

Standardizing Your Approach to a Lateral Node Dissection & Where Can Things Go Wrong?

THE UNIVERSITY OF TEXAS
MD Anderson
Cancer Center

Tsuyoshi Konishi, MD, PhD

The University of Texas MD Anderson Cancer Center, Houston, USA

COLOSOS 2024, Toronto, 10/26-27,2024



COI Disclosure

Medtronic – Lecture fee (completed)

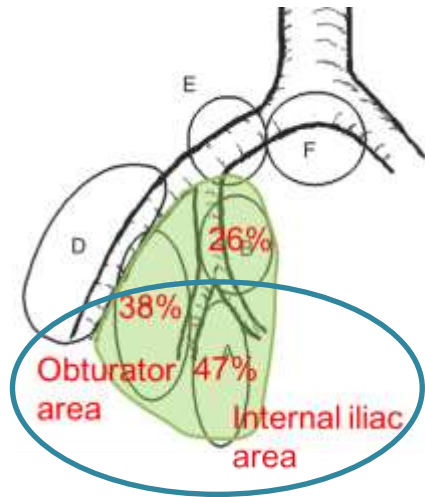
Johnson and Johnson – Consultation fee (completed)

THE UNIVERSITY OF TEXAS
MD Anderson
Cancer Center

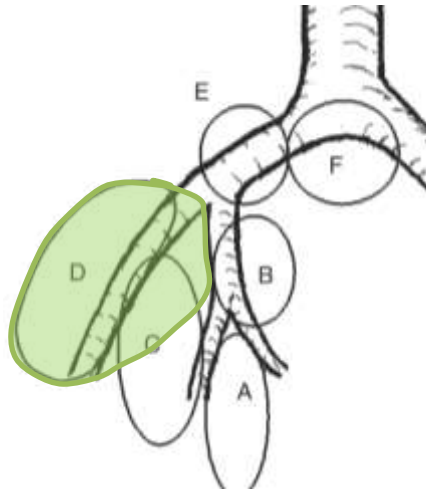
Lateral Nodal Disease in Rectal Cancer

Different Distribution from GYN/URO

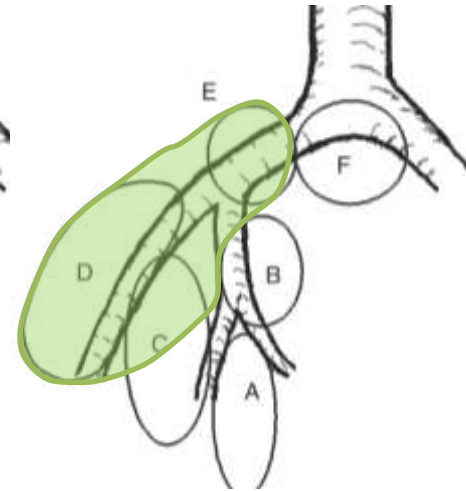
Rectal Cancer



Prostate Cancer



Cervical Cancer



Importance of DISTAL Compartment

Oncologic impact of lateral lymph node metastasis at the distal lateral compartment in locally advanced low rectal cancer after neoadjuvant (chemo)radiotherapy

Takashi Akiyoshi ^{a,*}, Tomohiro Yamaguchi ^a, Makiko Hiratsuka ^b, Toshiaki Mukai ^a,
Yukiharu Hiyoshi ^a, Toshiya Nagasaki ^a, Masashi Ueno ^c, Yosuke Fukunaga ^a,
Tsuyoshi Konishi ^d

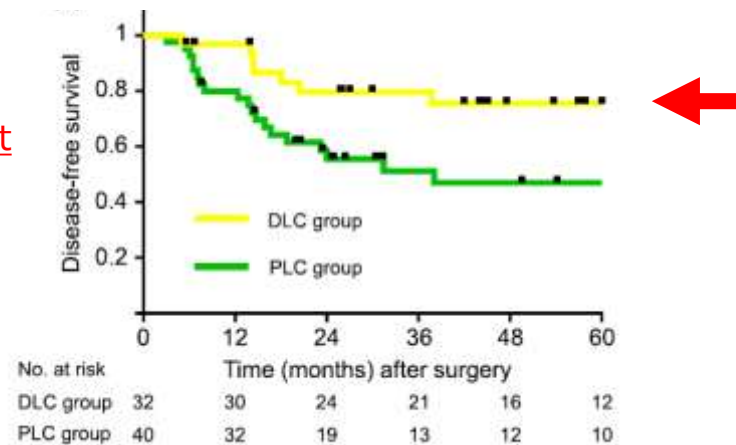
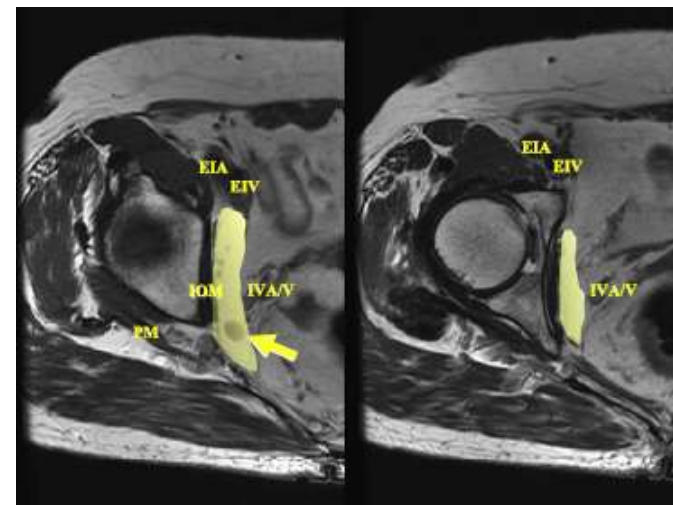
^a Gastroenterological Center, Department of Gastroenterological Surgery, Cancer Institute Hospital, Japanese Foundation for Cancer Research, Tokyo, Japan

^b Department of Diagnostic Imaging, Cancer Institute Hospital, Japanese Foundation for Cancer Research, Tokyo, Japan

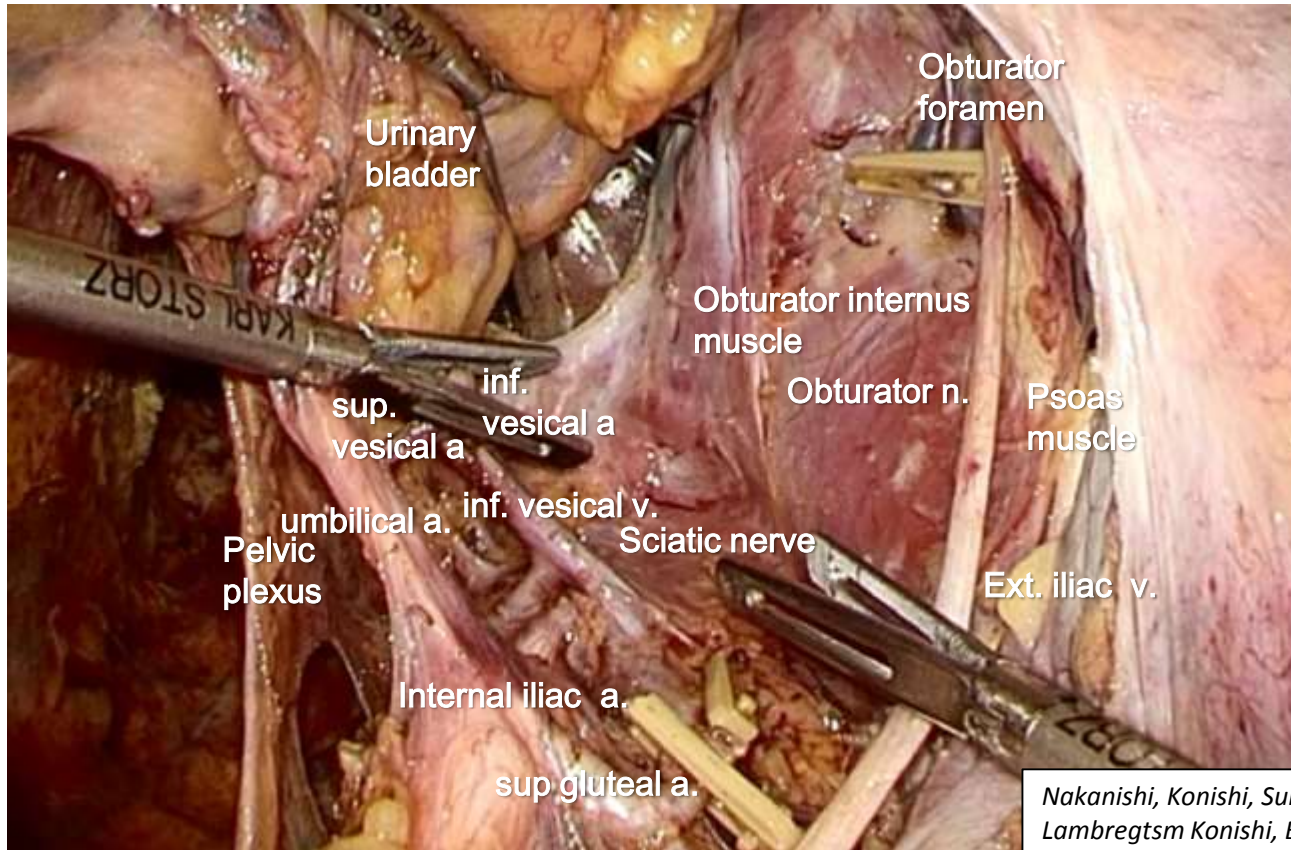
^c Department of Gastroenterological Surgery, Saitama Hospital, Tokyo, Japan

^d Department of Colon and Rectal Surgery, The University of Texas M.D. Anderson Cancer Center, Houston, TX, USA

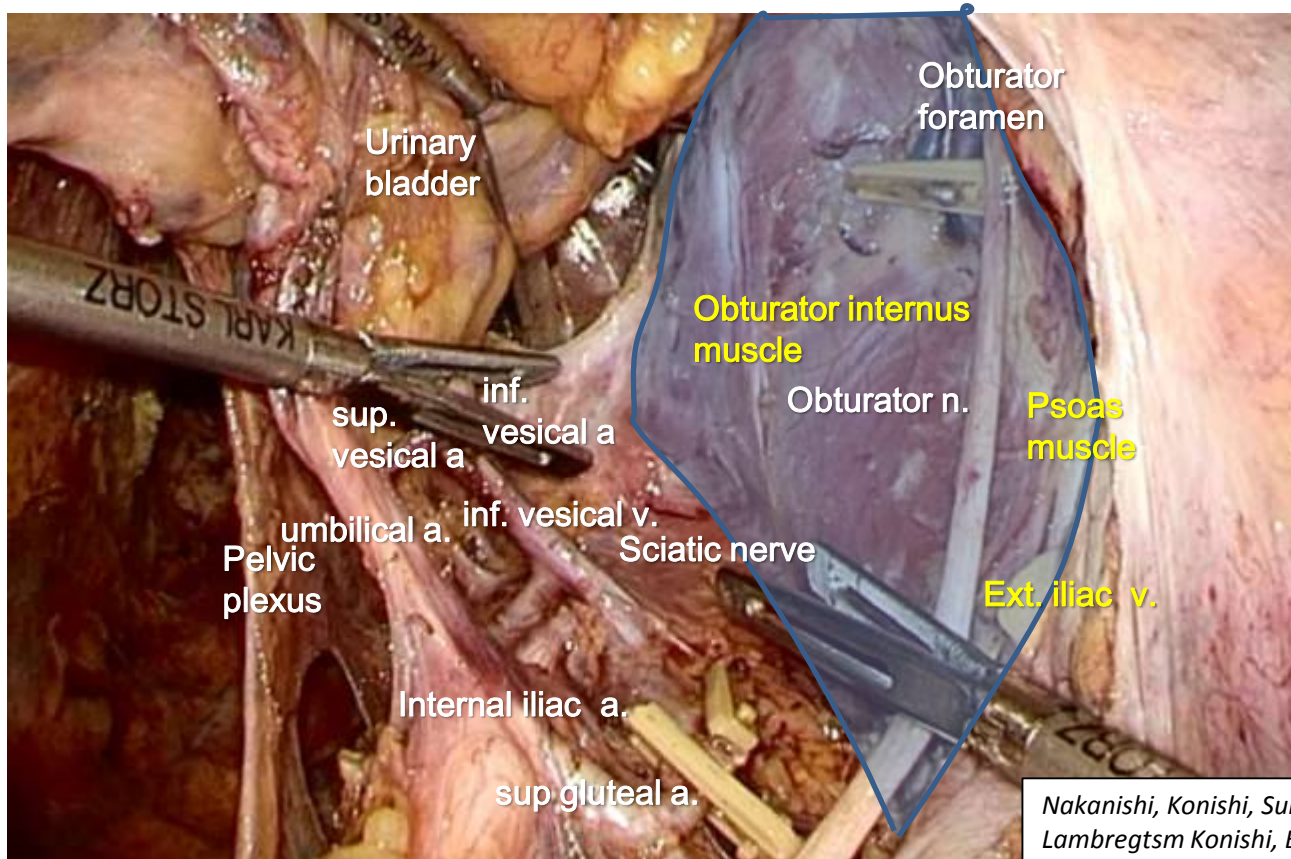
- nCRT + TME + selective LPLND (n=718)
- 44 % of lateral LN metastasis occurred in distal compartment
- Better DFS after LPLND than proximal compartment



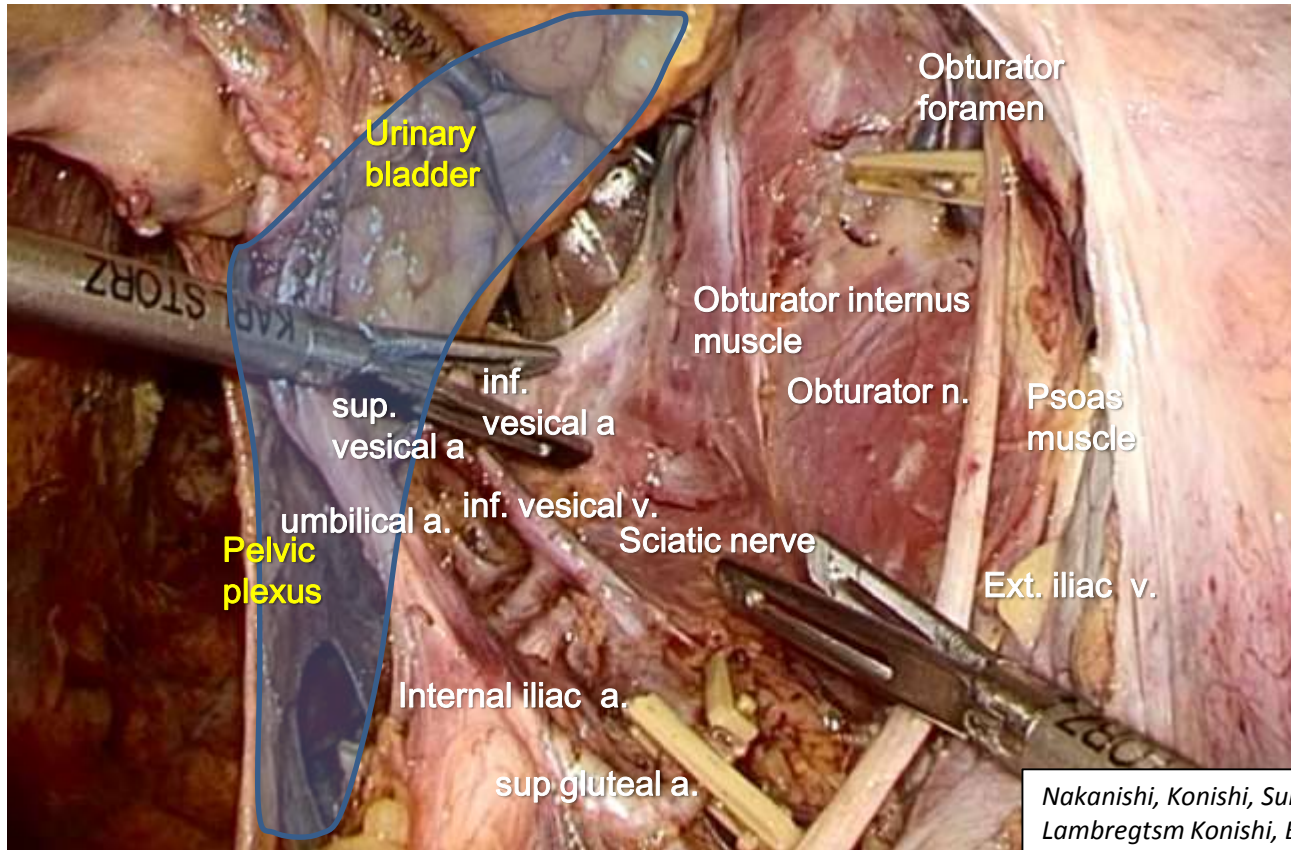
Dissection planes for LLND



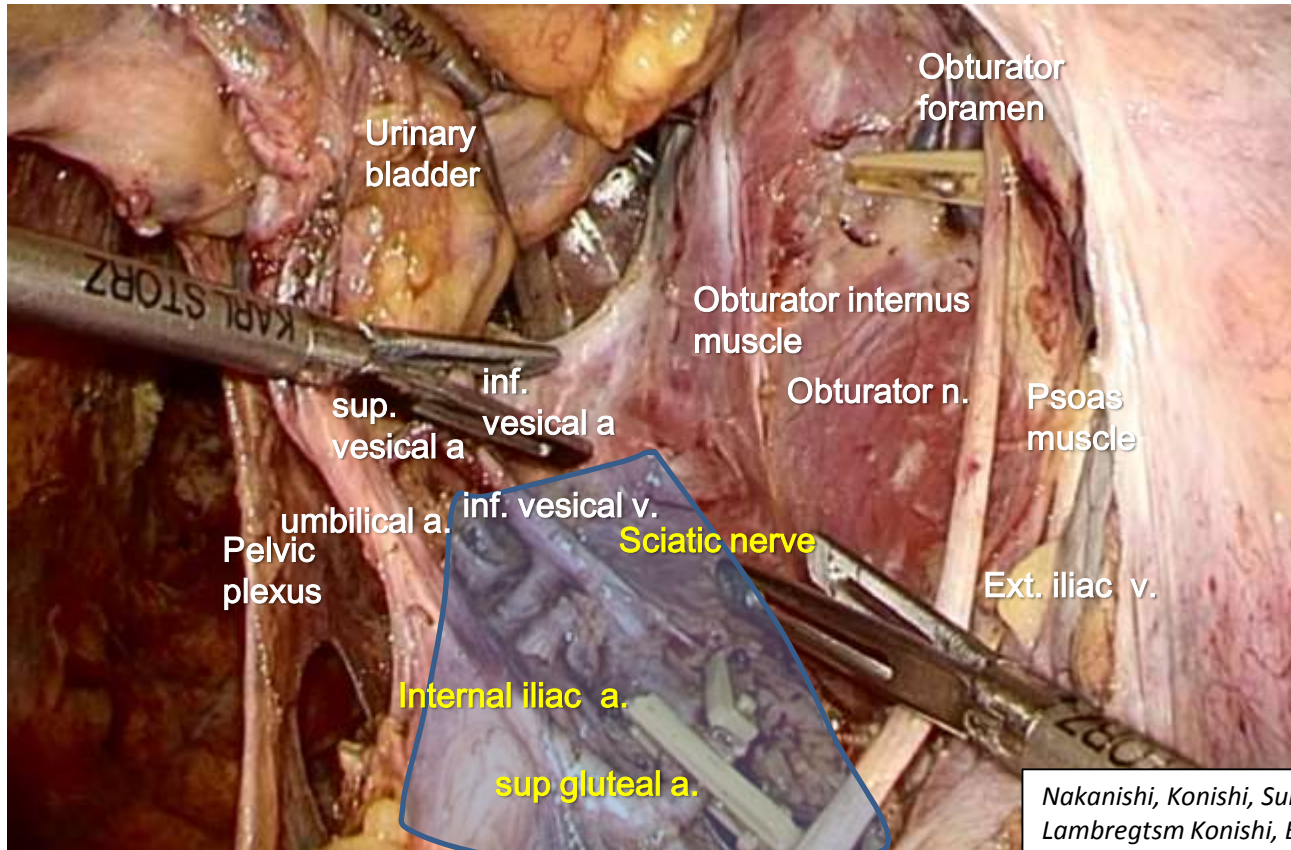
Dissection planes for LLND



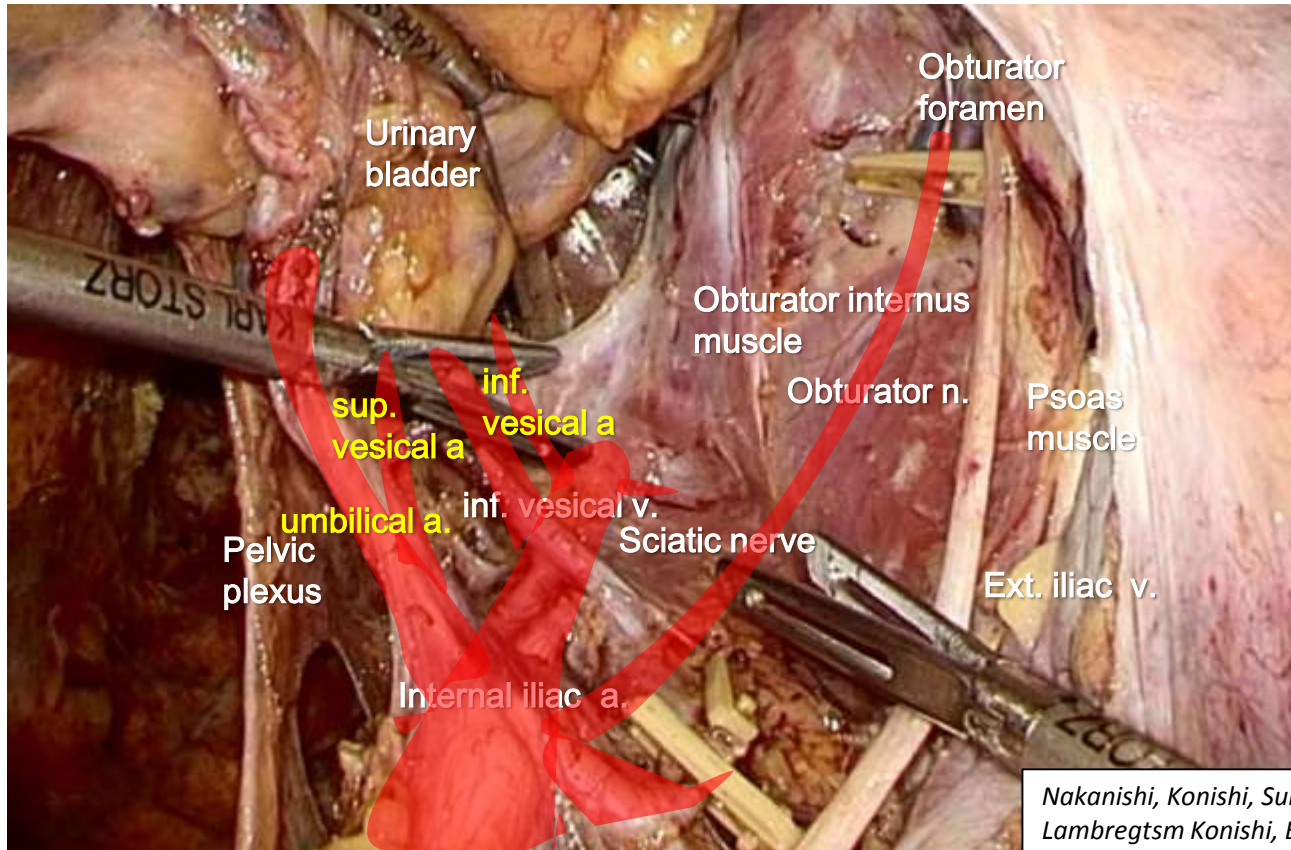
Dissection planes for LLND



Dissection planes for LLND

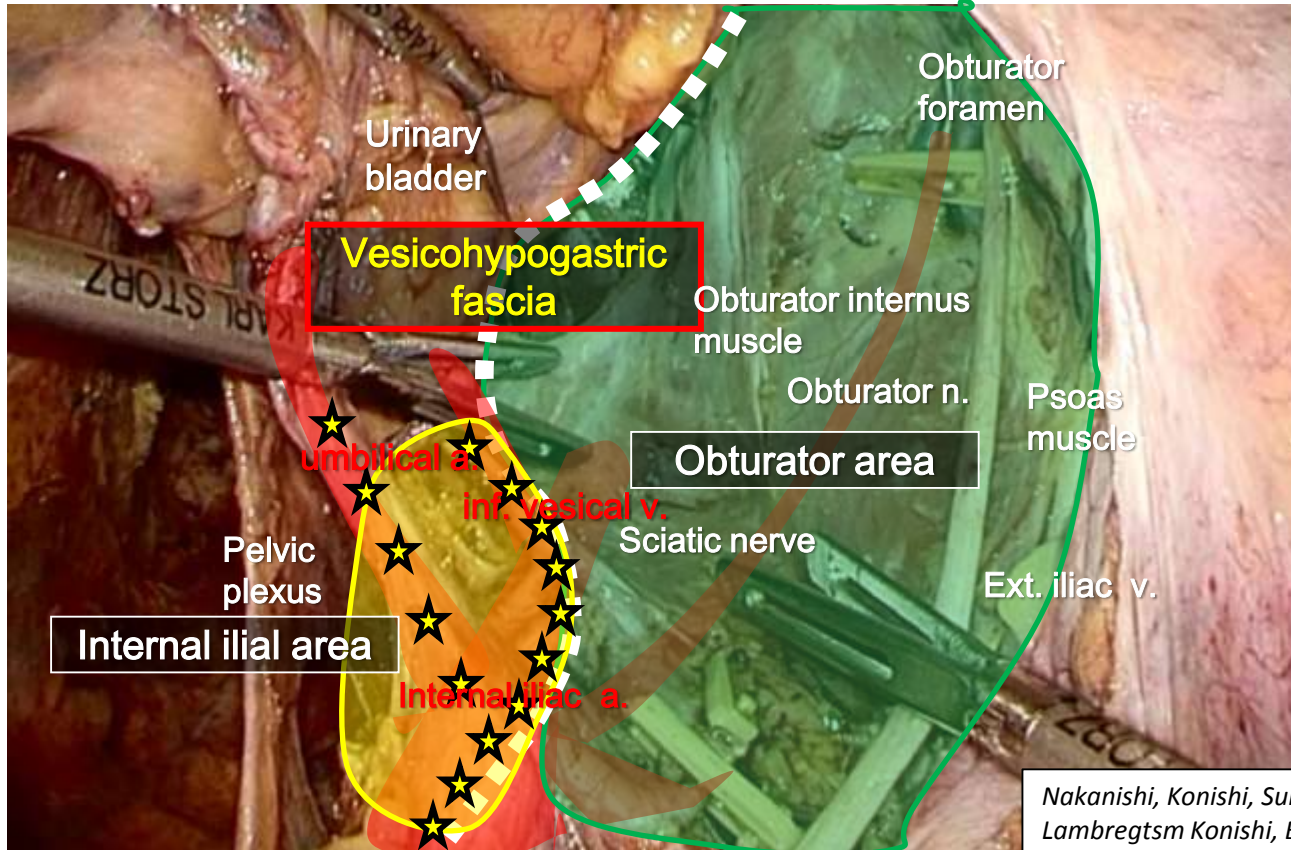


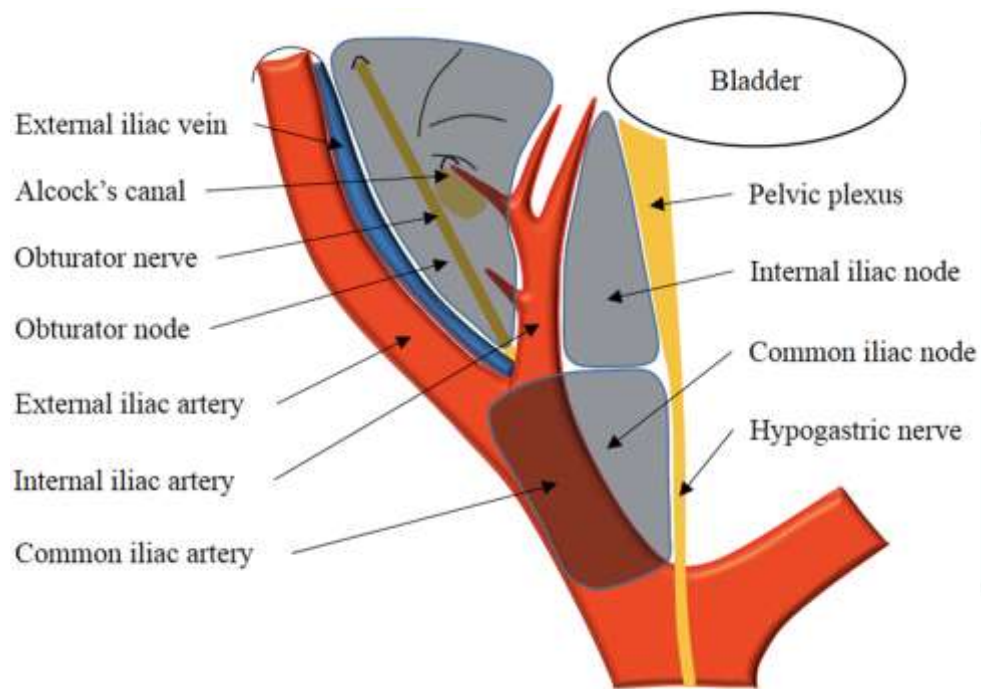
Dissection planes for LPLND



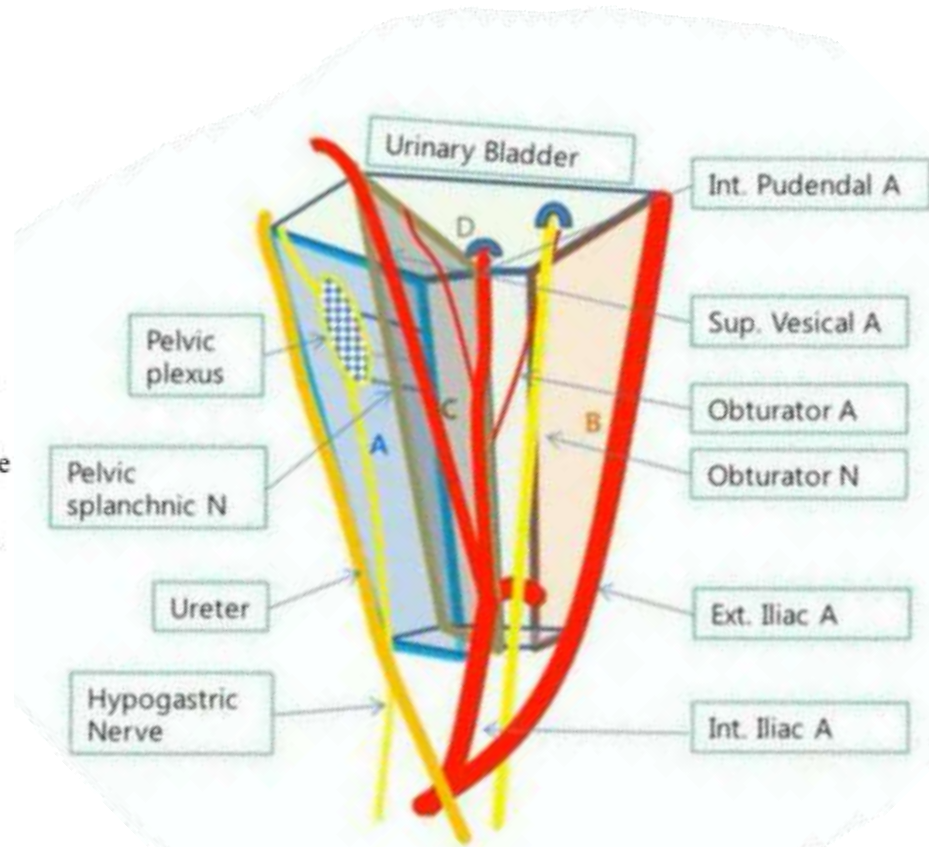
Dissection planes for LPLND

Vesicohypogastric fascia



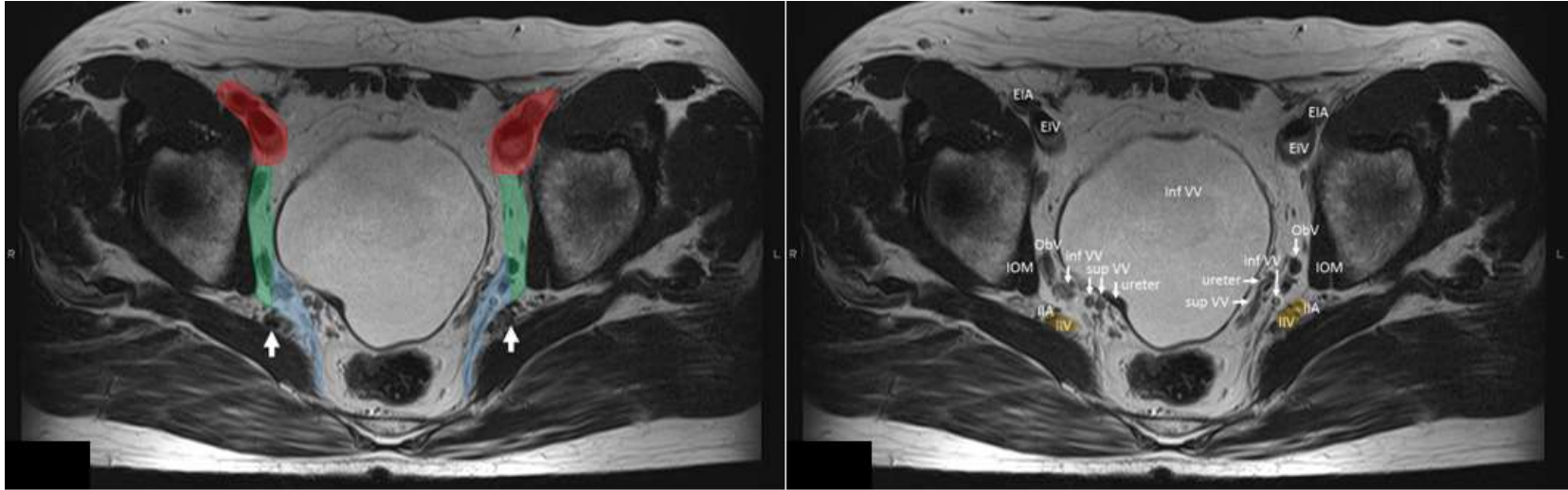





Choi 2019 DCR



Yamaguchi Surg Endosc 2016

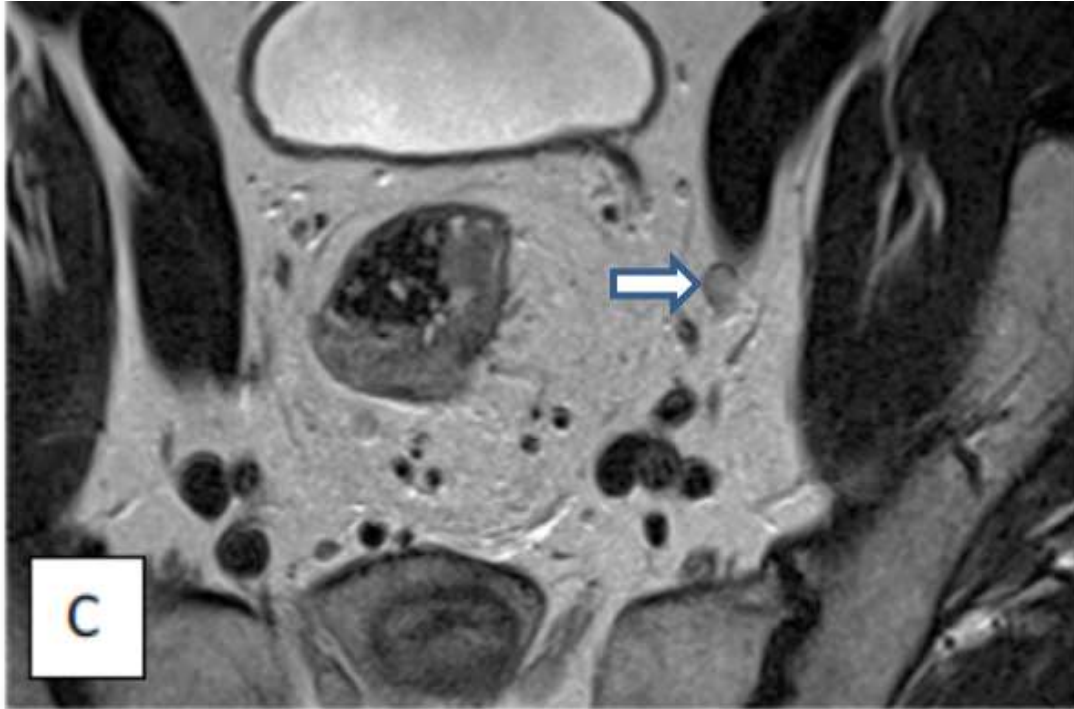
MRI anatomy of lateral area



-  External iliac area
-  Obturator area
-  Internal iliac area

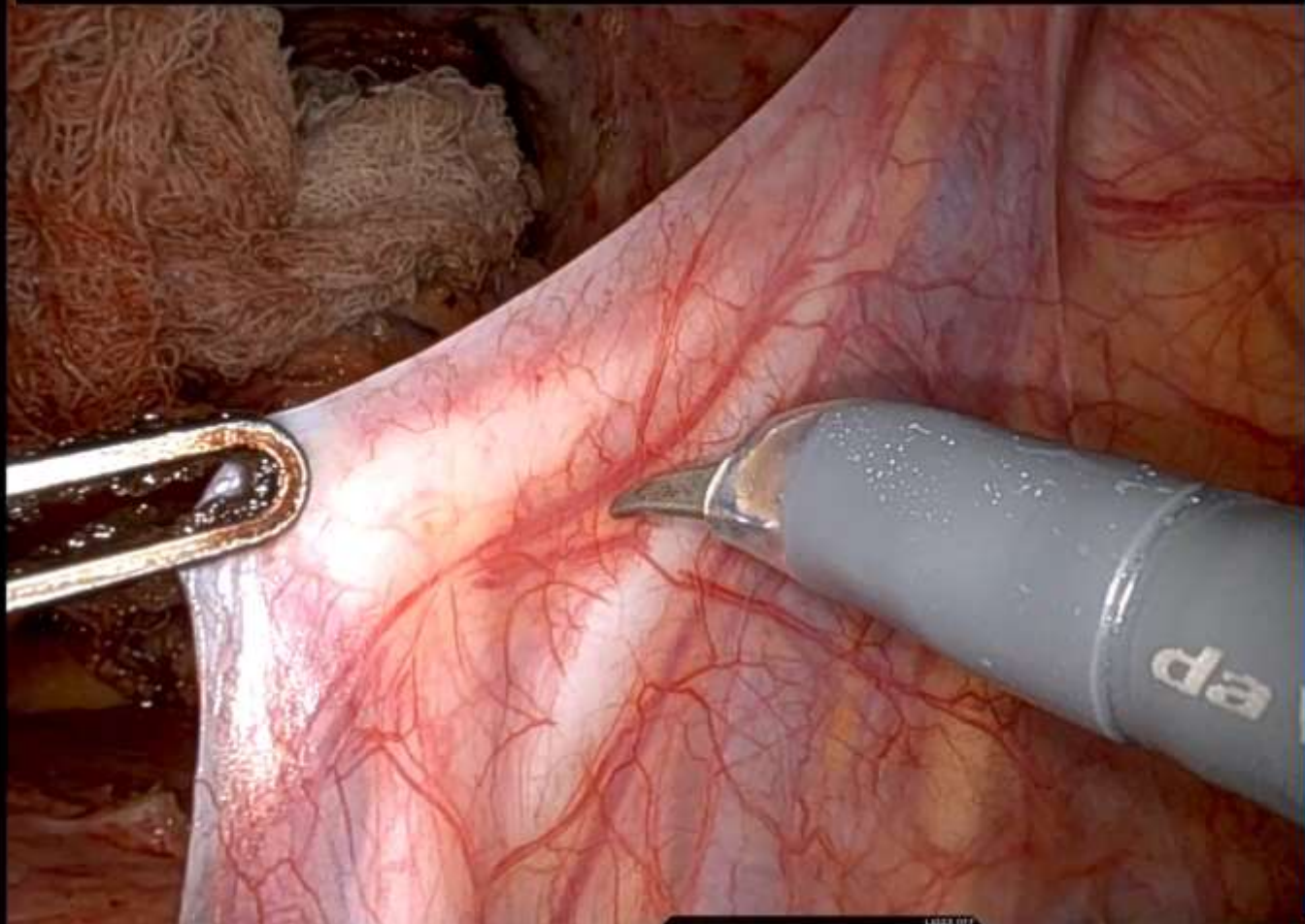
Ogura, Konishi, Kusters JCO 2018
Ogura, Konishi, Kusters JAMA Surg 2019

Ignore a Long-stretched Benign LN at Ext. Iliac Vein





FOOT POSITION SENSORS BLOCKED. CHECK FOR OBSTRUCTIONS



1

TIP-UP FENESTRATED GRASPER

2

FENESTRATED
BIPOLAR FORCEPS

COAG

3

15°

0°

0°

LASER OFF

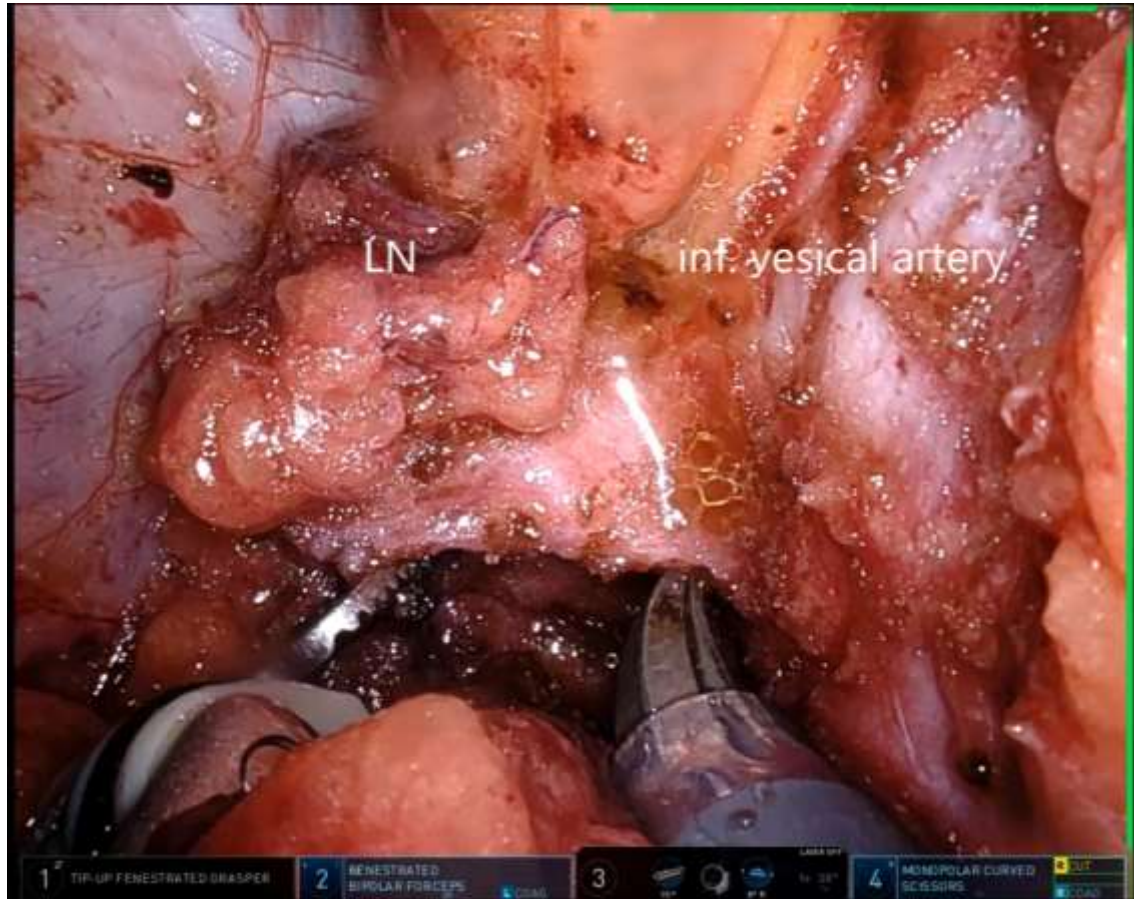
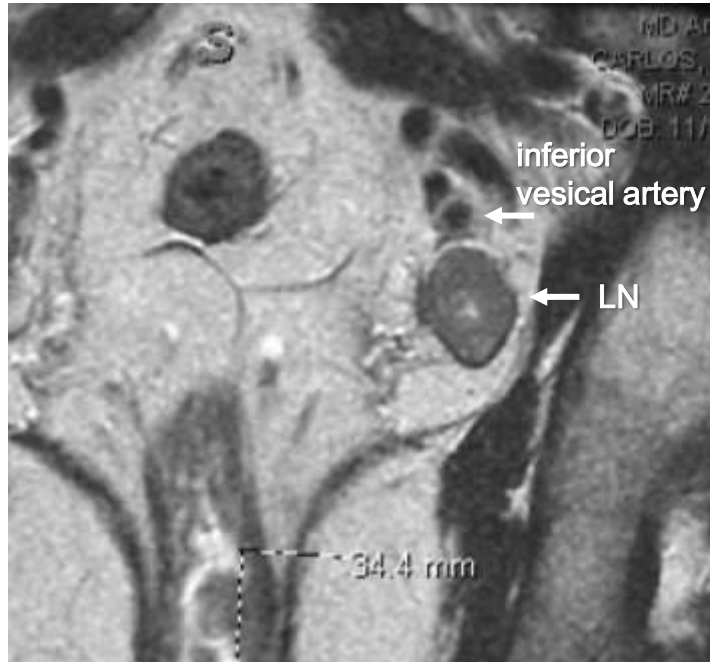
to 0°

4

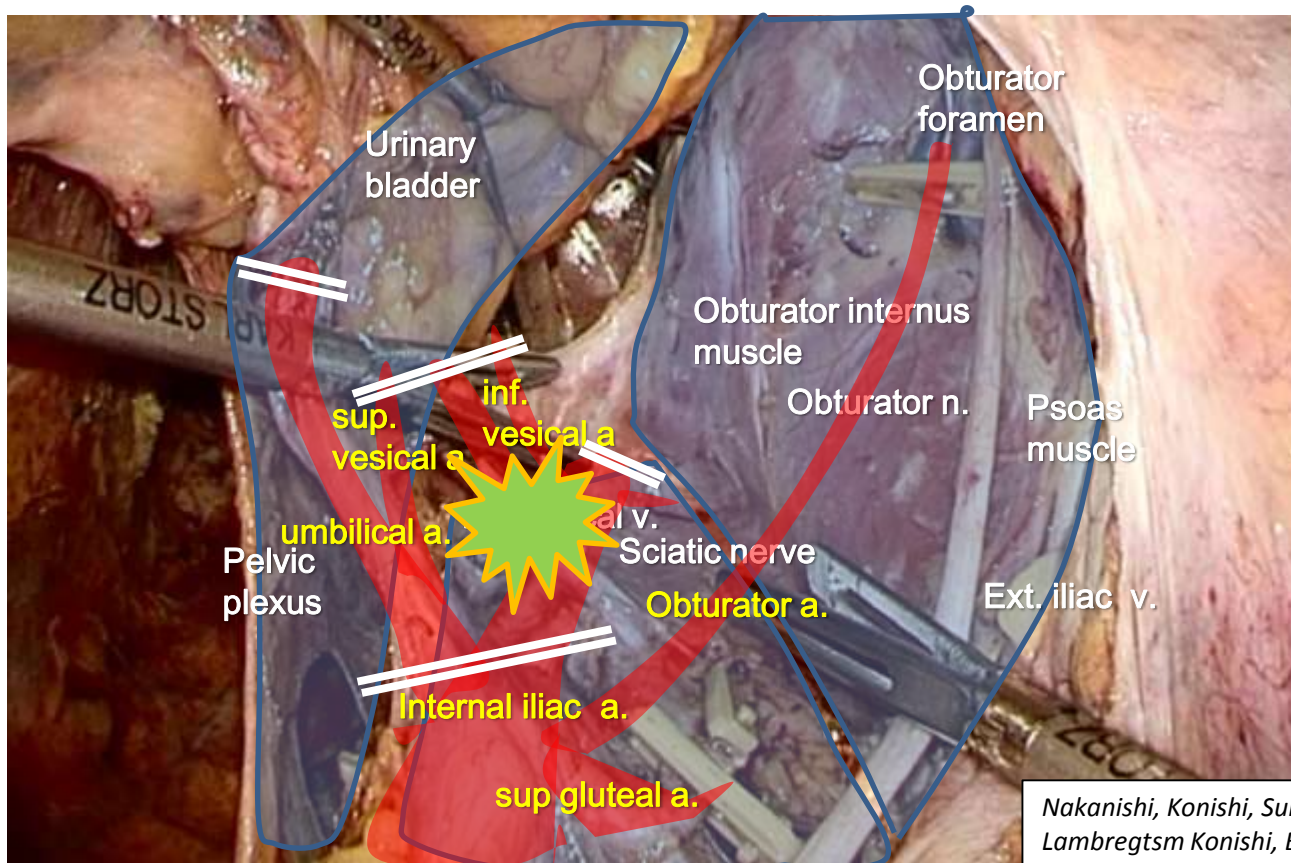
MONOPOLAR CURVED
SCISSORS

COAG

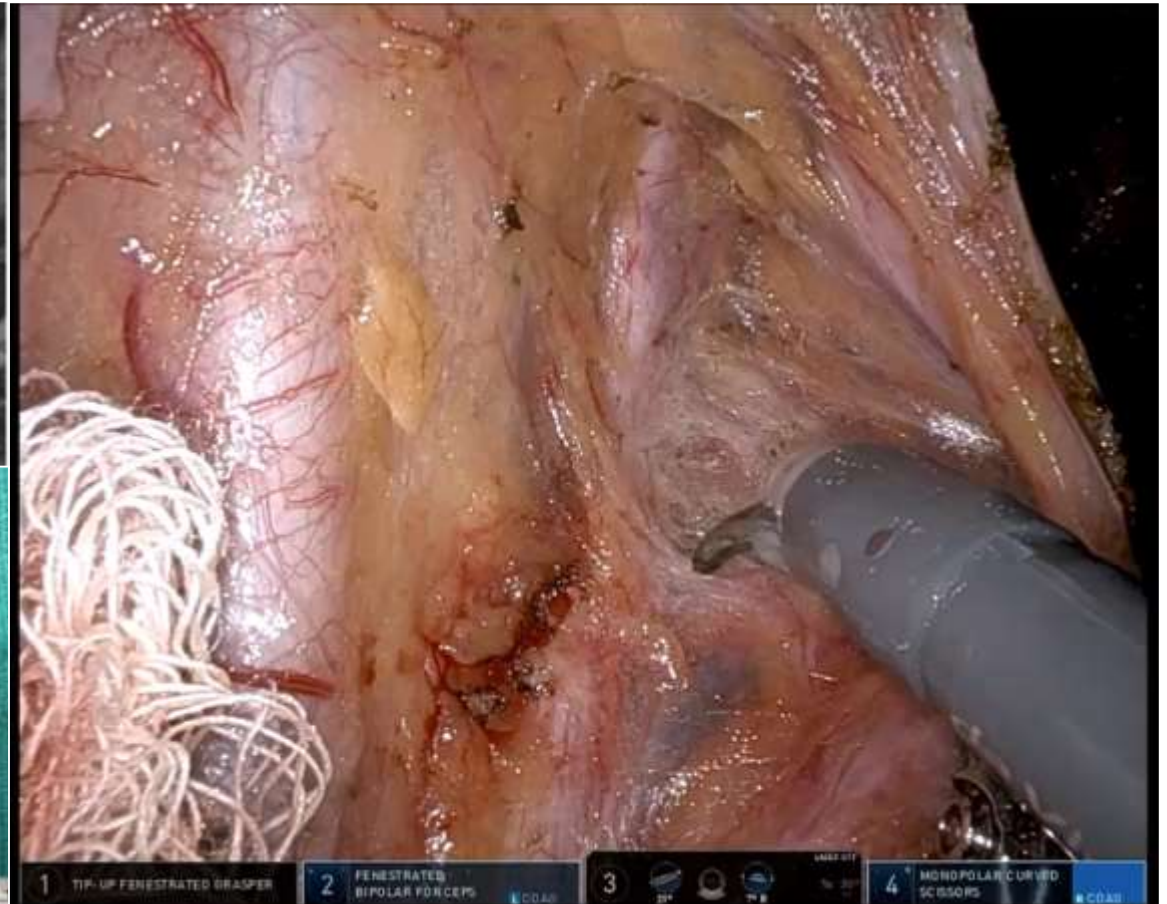
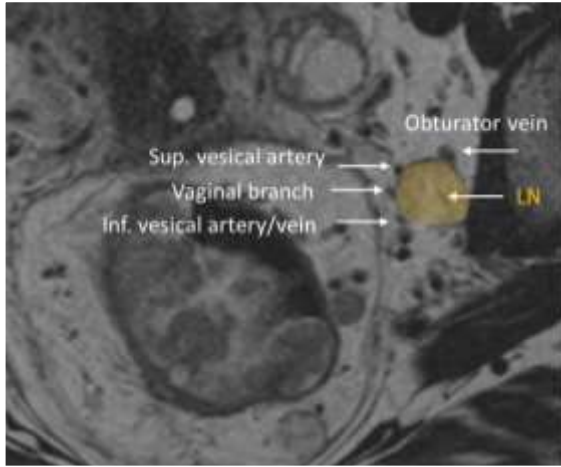
Fibrotic nodal adhesion to vessels after TNT



Dissection planes for LLND



Robotic LPLND with Combined Resection of Internal Iliac Artery after TNT



MIS LPLND in high volume cancer centers

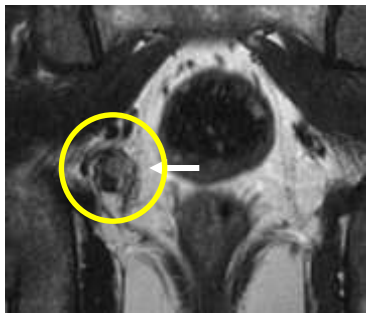


- Robotic LPLND after nCRT, n=40
- Bleeding: 150 mL
- Grade III complications: 10.0 %

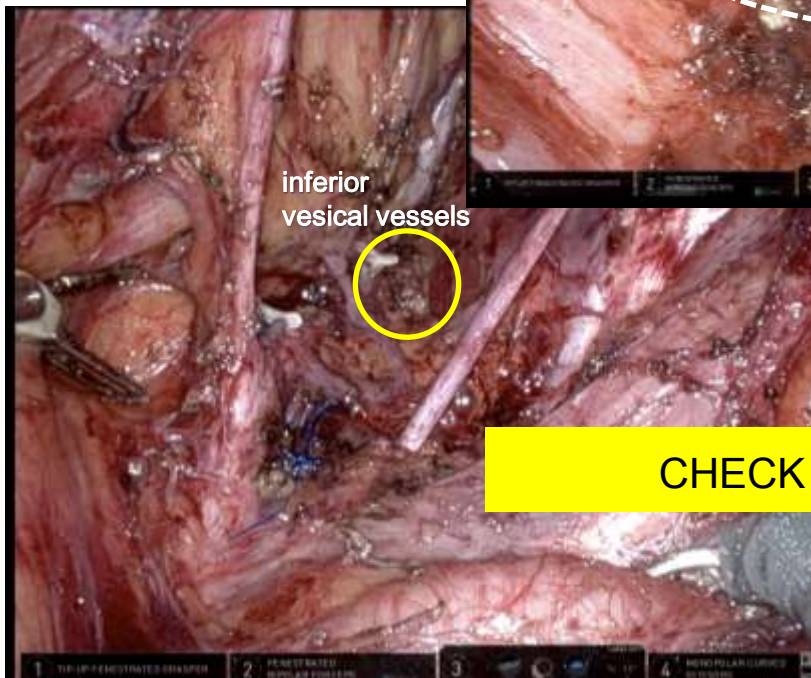
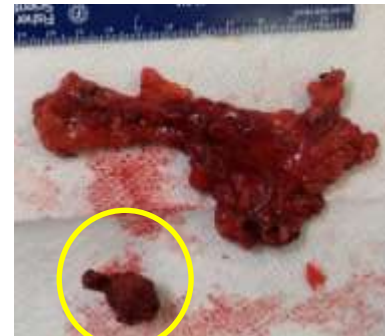
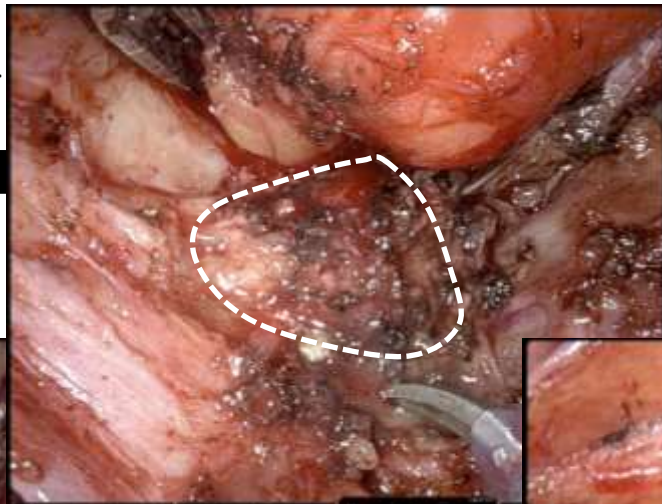


- Laparoscopic LPLND after nCRT, n=107
- Bleeding: 115 mL
- Grade III-IV complications: 9.3%

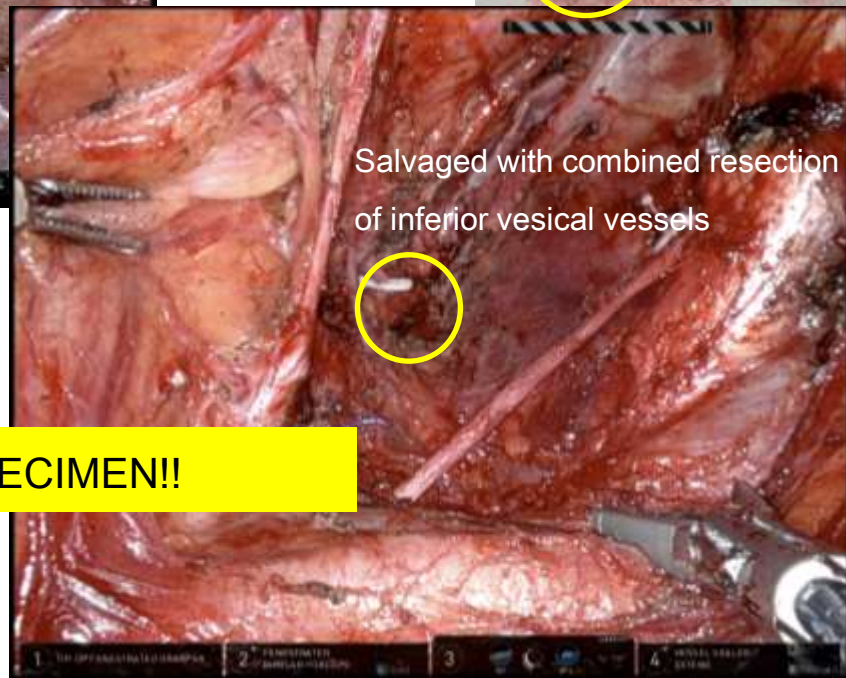
Where Can Things Go Wrong?



nCRT



inferior vesical vessels

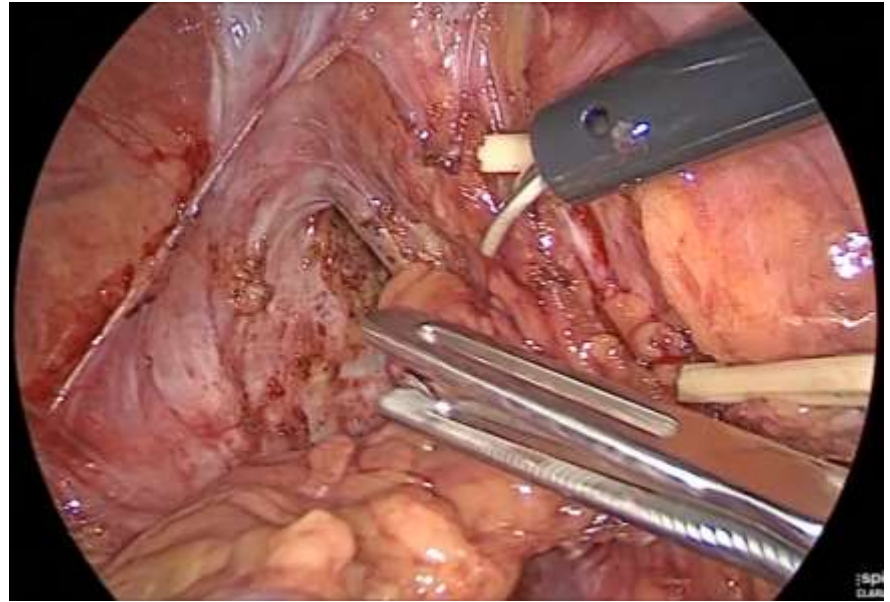
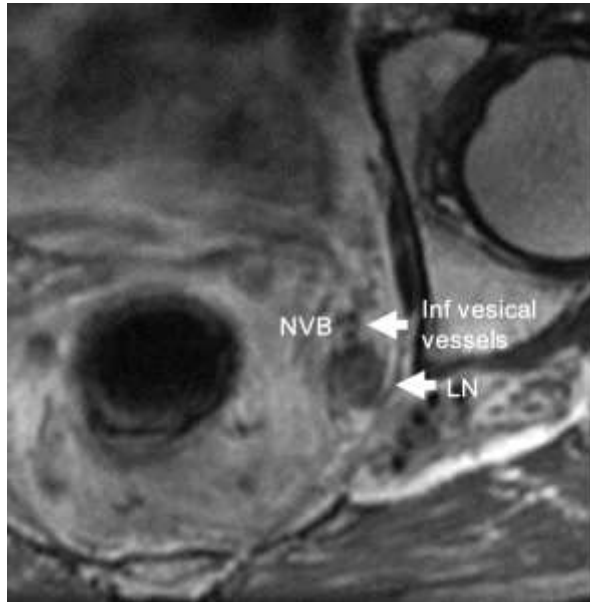


Salvaged with combined resection of inferior vesical vessels

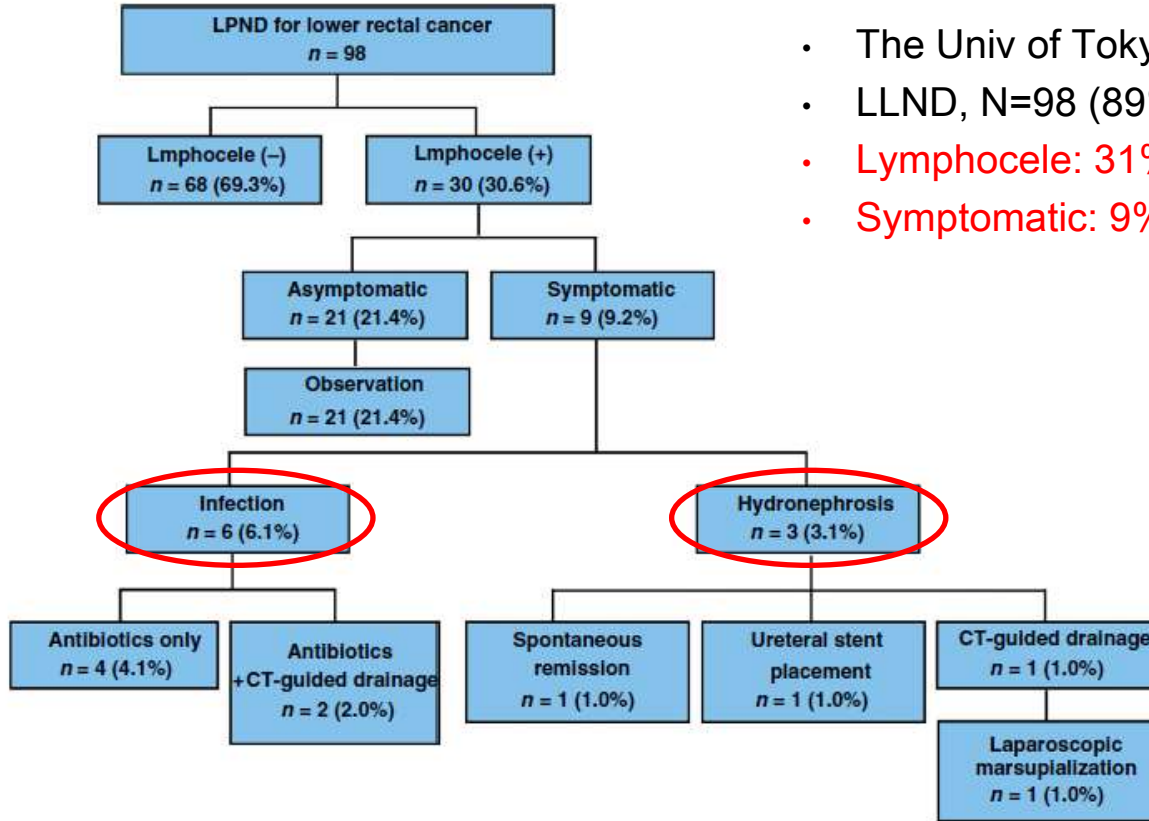
CHECK THE SPECIMEN!!

Check the specimen for metastatic nodes!!

LN abutting the NVB is often stuck to the bladder!!



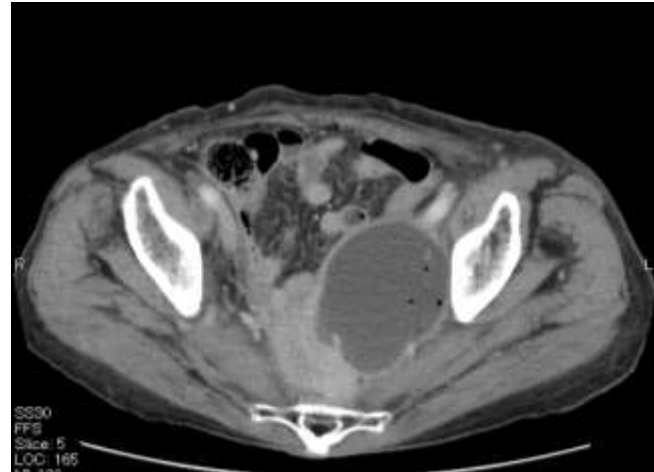
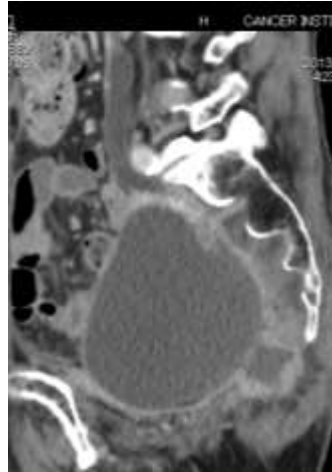
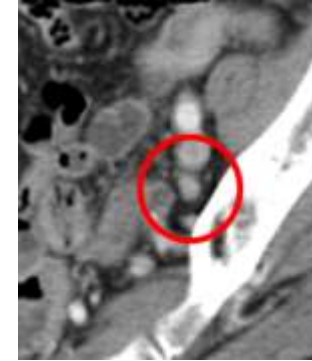
Lymphocele... Major Late Complication



- The Univ of Tokyo
- LLND, N=98 (89% MIS)
- **Lymphocele: 31%**
- **Symptomatic: 9%**

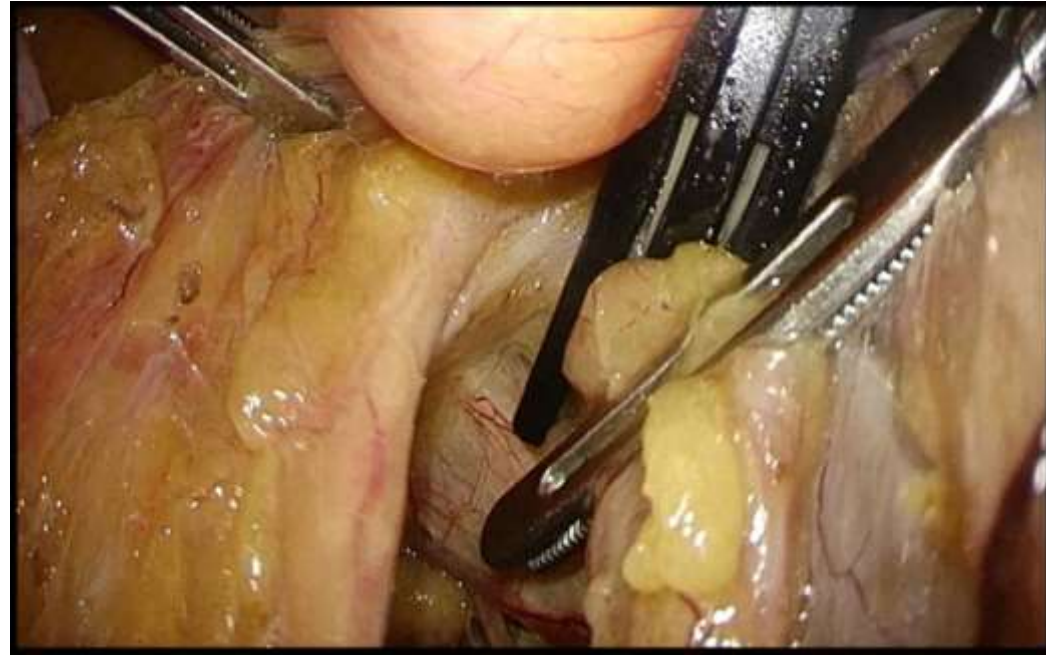
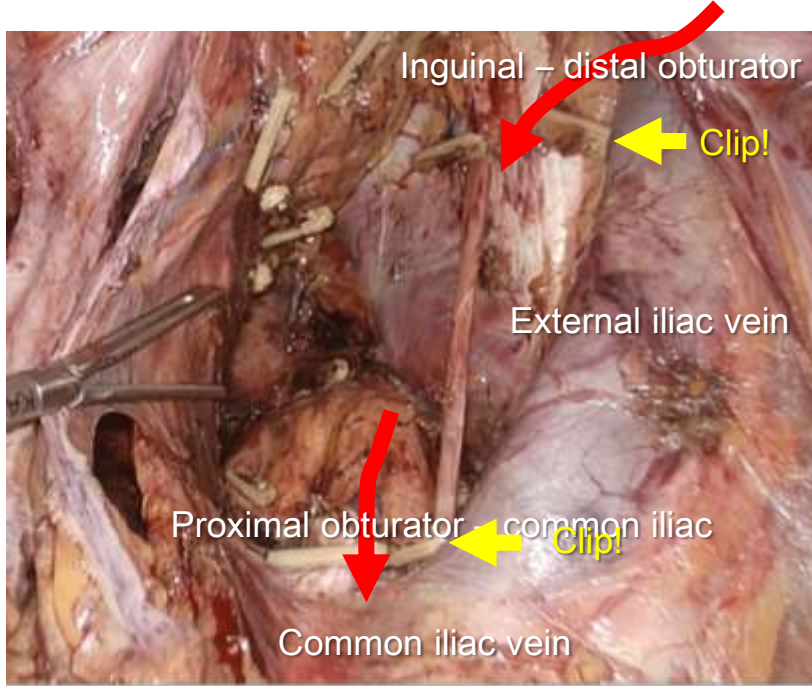
Case

- nCRT → APR + LPLND, no complications.
- 4 months later...fever, leg edema, WBC elevation
- Infectious lymphocele with hydronephrosis
- IR drainage + antibiotics, diuretics



Prevention of lymphocele/lymphorrhea

Clip the two major lymphatic channels!

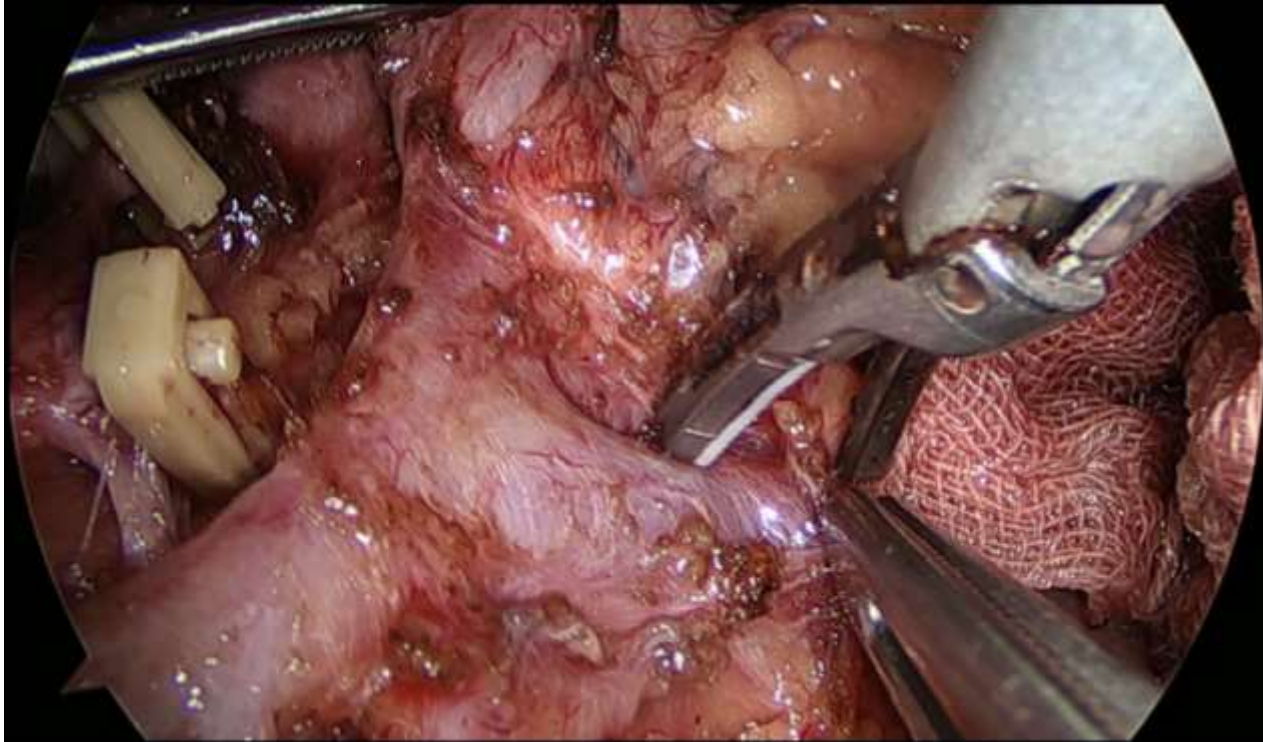


Obturator Nerve Palsy

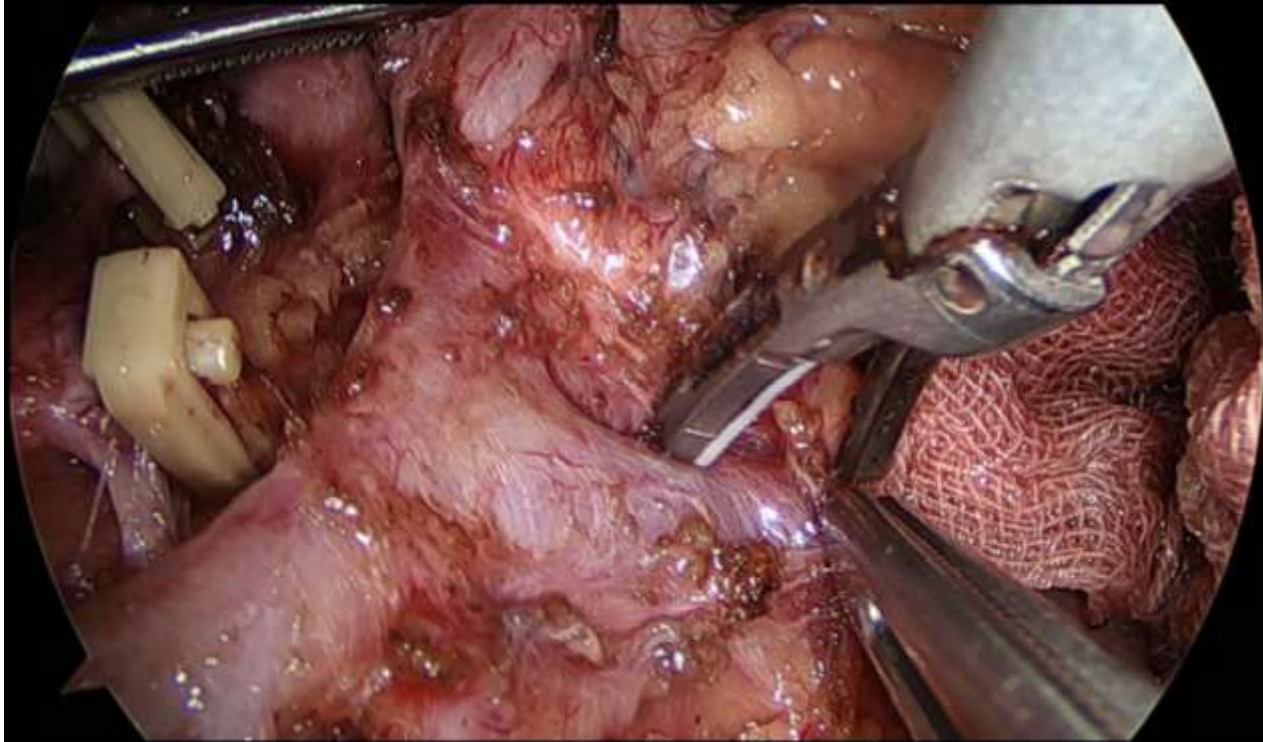
- ✓ Weakness of leg adductor muscles
→ “Cannot get out of bed.”
- ✓ Avoid thermal/electric/retraction injury
- ✓ Mostly recover in 2-3 wks with/out rehab.



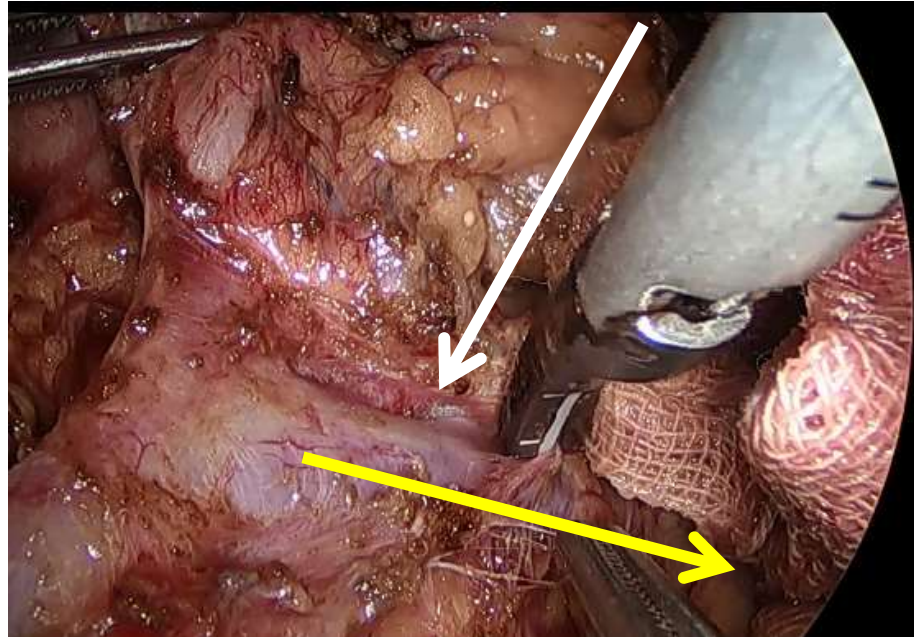
Bleeding from Internal Iliac Vein



Bleeding from Internal Iliac Vein



Bleeding from Internal Iliac Vein



Global Education with Cadaver Workshop for Technical Standardization

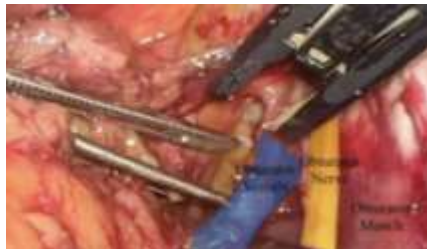
- Cadaver training course, live demonstration (2018~)



US (Orlando, Houston)
Korea
Brazil
Canada
UK
Netherland
Russia
etc...



- LPLND anatomy & video publications



Perez, Konishi, DCR 2018



ASCRS 2019 Best Video Award



ASCRS 2022 Best Video Award

- International collaboration



LANOREC Study (Netherland)



Thank you

tkonishi@mdanderson.org

THE UNIVERSITY OF TEXAS
MD Anderson
Cancer Center