LAPAROSCOPIC MANAGEMENT OF CA ENDOMETRIUM AND ROLE OF SENTINEL NODE MAPPING

DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY

UNIT 3

Endometrial carcinoma - global burden

Most Common Malignancy Affecting Women In Developed Countries

2nd Most Prevalent Cancer After Breast Cancer

6th Most Common Cancer Affecting Women Globally

United States - Fourth Most Commonly Diagnosed Female Cancer

The Sixth Most Common Cause Of Female Cancer Deaths In 2023

In 2023, 1,958,310 New Cancer Cases

609,820 Cancer Deaths

India - Fourth Common Gynecological Cancer

Increasing prevalence more in Indian and Asian continent

HISTORY

- Young 38yr/F , Nulligravida

Chief Complaint:

- Prolonged And Heavy Bleeding X 10 Days
- Fatigue And Giddiness x 5 Days

HISTORY OF PRESENTING ILLNESS :

- Prolonged And Heavy Menstrual Bleeding (HMB) With Passage Of Clots X 10 Days, Soaking 4-5 Pads/Day
- Prior to HMB -- Period Of Amenorrhea Of 2-3 Months
- Not Associated With Pain Abdomen
- History Of Similar 2 Episodes Since Feb. 2023
- Taken Medications Outside

OBSTETRIC HISTORY AND MENSTRUAL HISTORY

- **Obstetric history**
  - Married since 1 year , **Nulligravida**
- **Menstrual history :**
  - Menarche Attained at 14 Years Of Age
  - LMP:19/5/23
  - History Of Heavy Menstrual Bleeding Since 6 months
  - Past Menstrual History : Irregular Cycles Since Menarche
  - Known Case of Polycystic ovarian syndrome

PAST MEDICAL HISTORY

Known case of hypertension since 2 years

History of ICU admission for stroke in May 2023

History of 4 pint packed red blood cells transfusion (Hb- 4.2 gm%)

Treatment History & Surgical History

- Tab Cilnidipine 10 mg OD . (Non compliant) since 2 years
- After the episode of stroke

  Tab Clinidipine 10 mg OD

  Tab Clopidogrel + Aspirin (75mg +75 mg) OD

No relevant surgical history

GENERAL EXAMINATION

- Conscious , Cooperative And Oriented To Time Place And Person

  Wt - 88 kg Ht – 165 cm

  BMI – 32.2 kg/m2 (**Severely Obese**)
- Pulse- 92 bpm, BP- 130/90 mmHg.
- Abnormal Facial hair ++
- Pallor ++

SYSTEMIC EXAMINATION

- RS- B/L Equal Air Entry, No Added Murmur
- CVS- S1, S2 Heard, No Murmur
- P/A - Soft Nontender
- Pelvic examination -- Active bleeding +
  uterus bulky
  Bilateral fornices free

INVESTIGATIONS AT OUR HOSPITAL

Hb : 4.2 gm%

4 pint packed red blood cells transfusion done.

Repeat Hb : 9.6 mg/dl

- WBC- 5900/mm
- Plt- 2,91,000/mm
- Bleeding time :2 min
- Clotting time : 5min 15 sec
- PT -12.70 sec
- Inr -1.06

Usg Pelvis

Uterus bulky with endometrial thickness of 18 mm

Bulky both ovary s/o borderline polycystic ovarian disease

PROVISIONAL DIAGNOSIS

- Young 38yr/Female Nulligravida With Abnormal Uterine Bleeding Under Evaluation

PLAN OF MANAGEMENT

Aim

To arrest present bleeding

- Therapeutic dilatation and curettage

Endometrial biopsy

Definitive management

Therapeutic Dilatation And Curettage

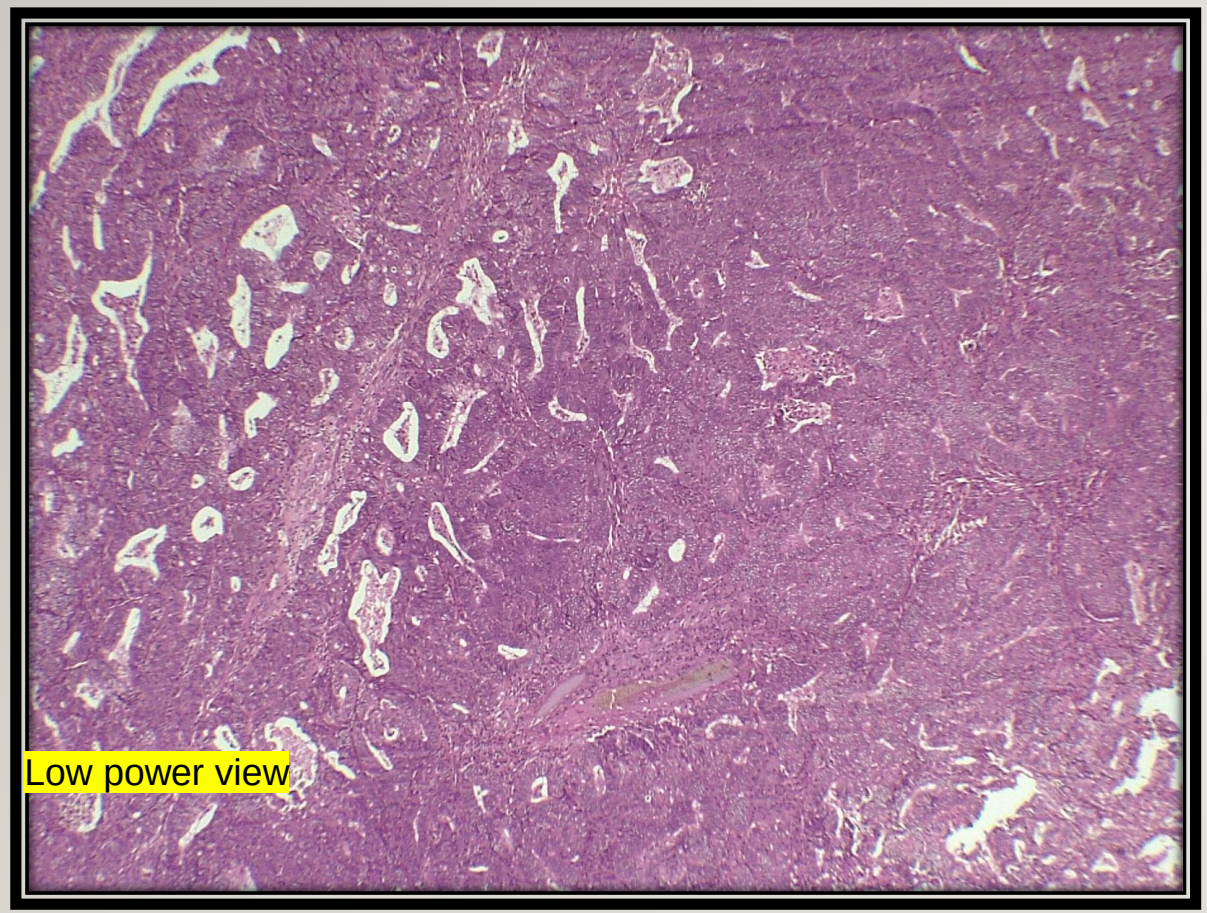
Sample Sent For Histopathological Examination

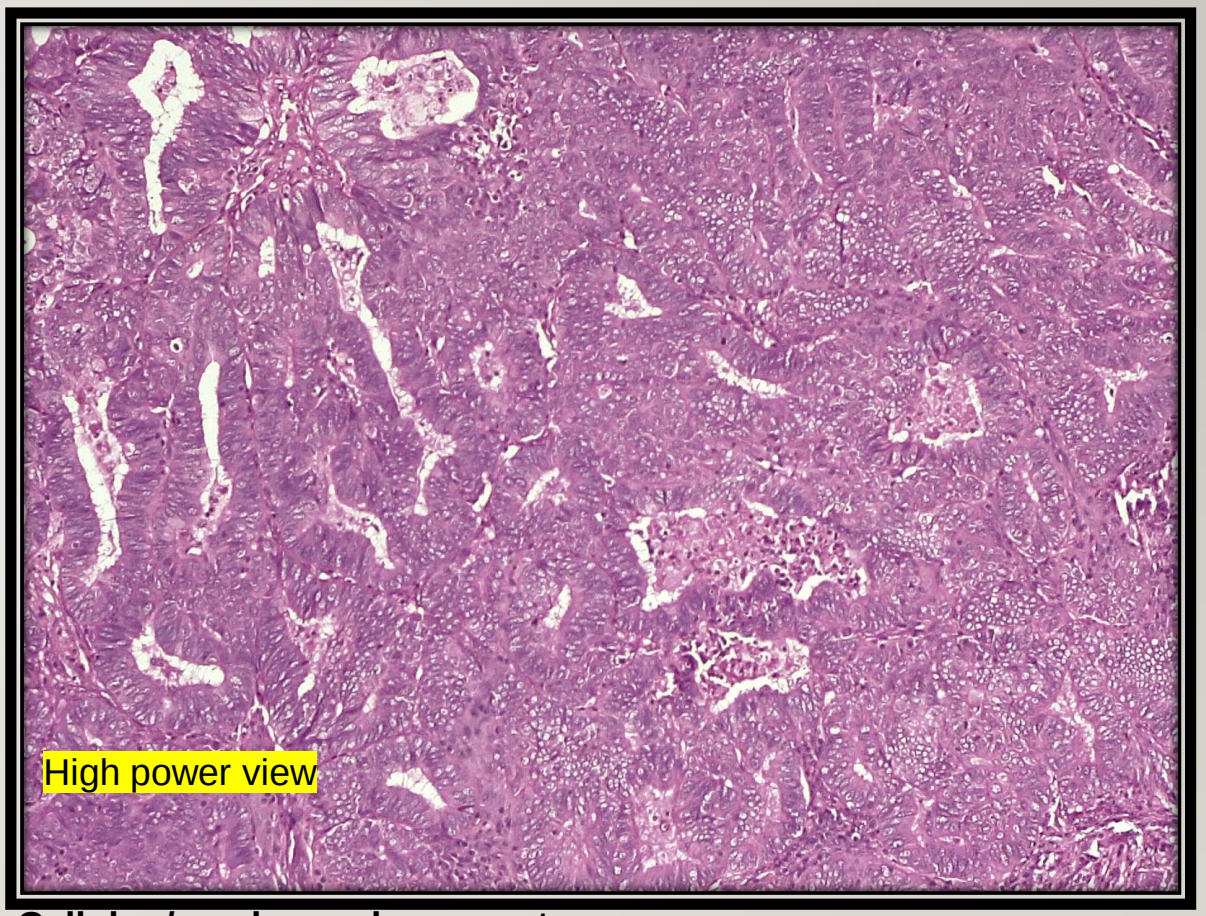
HPE Report Of Dilatation And Curettage

Pathology department had received multiple grey brown soft to firm tissue pieces aggregating to 4.5 x 3 x 0.5 cm.

After processing, the hematoxylin and eosin stained slides showed –

A final diagnosis of Endometrioid endometrial adenocarcinoma FIGO (grade 1)





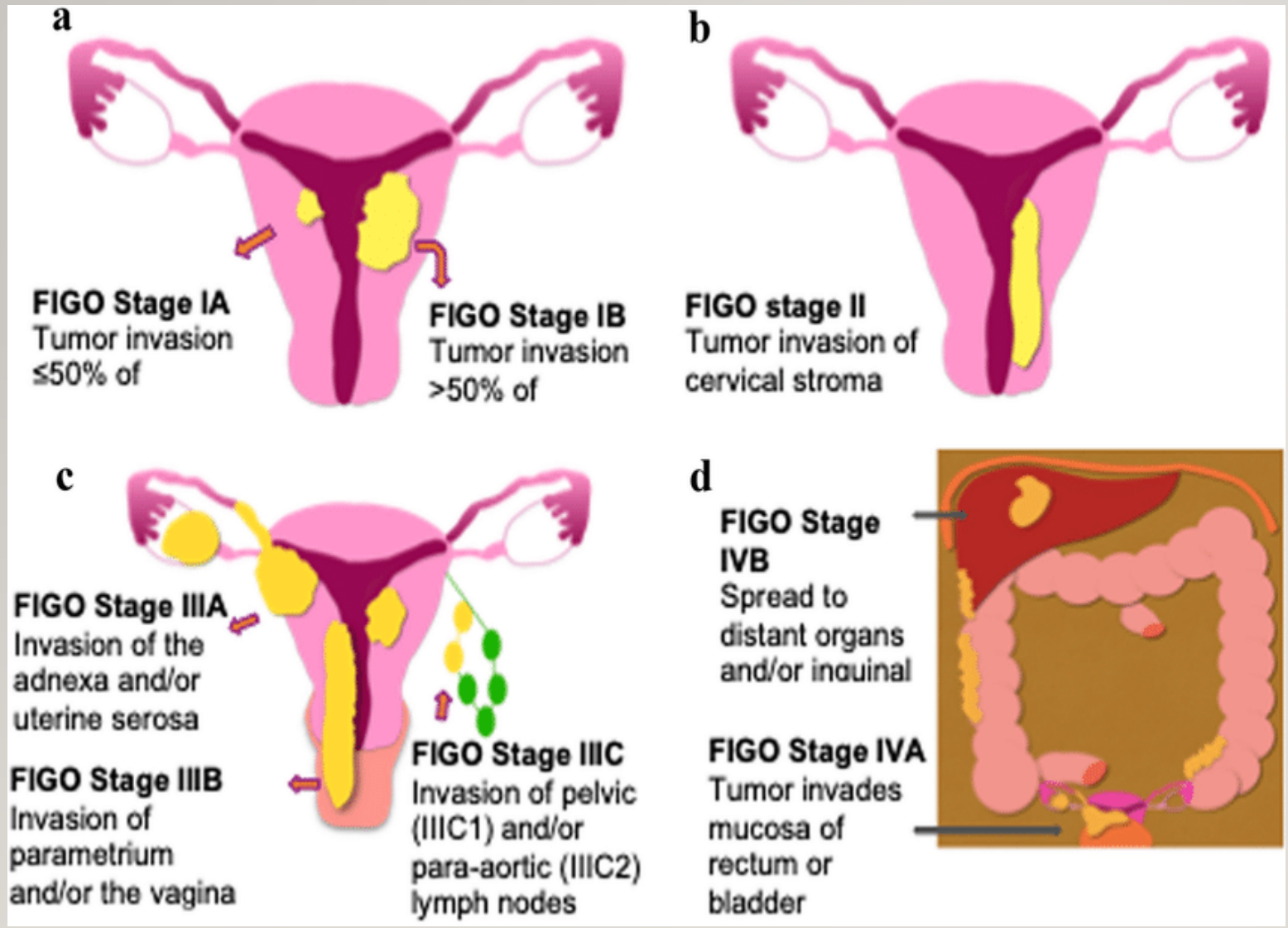
• tumor shows back to back glands with minimal or lacking intervening stroma
•Cribrifrm or microacinar pattern and solid areas

•Cellular / nuclear enlargement
•Nuclear rounding and overlapping with large nucleoli
•Loss of polarity, Cytoplasmic eosinophilia

Mri pelvis

- A fairly well defined infiltrative lesion in anterosuperioir portion of endometrium

  Endometrium thickness FIGO stging 1a
- Bilateral bulky ovaries



ENDOMETRIAL CA: by HPE	
STAGE I	Confined to Corpus Uteri
IA	Limit to Endometrium
IB	Invade < ½ Myometrium
IC	Invade > ½ Myometrium
STAGE II	Invade Cervix; Not beyond Uterus
IIA	+ Endocervical
IIB	+ Ectocervical
STAGE III	Beyond Uterus; Not beyond True Pelvis
IIIA	Invade Serosa, Adnexae, Peritoneum
IIIB	+ Vagina
STAGE IV	Beyond True Pelvis/ + Bladder/ + Rectum
IVA	Invade Bladder/ Bowel Mucosa
IVB	Distant Mets (including Inguinal Nodes)

Mainstay of management

Definitive management – Total Hysterectomy with bilateral salpingo-oophorectomy with pelvic lymphadenectomy.

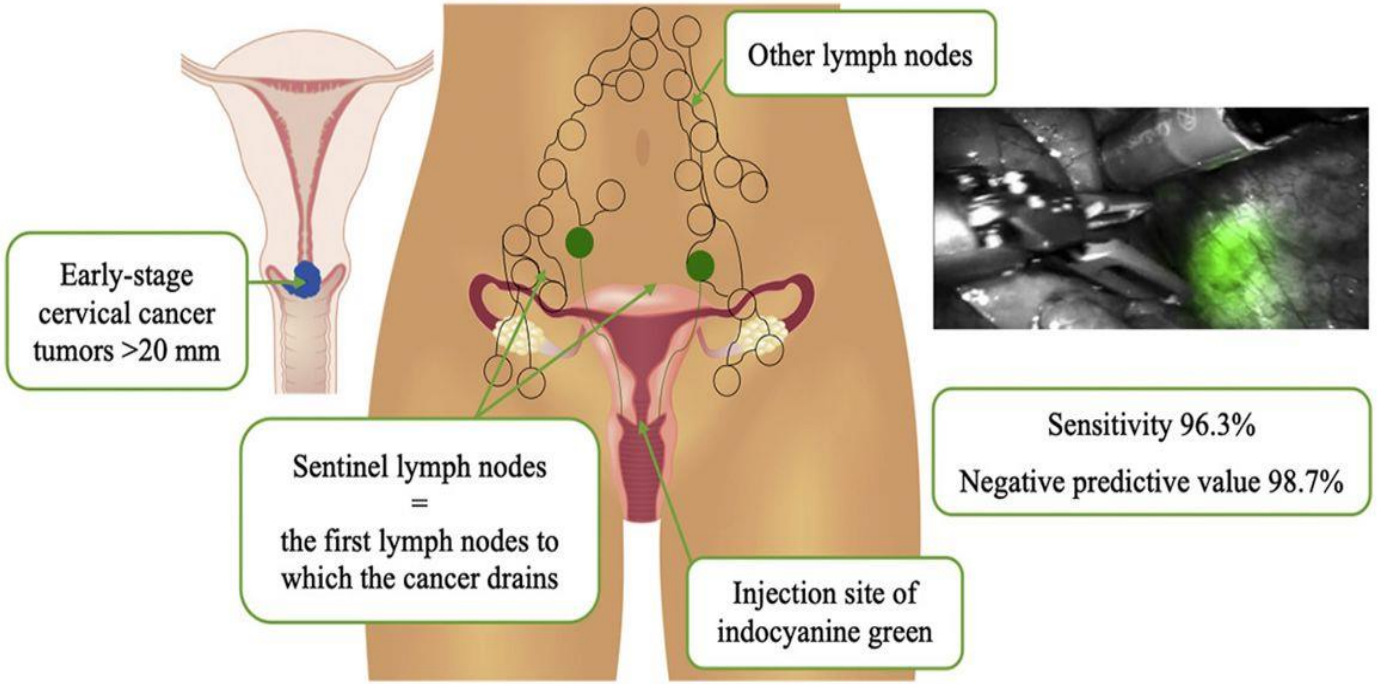
What Is Sentinel Lymph Node ?

A sentinel lymphnode (SLN) refers to one or more lymph nodes that is first impacted by lymphatic metastatis of the primary malignant tumour through the regional lymphatic drainage pathway.

SENTINEL LYMPH NODE MAPPING IN ENDOMETRIAL CANCER: A COMPREHENSIVE REVIEW

29 JUNE 2021, FRONTIERS IN ONCOLOGY

SENTINEL LYMPH NODE MAPPING



Sensitivity 96.3%

Negative predictive value 98.7%

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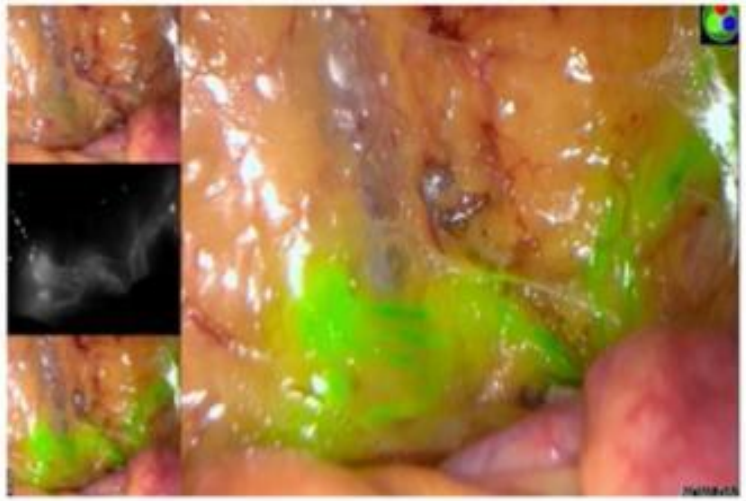
3 JULY 2021

Technique

A



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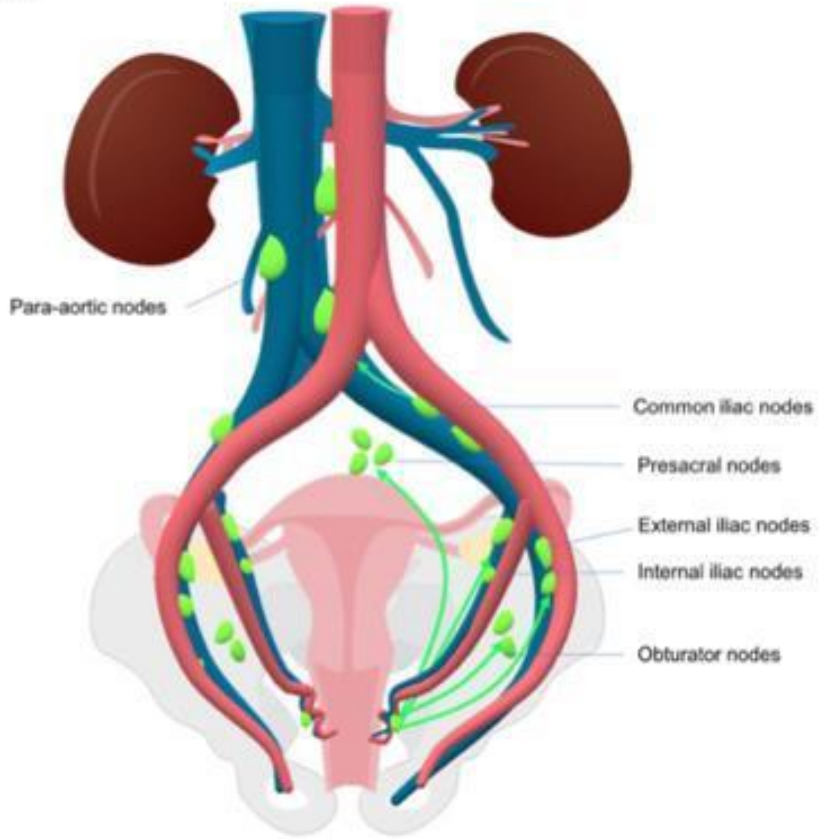

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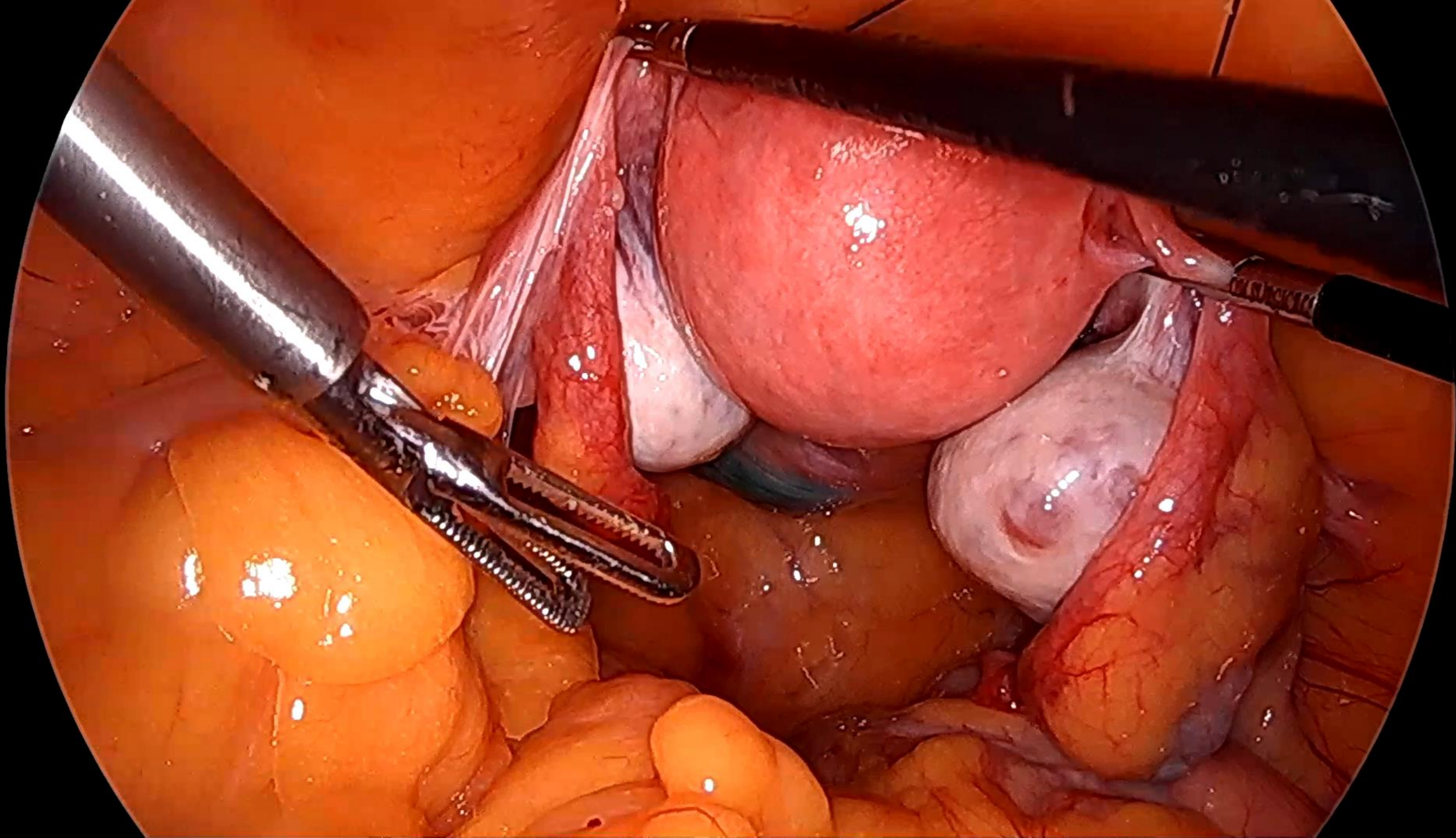


ROLE OF SLN MAPPING

Lymphadenectomy is a must in low grade as well as high grade endometrial carcinoma irrespective of its morbidity and intraoperative complications-

Lymphedema, lymphocyst formation

Vascular, ureteral and visceral injuries.

Deep vein thrombosis , chylous ascitis.

Hence the role of SLN mapping has emerged.

Final HPE report -

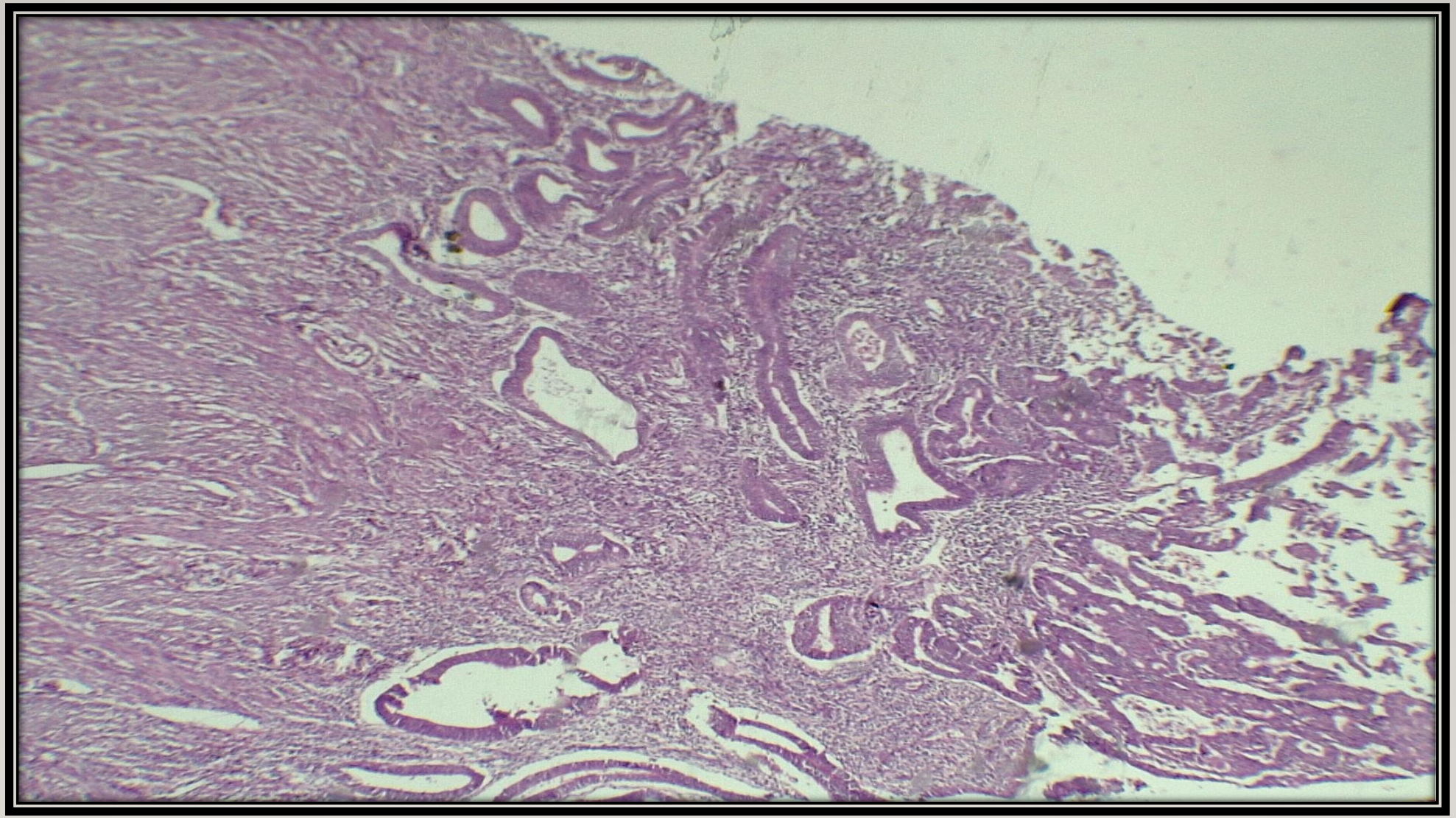
The Total laproscopic hysterectomy with bilateral salpingoophrectomy specimen sent for histopathological examination.

At the pathology department, specimen of uterus with cervix with bilateral adnexae measuring 14x 9x 4 cm and weighing 120 gms was received.

On gross examination, endometrium was variable in thickness with endometrial thickness as 0.2 to 0.6 cm and myometrial thickness as 1.7 cm.

The cut surface of bilateral ovaries showed multiple small cysts.

After processing, the microscopy showed -



Irregular endomyometrial junction without intervening rim of endometrial glands with cystic changes, atypia and endometrial stromal edge is smooth pushing but not infiltrating the myometrium.

Conclusion

- Laparoscopic approach is superior to total abdominal approach in terms of minimal blood loss and faster recovery.
- SLN mapping and biopsy is a safe and accurate method to detect lymph node metastasis, enabling the omission of futile systemic lymphadenectomy and improving patient's quality of life.
- Clinical trials are currently underway to elucidate the impact of SLN mapping strategy on survival outcomes.

UPDATE OF SLN MAPPING ASSESSMENT IN ENDOMETRIAL CANCER – JOURNAL OF GYNECOLOGY AND OBSTETRICS CLINICAL MEDICINE – 30TH JANUARY 2023

Thank you