មជ្ឈមណ្ឌលជាតិគាំពារមាតា និងទារក
National Maternal and Child Health Center

និទាសល្យសាស្ត្រ សម្ភព និងរោគស្ត្រី លើកទី៤

ប្រធានបទ៖ «រួមគ្នាបង្កើនគុណភាពសេវាព្យាបាល ថែទាំ និងសង្គ្រោះមាតា និងទារក »

INTERESTING ENDOSCOPIC GYNECOLOGY SURGERY in National Maternal and Child Health Center

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ថ្ងៃទី២-៣ ខែកញ្ញា ឆ្នាំ២០២៦
មជ្ឈមណ្ឌលជាតិគាំពារមាតា និងទារក

Presented by Dr. Meng HuyCheng

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I-INTRODUCTION

- NMCHC In 2024 we have laparoscopic surgery 102case (Total laparoscopic hysterectomy and subtotal hysterectomy, Myomectomy, cystectomy, ectopic pregnancy (rupture/non rupture /Interstitial pregnancy).
- Hysteroscopic Myomectomy with **Monopolar resectoscopic** at NMCHC In December 2024 we have 02 cases .
- NMCHC in 2025 ,Laparoscopic surgery 151case /**Bipolar Hysteroscopic with Endomat** :21Cases.
- NMCHC IN 2026 Hysteroscopic (Jan to May):20 Cases

The progression laparoscopic Team has contributed to Reduced postoperative pain, shorter hospital stay and improved **patient satisfaction**.

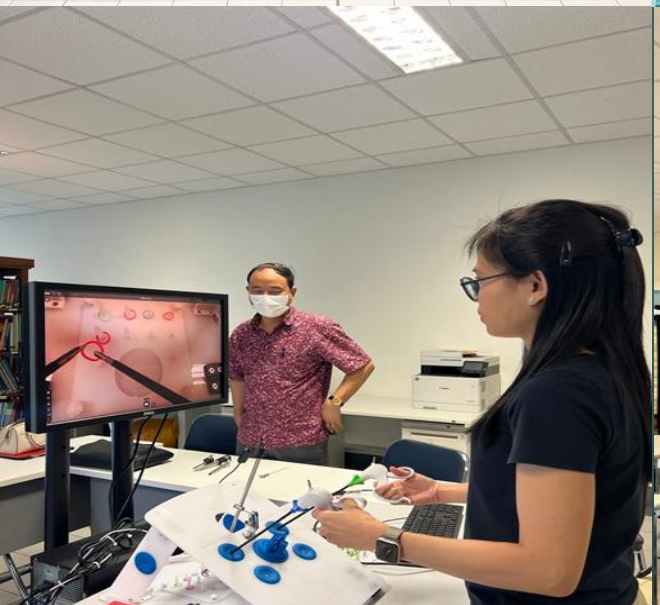
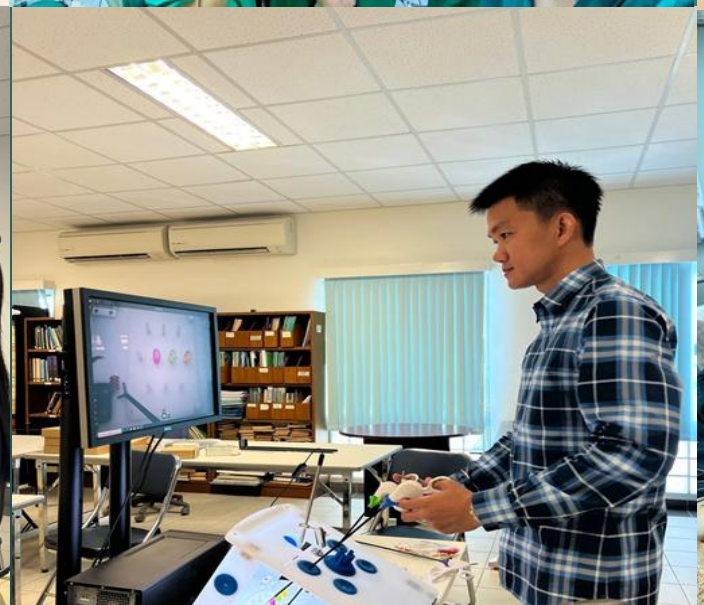
II-PROGRESS OF ENDOSCOPIC GYNECOLOGY SURGERY NMCHC

Operation 2024	Operation 2025
LAPAROSCOPIC : 102CASES	LAPAROSCOPIC :151CASES
Monopolar Hysteroscopic:02cases	Bipolar Hysteroscopic :21cases
Hysteroscopic 2026 (Jan to May) :20 CASES	

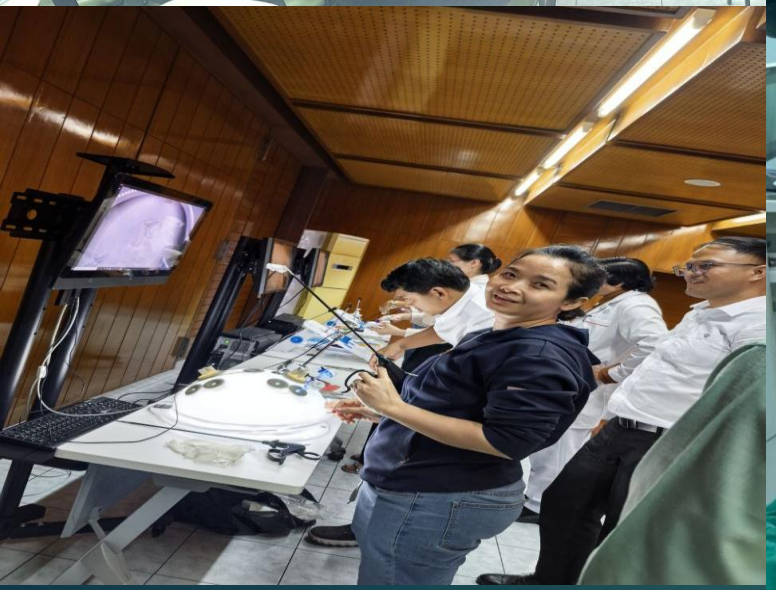
Activies in minimally invasive surgery at NMCH 2024





Activies in minimally invasive surgery at NMCH 2025-2026



III- HYSTEROSCOPIC MYOMECTOMY

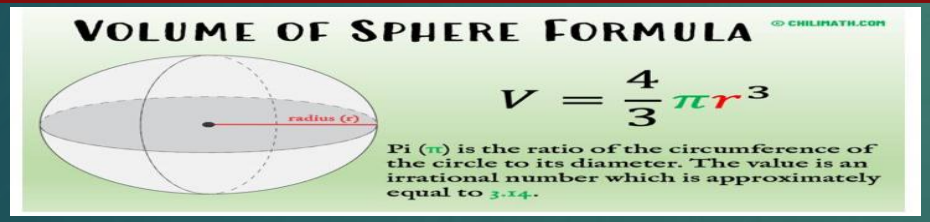
Element of safe HM and Complication

- Proper case selection
- Good Intrumentation
- Good Surgical Technique
- Fluid balance

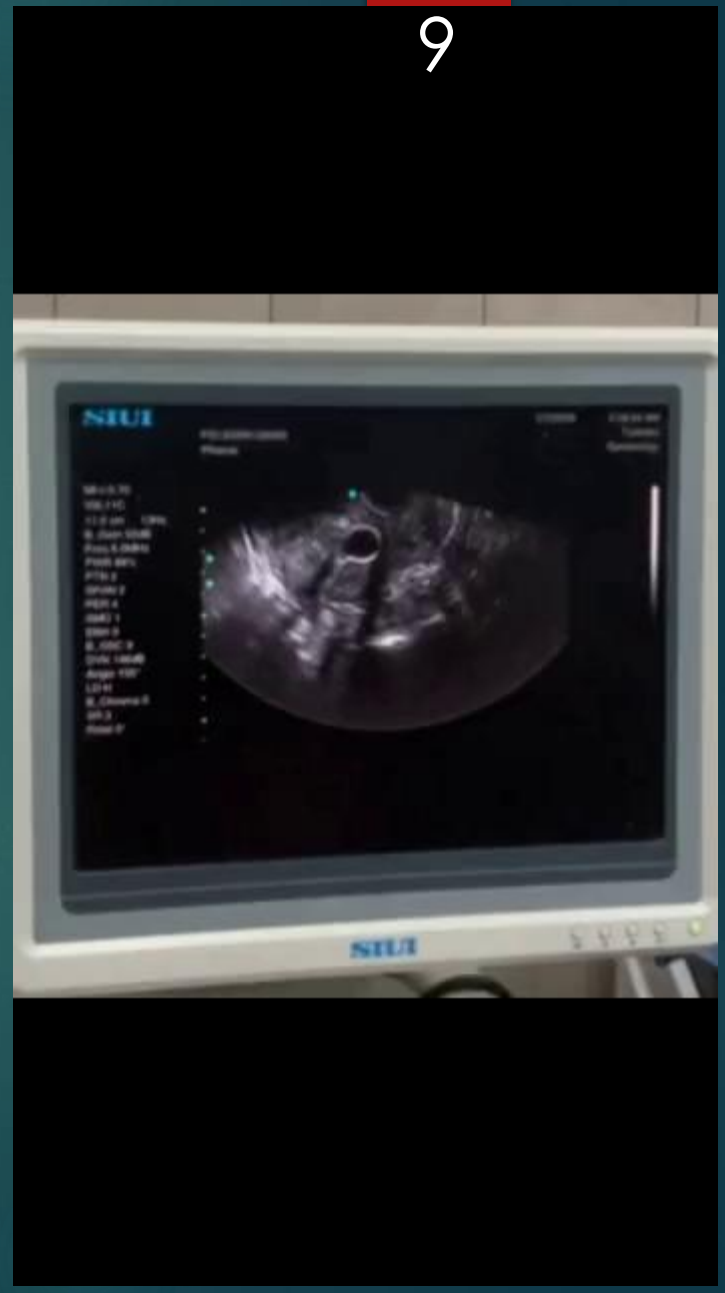
What to look for in an Ultrasound ? (Fibroid Mapping)

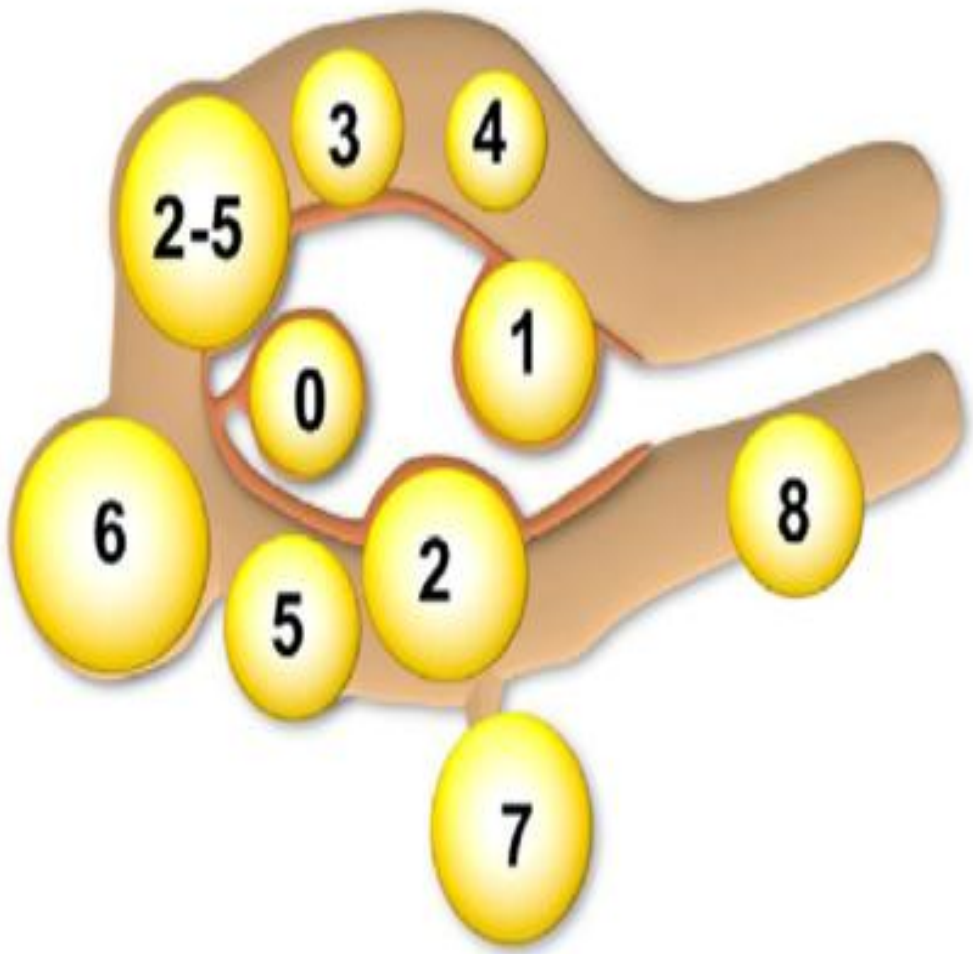
- Number of myomas - Multiple is more difficult
- Size of myoma Volume =

Uterine fibroid volume= L× W × H ×π/6
Or V=0.523 × L × W × H (Usually CM)



- Location/ depth/ grade of myoma
- Myometrial margin between fibroid and uterine serosa

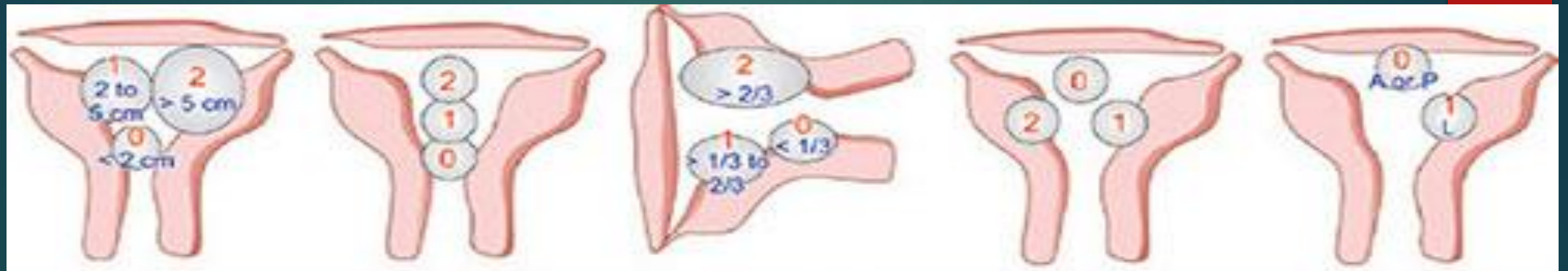




SM - Submucous	0	Pedunculated intracavitary
	1	<50% intramural
	2	≥50% intramural
	3	Contacts endometrium; 100% intramural
O - Other	4	Intramural
	5	Subserous ≥50% intramural
	6	Subserous <50% intramural
	7	Subserous pedunculated
	8	Other (specify e.g. cervical, parasitic)

Hybrid	Two numbers are listed separated by a hyphen. By convention, the first refers to the relationship with the endometrium while the second refers to the relationship to the serosa. One example is below	
(contact both the endometrium and the serosal layer)	2-5	Submucous and subserous, each with less than half the diameter in the endometrial and peritoneal cavities, respectively.

Lasmar/ STEP W classification



	Size (cm)	Topography	Extension of the base	Penetration	Lateral wall	Total
0	<2	Low	<1/3	0	+1	
1	>2–5	Middle	>1/3–2/3	<50%		
2	>5	Upper	>2/3	>50%		
Score	+	+	+	+	+	

Score	Group	Complexity and therapeutic options
0 to 4	I	Low complexity hysteroscopic myomectomy
5 to 6	II	High complexity hysteroscopic myomectomy Consider GnRH use? Consider two-step hysteroscopic myomectomy
7 to 9	III	Consider alternatives to the hysteroscopic technique

Fluid balance

- To prevent OPERATIVE HYSTEROSCOPY INTRAVASCULAR ABSORPTION (OHIA)/Gynecology TURP syndrome .

- Intracavity Pressure Not higher than the Mean arterial pressure of the patient

  (**Range between 50 to 80mmhg)**

- **Deficits 1000 to 2500ml with NSS should be careful monitoring**

- In hypotonic media (monopolar techniques) is Robust and rapid effect in the onset of hyponatremia for this reason the upper limited for fliud deficit when using hypotonic solutions has been set **1000ml ,**

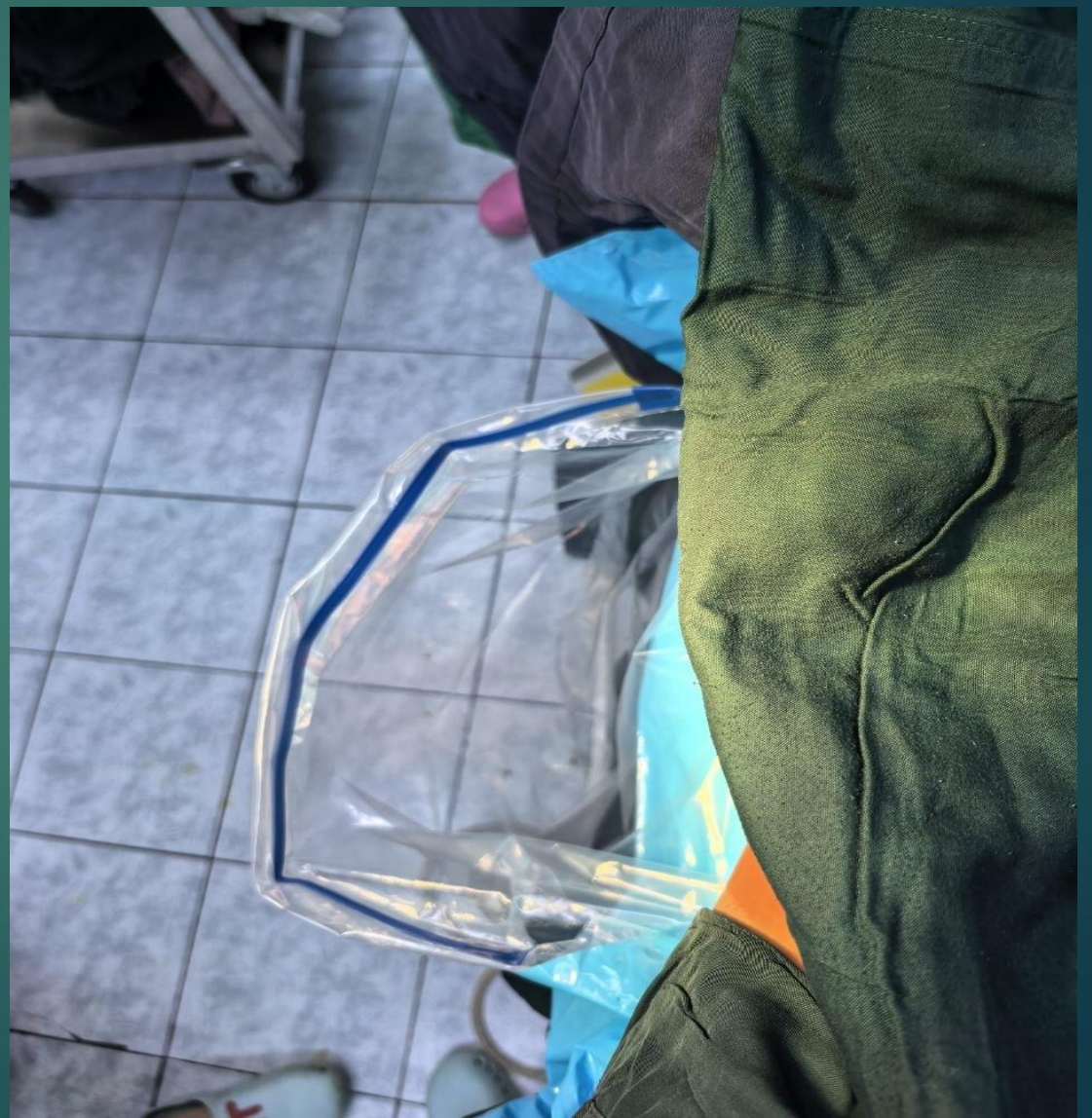
STOP…..

- Surgery must be stopped at the first sign of possible OHIA(primarily signs of electrolytes imbalance ,which can emerge differently on the basis that the patient is under anesthesia or not) .

- When using **Normal saline** The surgery must be stopped immediately with a deficit of **2500ml ..**

- When dealing with older and patients with **cardiovascular ,renal,** other comorbidities , the threshold for fluid deficit must be lowered to **750ml..**
- upper limited for fluid deficit when using **hypotonic solutions has been set 1000ml**

Fliud Control



INSTRUMENTATION

Monopolar resectoscope with Glycine

Bipolar resectoscope with Normal saline

About Size:

26fr(10hega dilator)

22fr(8hegar dilator)

18fr(6hega or NO)

15fr.....

COMPLICATION

- **OHIA (Gynecology TURP syndrom)**
- Venous air embolism,Retained air in the Apex of the right vetricle
  (Management: DURANT MANEUVER)
- Bleeding(Perforation)
- Infection (prevention :Doxycyclin 100mg BID one day prior surgery)
- Adhesions

Prevention:Hormonal therapy with balloone intrauterine cavity /Routine application of hyaluronic acid gel and hysteroscopic in next 7day.(ISUOG)/PUbMed

Hysteroscopy resection CASE

The woman is present with severe anemia + Abnormal vaginal bleeding (blood tranfusion 6sac with on going TXA .

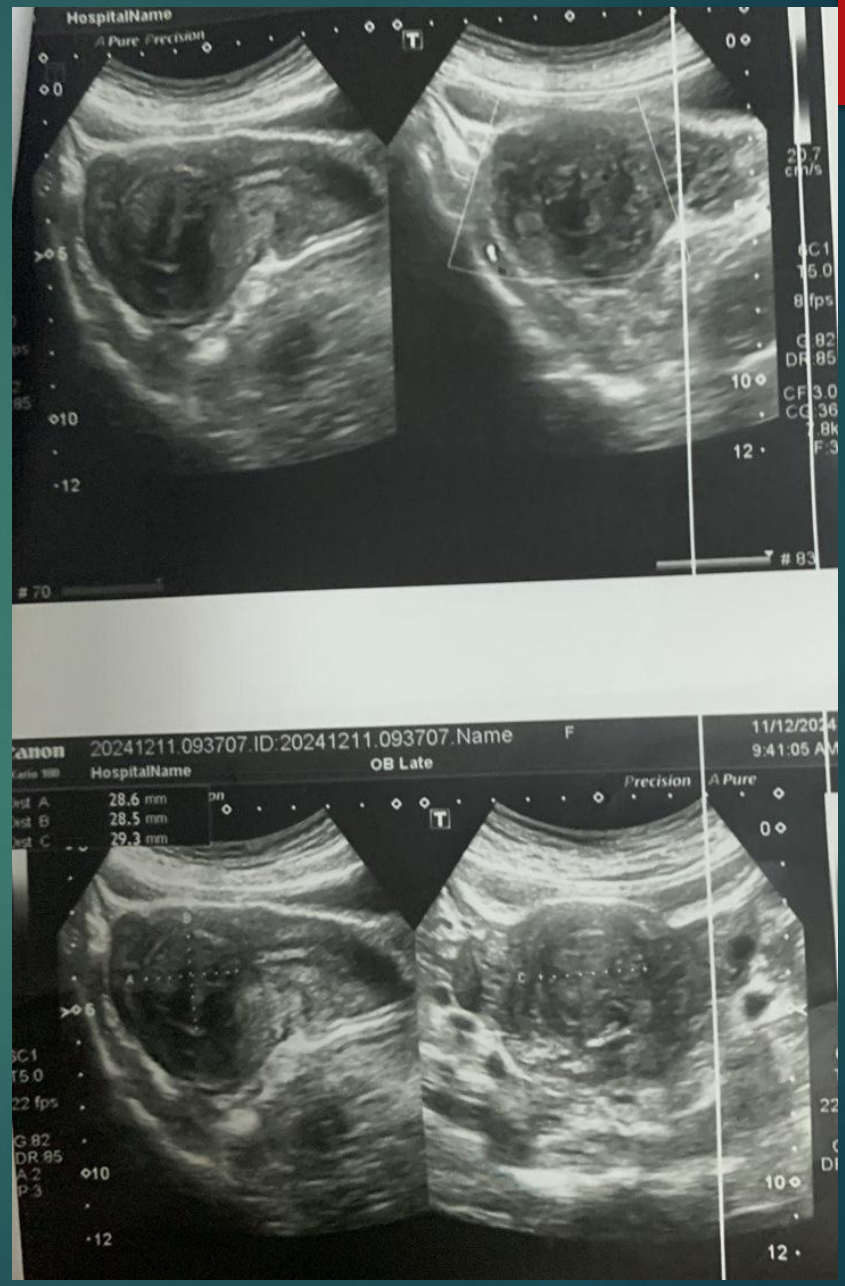
Result :

Completed resection

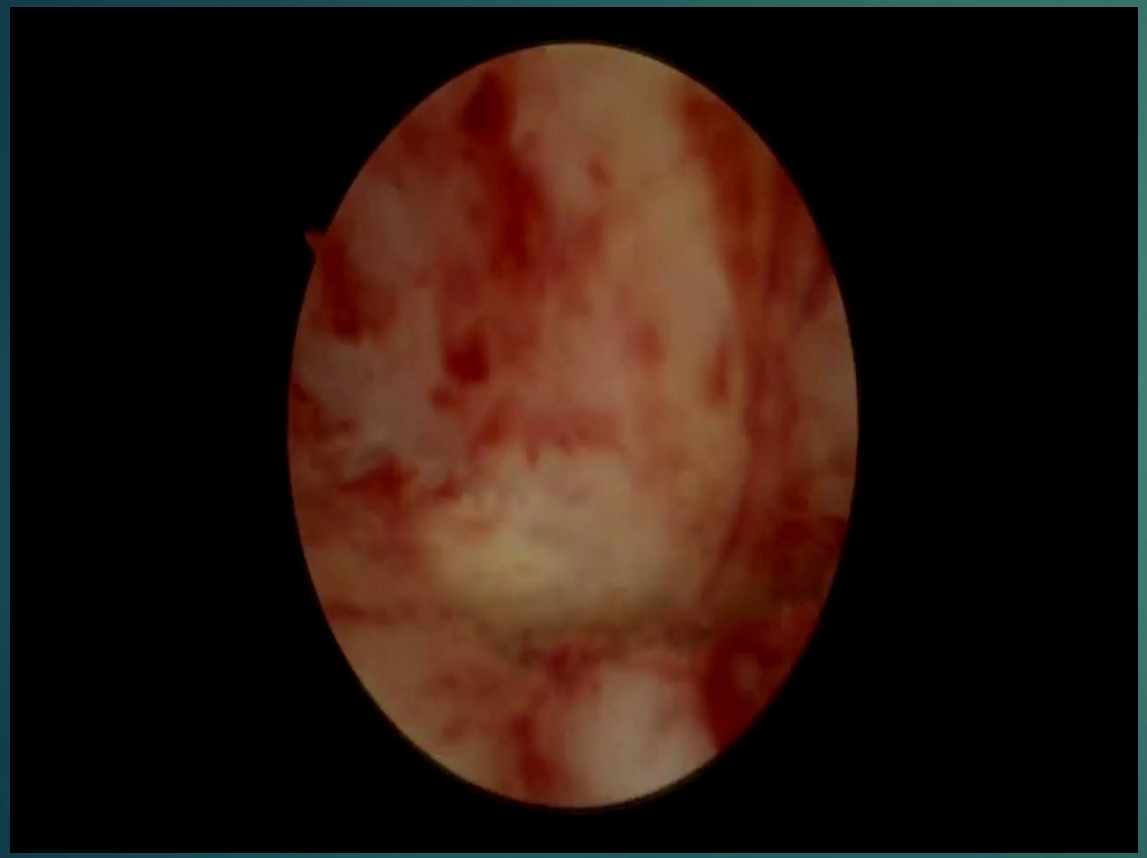
Water loss700ml

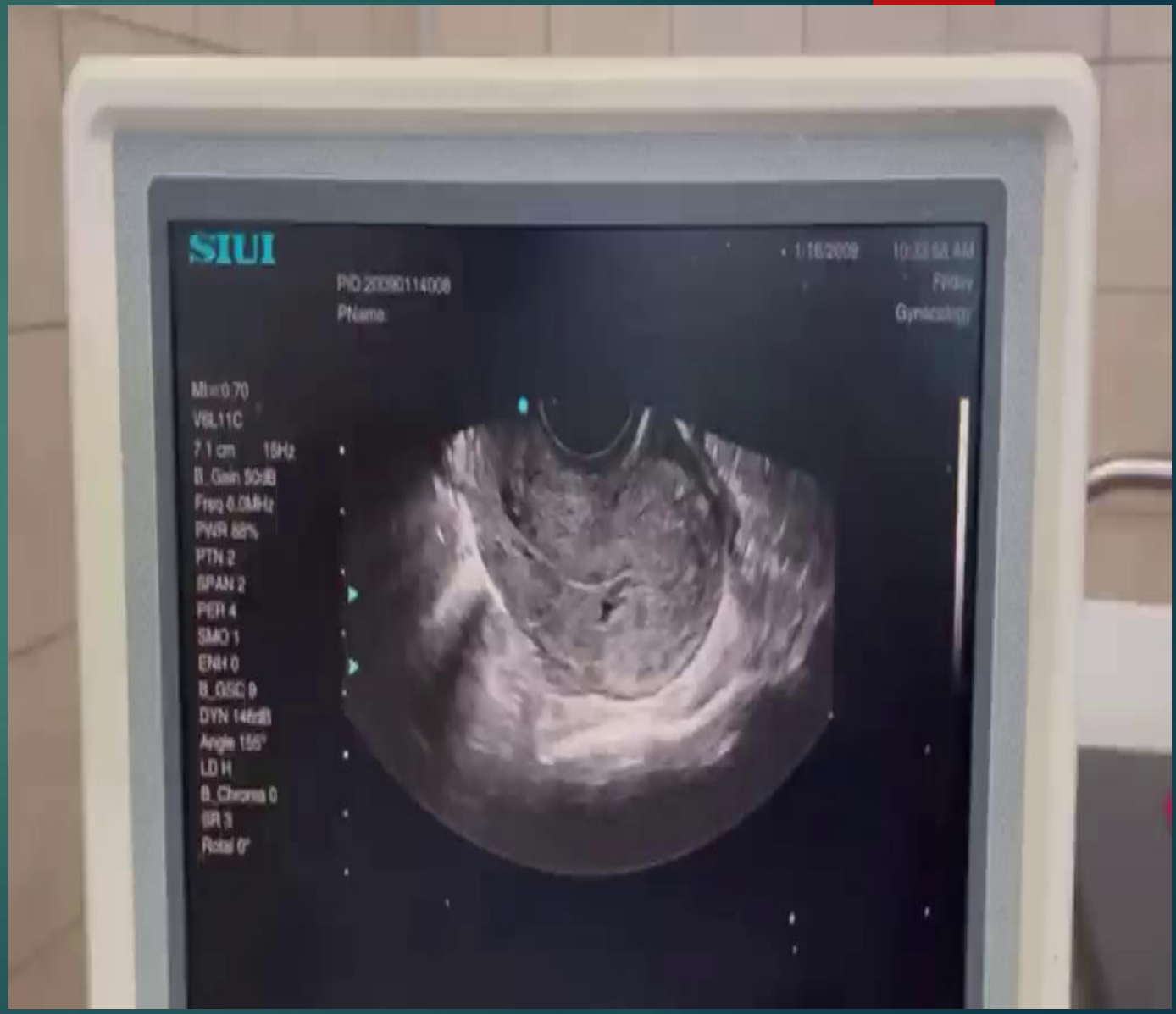
Minimal bleeding

Balloon intrauterine cavity 07day with



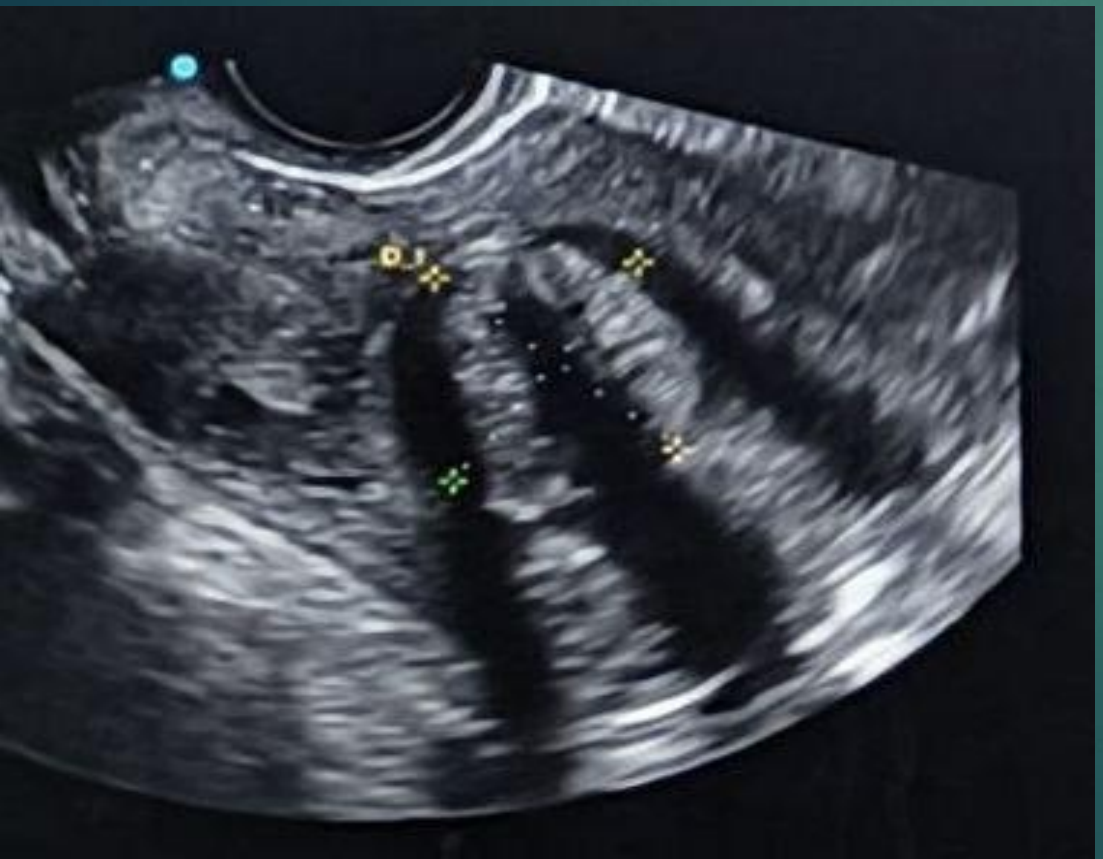
Take Action

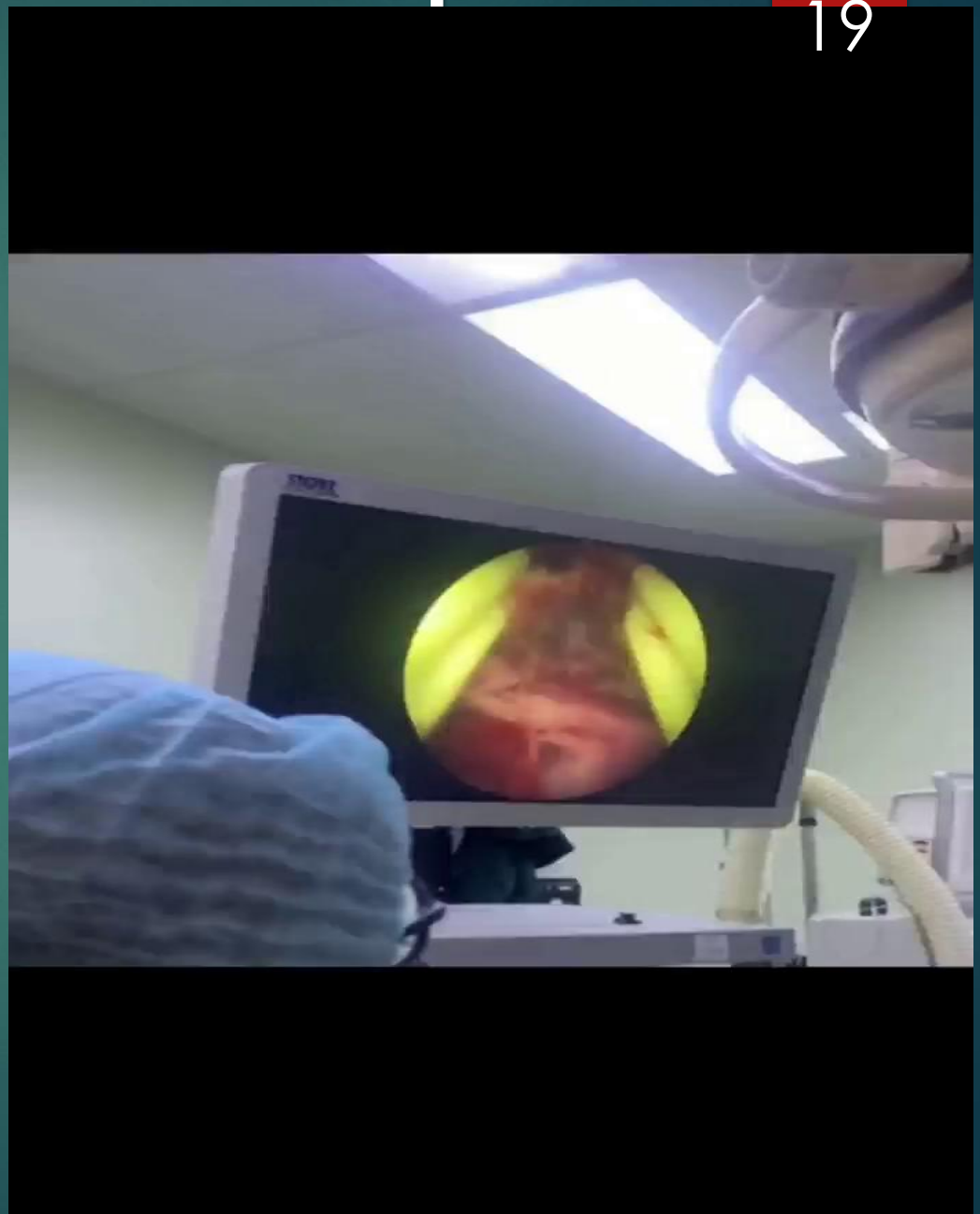




How to Complete Resection in Deep Fibroid

- HaMou's Uterine Massage
- Decrease intrauterine pressure
- Uterine Bimanaully massage





IV- HOME MESSAGE

- **Hysteroscopic myomectomy is Minimal invasive and the definitive manangement of symptomatic submucosal fibroid ,with high efficacy and safty with**

Preservation of Uterus Function.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