

មឡុមស្នាលខាតិគាំពារមាតា និចនារត National Maternal and Child Health Center

និទាសល្យសាស្ត្រ សម្ពព និទពេងស្ត្រី លើអនី៣

ប្រធានបទ៖ «**ពរុទ្ធិខ និខមខ្កើនសេខាព្យាចាល ខែនាំ សម្រ្គោះ ម្រគមដោយគុណភាព** »

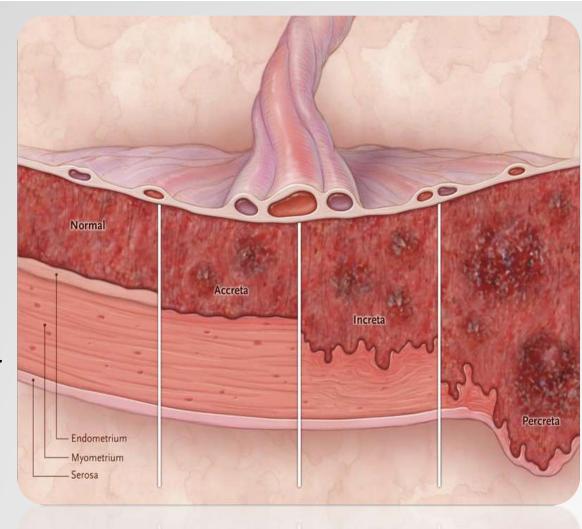
NEW ERA IN SURGICAL MANAGEMENT OF PLACENTA ACCRETA SPECTRUM IN NMCHC 2024



ថ្ងៃទី៤-៥ ខែកញ្ញា ឆ្នាំ២០២៥ សណ្ឋាគារភ្នំពេញ

PLAN

- 1. Objective
- 2. Generality
 - Definition
 - Pathogenesis
 - Diagnosis
 - Surgical management in 2024
- 3. Materials and Methods
- 4. Results
- 5. Discussions
- 6. Conclusion and recommendations



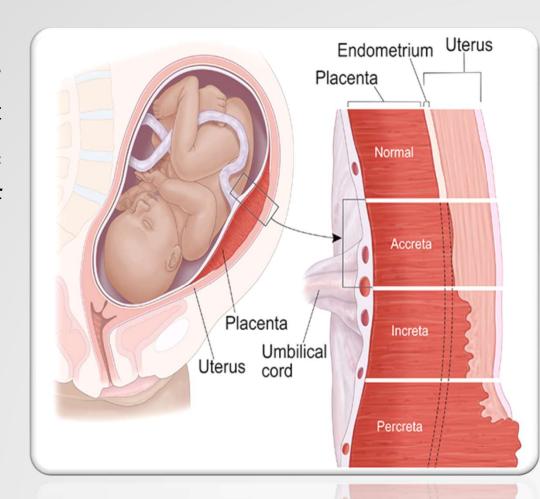
OBJECTIVE

- Determine the epidemiological profile of Placenta accreta spectrum (PAS)
- The surgical outcomes of PAS operative approach in NMCHC (Internal iliac artery ligation prior hysterectomy)
- Propose the recommandations.

GENERALITY

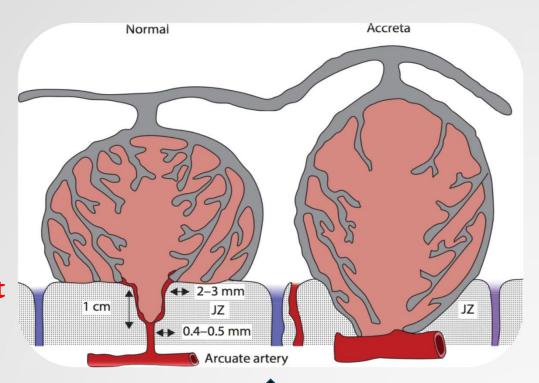
Definition

- Placenta accreta spectrum (PAS) is defined as abnormal trophoblast invasion of part or all of the placenta into the myometrium of the uterine wall.
- 3 types of PAS (FIGO):
 - accreta
 - increta
 - percreta.



Pathogenesis

- A secondary defect of the endometrial—myometrial interface
- A failure of normal decidualization in the area of the uterine scar allowing
- An abnormally deep trophoblast infiltration of myometrial vasculatures

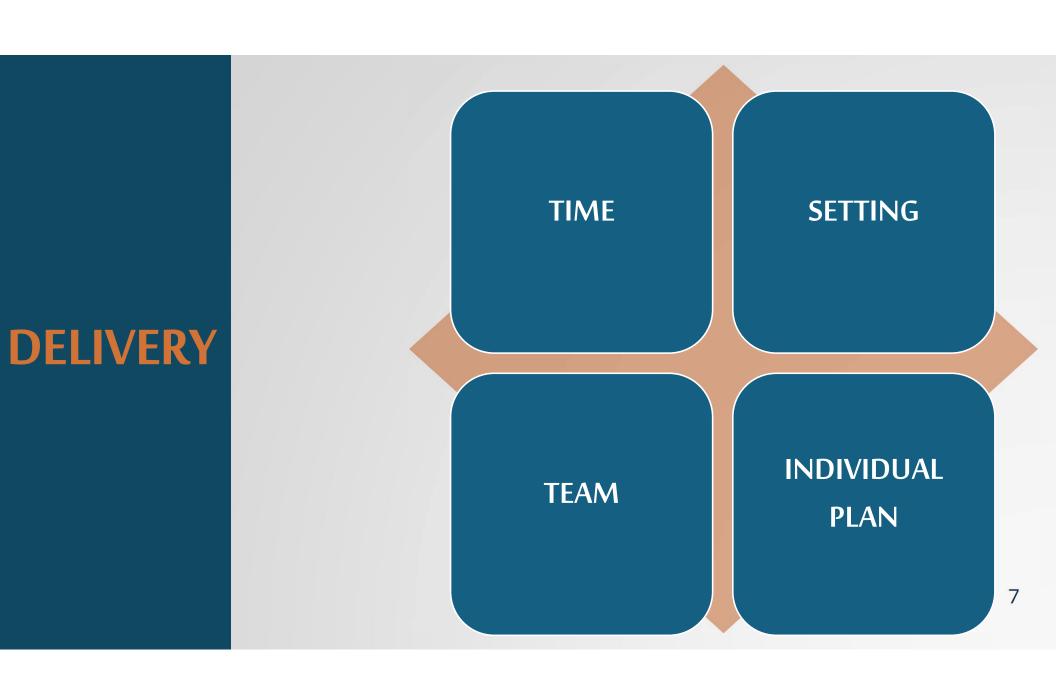


excessive neovascularity

Diagnosis

The only method for prenatal identification of invasive placenta (Color Doppler Echography + MRI)

The sensitivity and specificity are > 90%.



Time

Risks of urgent delivery to maternal health must be balanced with the neonatal complications associated with late preterm delivery.

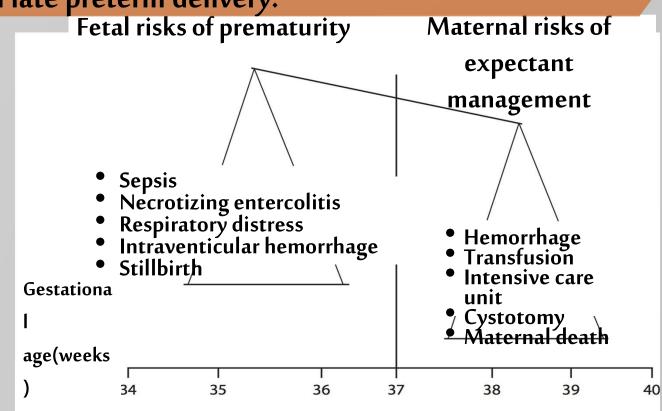
ACOG: 34weeks

NICHD: 34-35+6

RCOG : 35 - 36 + 6

SCGO: 34-36 weeks

(NMCHC)



Individualized time?

The timing of the caesarean section should consider the desirability of performing it as an elective rather than an emergency procedure

Stable

No APH, PPROM, or

uterine contractions

planned delivery at 36 weeks.

Recurrent APH, PPROM,
Uterine Contractions

planned preterm delivery around 34 weeks

Multi-disciplinary team

Obstetricians (expert senior and junior)

Urologists and general surgeon

Anesthesiologist

Imaging experts

Neonatologists

Laboratory and blood bank

Ultrasound mapping of the placental attachment site to plan the skin and uterine incision. Individualized surgical management The available choices if PAS is confirmed: Cesarean-hysterectomy Other managements



Our patients with PAS (percreta) disorders were managed with general anesthesia.

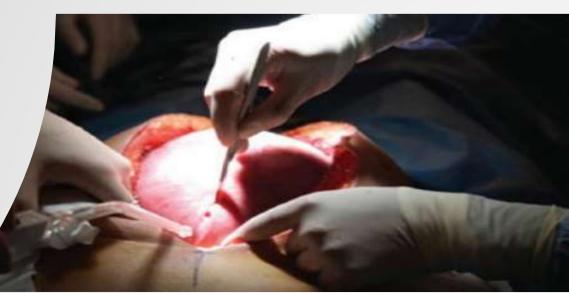
Surgical Step if Percreta

1. Skin incision: midline vertical incision

it provides sufficient exposure if hysterectomy becomes necessary.



to avoid the placenta and allow delivery rapidly of the infant.



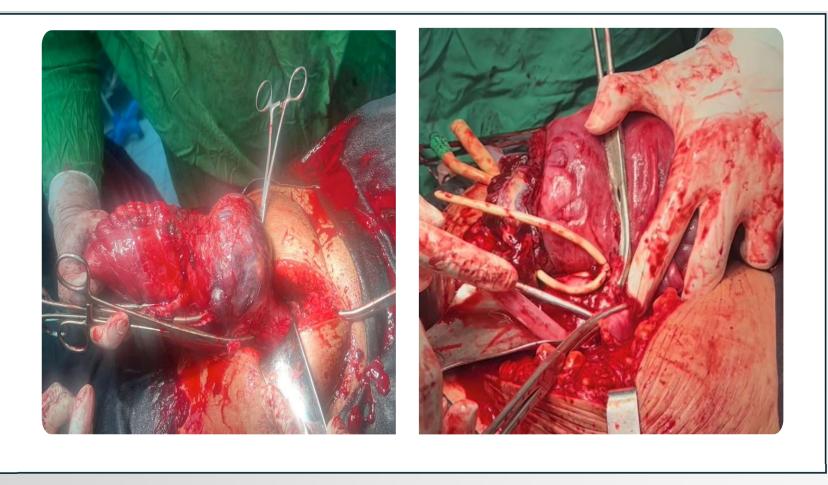
3. Deliver the baby

Avoid manual placental removal

Don't use uterotonics

Uterotonics may cause partial placental separation. It may lead to massive bleeding just at the beginning of hysterectomy.



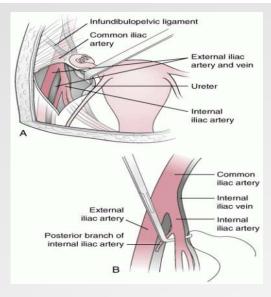


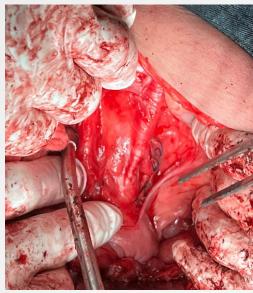
4. Stick of the lower uterine segment or close the hysterotomy

5. Internal iliac artery ligation

Lateral dissection of the ureter

6. Proceed with Cesarean-Hysterectomy





7. When to dissect the urinary bladder?

If there is no placenta percreta:

- It is done prior to delivery
- It allow sufficient time to identify and create the vesicouterine plane before an intraoperative bleed.

If there is placenta percreta:

 Delay the dissection or disection slowly cervicovesicle fascia for pushing bladder down (after delivery)

MATERIAL AND METHODS

- A retrospective review of all PAS, from 1st January 2024 to 31st december 2024 in NMCHC.
- 62 cases of PAS were found with complete file.

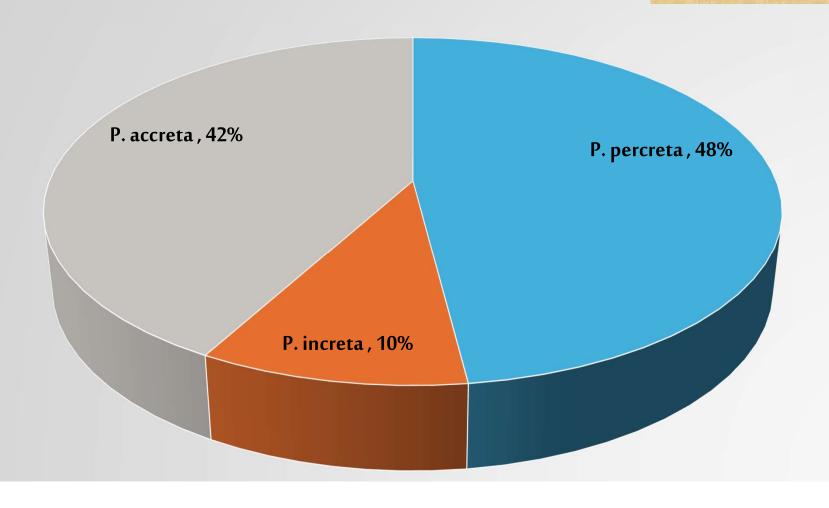
1. INCIDENCE in NMCHC

YEAR	Incidence/ Deliveries	RATE
2017 (Dr Ros Saphath)	14 in 11607	1/829
2021 (Dr Hor Lat Soriya)	31 in 8606	1/277
2024 (our study)	62 in 9788	1/157

2. Clinical appearance of PAS

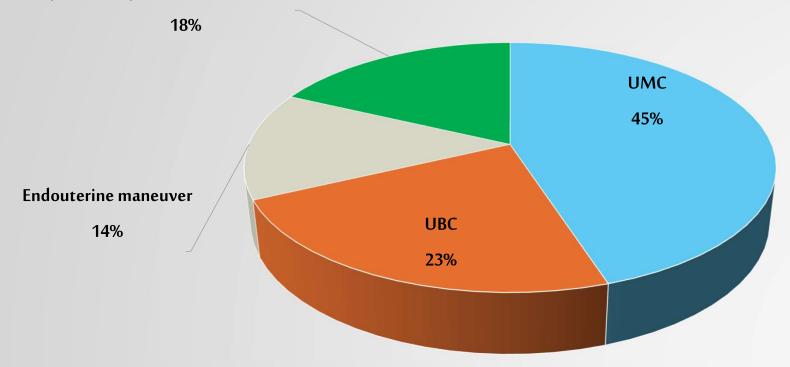
RESULTS

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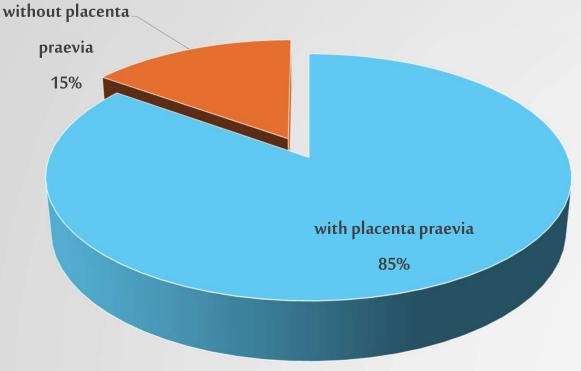


3. Incidence of PAS according to Patient's past history

Myomectomy and uterine abnormalities



4. Incidence of PAS according Placenta praevia

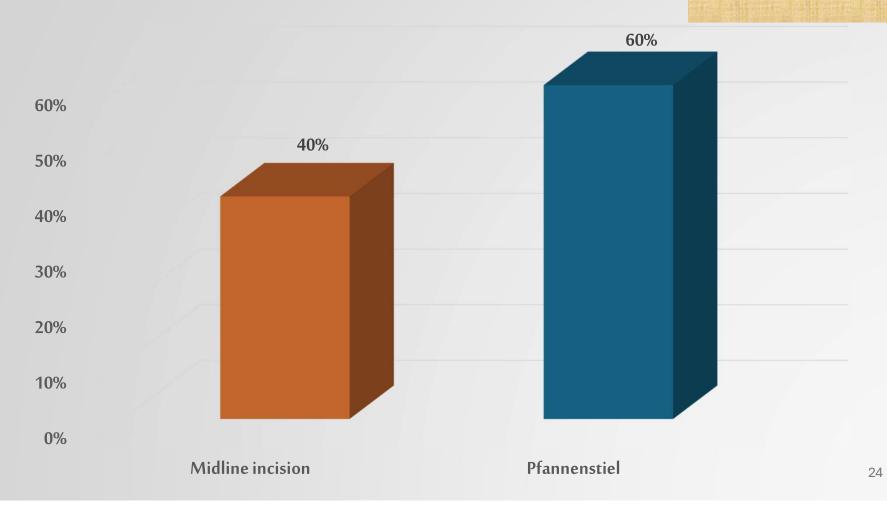


* Prior CS(s), particularly with a placenta praevia (61%)

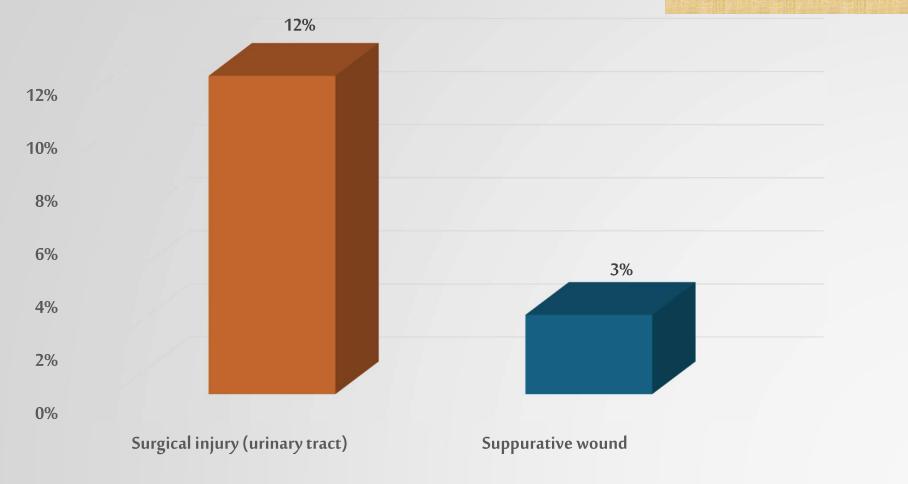
5. Incidence of PAS according Cesarean deliveries and Placenta praevia

No. of previous cesareans	Incidence of PAS without P. praevia	Incidence of PAS with P. praevia	Incidence of hysterectomy
No prior CS (32%)	8%	24%	12%
UMC (45%)	5%	40%	32%
UBC (23%)	2%	21%	19%
Total 100%	15%	85%	63%

6. Skin incision



7. Complications of PAS



8. Severity of PAS

Blood loss	Non-transfusion	Transfusion
Mild (< 750ml)	27%	-
Moderate (750 - < 1500ml)	-	38%
Massive (≥ 1500ml)	-	33%
Total 100%	27%	71%

9. Internal iliac artery ligation in P. percreta

Placenta Percreta	IIAL (-)	IIAL (+)
Before hysterectomy	-	8
After hysterectomy	-	7
Total	15	15



IIAL	Before HT (n=8)	After HT (n=7)
Mean blood loss	1737,5ml	1957,14ml
Mean operative time	131,2min	165min
Average day hospitalization	7.3days	8,1day
Per-ope Complications	1 case	3 cases
(urinary tract)	i case	J Cases



- Incidences of PAS
- Incidences related to prior CS and Placenta praevia
- Complications
- Our Management

1. INCIDENCE Comparison

STUDIES	COUNTRY	YEAR	Incidence/ Deliveries	RATE
Our study	NMCHC	2024	62 in 9788	1/157
Saphat R	NMCHC	2017	14 in 11607	1/829
Soriya HL	NMCHC	2021	31 in 8606	1/277
Chhiv leng LY	Calmette	2021	-	1/296
Pradip Kumar Saha, and al.	India	2022	54 in 5202	1/96

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2. Incidence Comparison related to risk factor

STUDIES	COUNTRY	YEAR	Prior cs	Prior cs + pp
Our study	NMCHC, Cambodia	2024	68%	61%
Soria HL	NMCHC, Cambodia	2021	68%	-
Kareeza SC and all	Barain	2021-2024	85%	-
Najmieh Saadati and all	Iran	2019-2022	86%	-

3. Comparison of PAS complications

COMPLICATIONS	OUR STUDY	PRADIP KS, AND AL.	KAREEZA SC AND AL.
	2024	2022	2021-2024
		India	Barain
Suppurative wound	3%	2,5%	-
Surgical injury (urinary tract)	12%	3,8%	15%

4. IIAL before HT in P.percreta

IIAL before HT	OUR STUDY 2024	Ahmed mh, and al 2016-2017 Egypt	Atsushi I, and al. 1987-2006 Japan
Mean blood loss	1737,5 ml	1632 ± 804 ml	3721 ± 1932 ml
Mean operative time	131,2 min	223 ± 66	184 ± 64 min
Average day hospitalization	7.3 days	9,84 ± 4,15 days	12 ± 8,1 days
Per-ope Complications (bladder and ureter)	1, 6%	8, 32%	-

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CONCLUSION

- In 2024, we found a rising 62 cases of PAS, an incidence of 1/157 deliveries.
- Prior C-section with placenta previa (61%) is a risk factor of PAS.
- Cesarean-hysterectomy (CH) is the first available choice for this current surgical model.
- A practical of Internal iliac artery ligation (IIAL) before hysterectomy exhibits a low intraoperative complication rate, minimize blood loss, operative time and also the hospitalization duration.

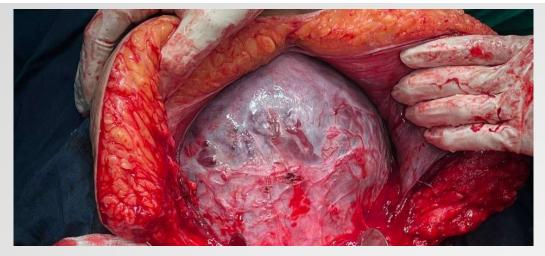


RECOMMENDATION

- Multi-disciplinary team is needed in management of PAS
- Planning the delivery at 36 weeks if all the conditions are stables and around 34 weeks in case of unstable conditions.
- Doing Caesarean-Hysterectomy (CH) in the presence of a PAS (Percreta) with our steps:
 - Opening the uterus at a site distancing from the placenta
 - Delivering the baby without disturbing the placenta
 - Hypogastric artery ligation (IIAL) before hysterectomy
 - Hysterectomy with fully attention of bladder dissection
- Caesarean hysterectomy is the gold standard management.
- We recommend the IIAL prior to CH, in case diagnosed with PAS (Percreta); however, this is not recommended for routine practice.

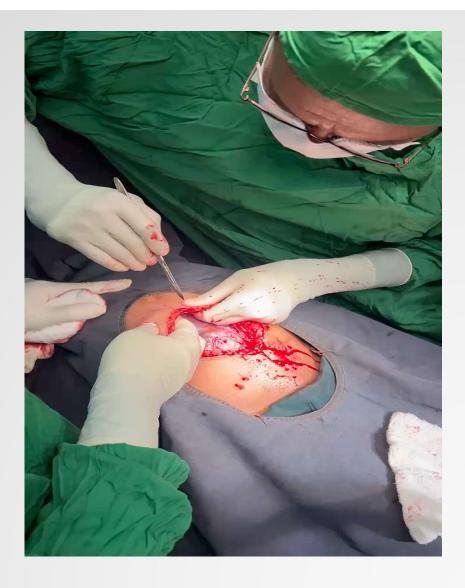
Challenges during the surgery





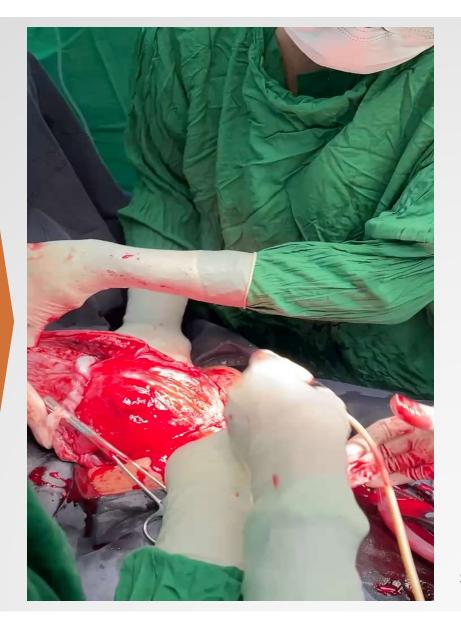
- Multiple c-section often present with pelvic adherences
- Thin and hypervascularity of lower uterine segment
- Bulky in-situ placenta
- Deep pelvis neovascularization
- Possible invasion to bladder, bowel, cervix, and parametrium in cases of placenta percreta.

Midline vertical skin incision



After delivery the baby,

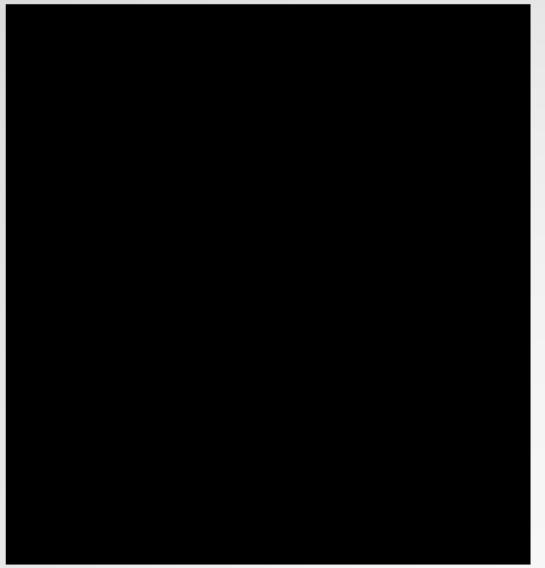
- → Avoid manual placental removal
- → Strick of the lower uterine segment



Internal iliac artery ligation

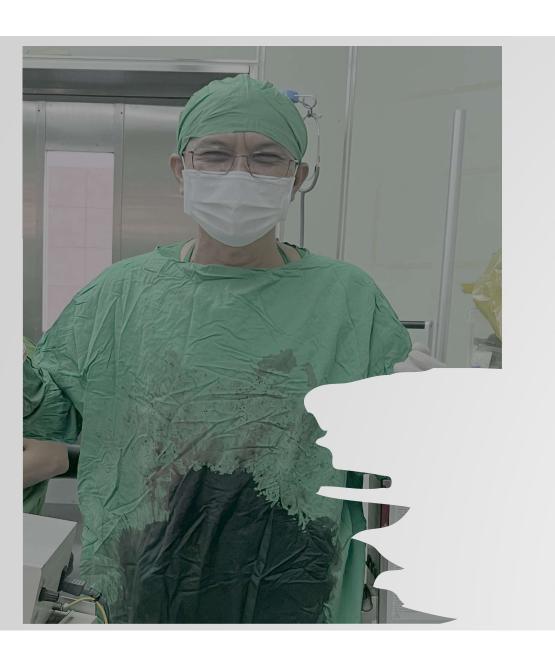


Cesarean-Hysterectomy with dissection of the urinary bladder



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THANK YOU FOR
YOUR ATTENTION 42