Robotic and Laparoscopic *Salvage Lateral Pelvic Node Dissection* for Suspicious Recurrent Rectal Cancer

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BACKGROUND

- Robotic surgery for rectal cancer has reported superior short-term outcomes than laparoscopy
- Robotic surgery in locally recurrent rectal cancer
  - Theoretically, a good option, but has been rarely reported

PURPOSE

- To describe **the technical details of salvage** lateral pelvic node dissection **(LPND) by the minimally invasive approach** including robot and laparoscopy
- To demonstrate the **safety and feasibility** of robotic and laparoscopic salvage LPND **for locally recurrent rectal cancer**.

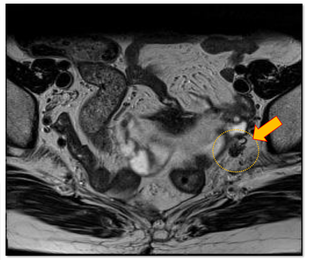
PATIENTS

Suspected lateral pelvic node recurrence
After curative resection of rectal cancer
from Sep. 2010 to 2019
(N= 54)

- With unresectable metastasis (N=17)
- Isolated or with resectable metastasis (N=36)
  - **Laparoscopic or Robotic LPND (N=25)** — **Robot : 11, Lap : 14**
  - Open or Open-converted LPND (N=11)

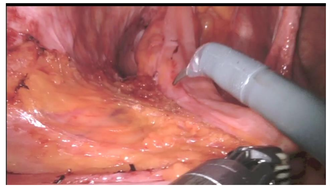
CASE

- 49 year-old female
- Initial operation at other hospital
  : Rectal ca. AV 8cm
  Laparoscopic LAR (Nov. 9, 2018)
- Initial pathology : T3N1a
- Adjuvant treatment : FOLFOX 12 cycles

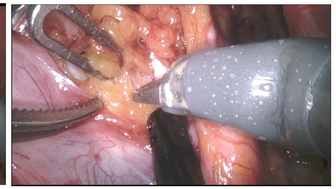


- Pelvic sidewall recurrence
  (Lt. lateral pelvic node)
  at 6months after initial operation
- Treatment course
  Chemoradiotherapy → Robotic LPND (Oct. 15, 2019)

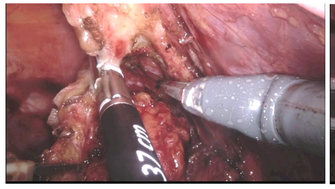
Technical details - Robotic operation

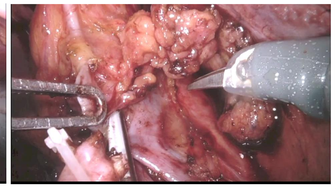


Mobilization of neorectum



LN dissection in obturator area





En-bloc resection of iliac vessels and recurrence LPNs



Last picture of complete salvage LPND

RESULTS

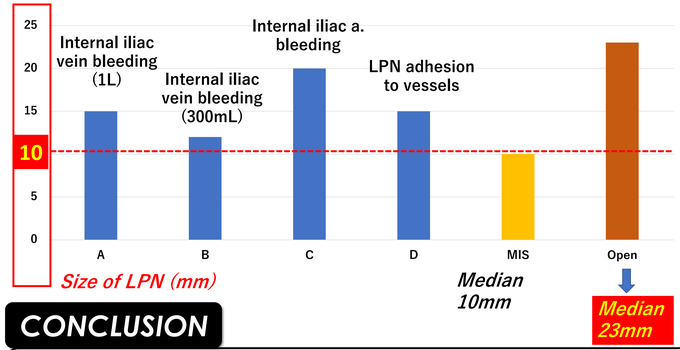
Perioperative outcomes	N = 25	Robot (N=11)	Lap (N=14)
Open-conversion from laparoscopic approach	4		
Operation time, median (range) (min)	100 (60-420)	120 (60-420)	85 (60-200)
Estimated blood loss, median (range) (min)	40 (10-300)	30 (10-200)	60 (10-300)
Combined resection, no.			
en bloc pelvic plexus	3	2	1
en bloc iliac vessels (artery or vein)	5	4	1
Incomplete resection, no. (%)	2 (8.0)	1	1
Postoperative complications, no. (%)	6 (24.0)		

Oncologic outcomes	N = 25
Follow-up, median (range) (months)	34.2 (2.5-101.7)
Chemotherapy after LPND, no. (%)	15 (60.0)
Overall recurrences, no. (%)	8 (32.0)
Local	2 (LPN:1, by lap)

3yr-DFS after LPND : 63.2%

3yr-OS after LPND : 77.0%

Open Conversion from laparoscopic approach (N=4)



CONCLUSION

- *Robotic approach has Potentials to treat invasive LPNs* compared to laparoscopic approach (only open-conversion)
- *We might safely remove recurrent LPNs using MIS approach* without obvious invasion of adjacent structures & small size of LPNs