JSCP-KSCP Symposium Session

Fri. Nov 14, 2025 3:30 PM - 4:30 PM JST | Fri. Nov 14, 2025 6:30 AM - 7:30 AM UTC Room 10

[JKS1] JSCP-KSCP Symposium Session 1 Front Line of Rectal Cancer Treatment

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[JKS1-4] Robotic Surgery and Laparoscopic Surgery for Rectal Cancer: Advancing the Front Line of Treatment

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Background: Rectal cancer surgery has evolved significantly over the past two decades, with minimally invasive techniques such as laparoscopic and robotic surgery becoming standard approaches in many centers. While laparoscopic surgery has demonstrated oncologic safety and functional benefits compared to open surgery, robotic platforms have offered enhanced dexterity, stable 3D vision, and improved ergonomics - particularly advantageous in the narrow pelvic cavity.
Content: We will compare laparoscopic and robotic approaches for rectal cancer, reviewing the current evidence on short- and long-term outcomes, including oncologic safety, postoperative recovery, and functional preservation. Although high-quality randomized controlled trials (RCTs) directly comparing these modalities remain limited, multiple observational studies suggest that robotic surgery may reduce conversion rates, facilitate total mesorectal excision quality, and improve postoperative urinary and sexual function.
In addition, recent advances in Single-Port (SP) robotic surgery have introduced new possibilities for rectal cancer treatment. Early clinical experiences indicate that SP robotic platforms may further minimize surgical trauma, improve cosmesis, and maintain oncologic principles, while potentially enhancing recovery. Although robust evidence from RCTs is not yet available, initial results are promising and suggest that SP robotic surgery could play a significant role in the next phase of minimally invasive rectal cancer surgery.
Conclusion: As technology advances, the role of robotic surgery - including SP platforms - continues to expand in rectal cancer treatment. Careful evaluation of ongoing and future studies will be essential to define their position at the frontline of surgical management.