 41 cases, respectively. Incision-related complications were more frequent in TLRH ($p < 0.005$). Functional outcomes were comparable, and no differences were observed in disease-free or overall survival.

Conclusions: NOSES is a safe, effective option for selected patients with right-sided colon cancer. It provides better postoperative pain control, reduced fatigue and fewer incision-related complications with promising oncological outcomes.