មជ្ឈមណ្ឌលជាតិគាំពារមាតា និងទារក
National Maternal and Child Health Center

ទិវាសល្យសាស្ត្រ សម្ភព និងរោគស្ត្រី លើកទី៤

ប្រធានបទ៖ «រួមគ្នាបង្កើនគុណភាពសេវាព្យាបាល ថែទាំ និងសង្គ្រោះមាតា និងទារក »

Assessment in placenta accreta spectrum

A case report on central placenta previa with percreta
and two prior cesarean scars — diagnosis, surgical management, and outcome.

008825

Presented by Doctor ROM PISETH,MD

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What we'll cover

A structured walk-through from clinical background to surgical outcome and lessons learned.

01 **Objective**
Why this case matters

02 **Introduction**
PAS definition, types & burden

03 **Case Presentation**
History, exam & workup

04 **Surgical Technique**
4-step operative approach

05 **Outcome & Recommendation**
Results, follow-up & Take-home messages

01 — OBJECTIVE

Why this case matters

1

Mother & Child Safety

Protect maternal and fetal wellbeing as the first priority in every decision.

2

Less Blood Loss

Minimize hemorrhage through planned, anatomy-guided surgical steps.

3

Fast Recovery

Support a smoother postoperative course and earlier discharge.

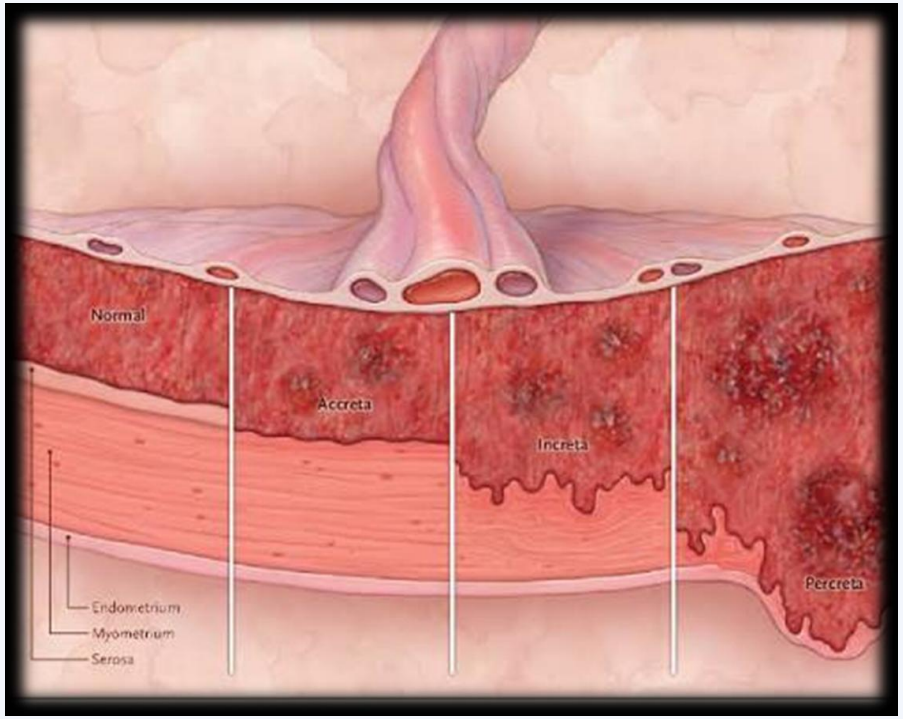
02 — INTRODUCTION

Placenta Accreta Spectrum (PAS)

Abnormal trophoblast invasion of part or all of the placenta into the myometrium of the uterine wall.

THREE FIGO TYPES

- **Accreta** — Villi attach to the myometrium without invading the muscle.
- **Increta** — Villi invade deeply into the myometrium.
- **Percreta** — Villi penetrate through the uterine serosa, sometimes into nearby organs.



Normal implantation vs. accreta, increta and percreta

02 — INTRODUCTION

A rare but high-stakes diagnosis

18

/ 11,192 deliveries

PAS cases recorded at the National Maternal and Child Health Center in 2025

800–1,000

mL average blood loss

Reported in the United States, France, China, India and Japan

Why it matters

- Leading cause of massive obstetric hemorrhage
- Rising with increasing cesarean rates
- Requires early antenatal recognition
- Best managed by a multidisciplinary team

03 — CASE PRESENTATION

Chief Complaint & Admission

PATIENT

37-year-old woman, G4P3A0

REFERRAL

Private clinic, Takeo — term pregnancy with suspected placenta accreta

WORKING DIAGNOSIS

Placenta previa + placenta percreta on two prior uterine scars, 39 weeks G.A.

ADMISSION

17.05.2025, 10:50, Triage Unit

VITAL SIGNS ON ADMISSION

Blood Pressure **120/70 mmHg**	Pulse **80 bpm**
O_2 Saturation **98% RA**	Temperature **36.8 °C**
Uterine Fundal Height **30 cm**	Fetal Heart Rate **150 bpm**

03 — CASE PRESENTATION

Past Obstetrical History

37-year-old woman, gravida 4 para 3 abortus 0

2019	2021	2023	2025
1st Delivery	**2nd Delivery**	**3rd Delivery**	**Current Pregnancy**
Vaginal delivery, term pregnancy	Cesarean section at a private clinic (transverse presentation)	Cesarean section at Takeo Referral Hospital	39 weeks G.A.; ANC irregular, ~7 visits at a private clinic

03 — CASE PRESENTATION

Past Medical & Surgical History

PAST MEDICAL HISTORY

- No diabetes
- No hypertension
- No tuberculosis
- No cardiac disease
- No HIV or syphilis

PAST GENERAL SURGERY

No surgery other than the two prior cesarean sections.

Allergy, Medication & Social History

ALLERGY

Unknown

CURRENT MEDICATION

Ferrous – folic acid tablet

SOCIAL HISTORY

No smoking, no alcohol use

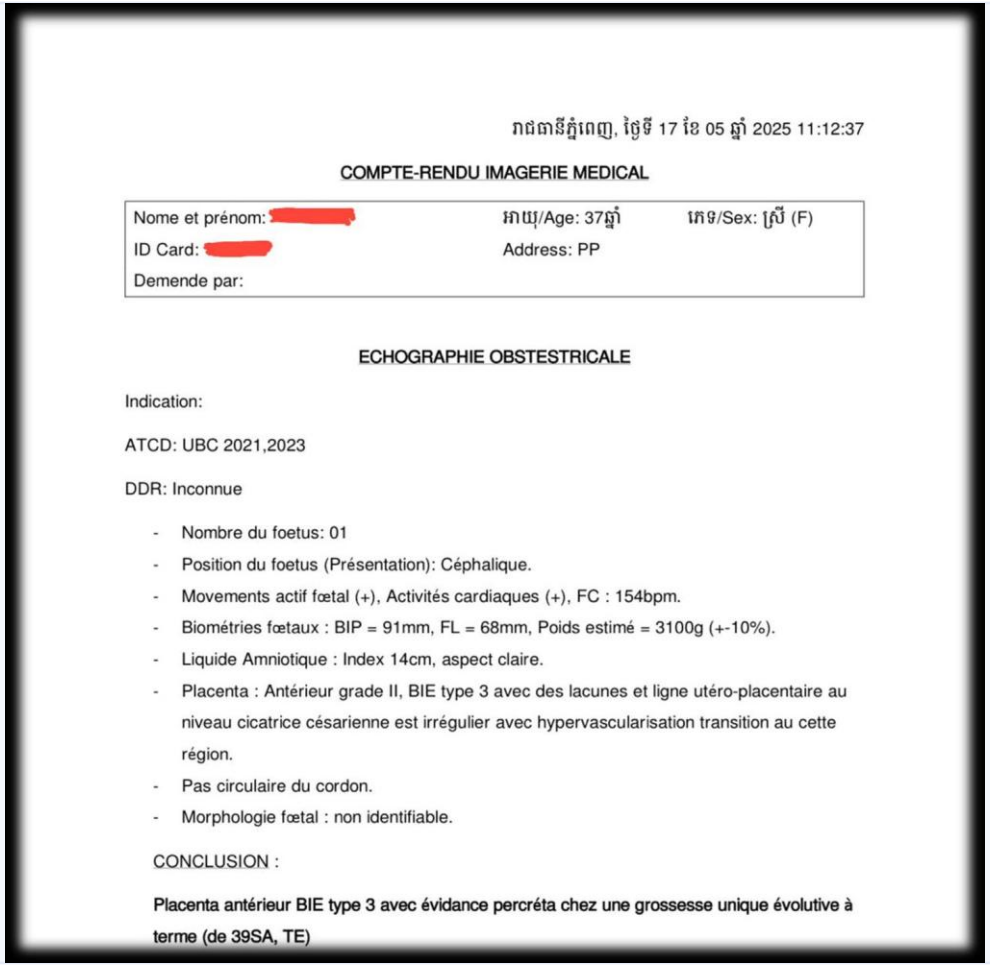
Physical Examination

General Appearance	Alert
Vital Signs	120/70 mmHg · Pulse 80 bpm · O_2Sat 98% RA · Temp 36.8 °C
HEENT	Normal
Lung	Clear to auscultation
Heart	No pathology found

Obstetric Examination

Uterus	Gravid, fundal height 30 cm, previous Pfannenstiel skin incision scar ≈ 13 cm
Contractions	None; longitudinal lie, cephalic presentation
Fetal Heart Rate	156 bpm
Cervix	Closed
Vaginal Bleeding	None

Paraclinical Exam — Obstetric Ultrasound



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COMPTE-RENDU IMAGERIE MEDICAL

Nome et prénom: [redacted]	អាយុ/Age: 37ឆ្នាំ	ភេទ/Sex: ស្រី (F)
ID Card: [redacted]	Address: PP	
Demende par:		

ECHOGRAPHIE OBSTESTRICALE

Indication:

ATCD: UBC 2021,2023

DDR: Inconnue

- Nombre du foetus: 01
- Position du foetus (Présentation): Céphalique.
- Movements actif fœtal (+), Activités cardiaques (+), FC : 154bpm.
- Biométries fœtaux : BIP = 91mm, FL = 68mm, Poids estimé = 3100g (+-10%).
- Liquide Amniotique : Index 14cm, aspect claire.
- Placenta : Antérieur grade II, BIE type 3 avec des lacunes et ligne utéro-placentaire au niveau cicatrice césarienne est irrégulier avec hypervascularisation transition au cette région.
- Pas circulaire du cordon.
- Morphologie fœtal : non identifiable.

CONCLUSION :

Placenta antérieur BIE type 3 avec évidance percréta chez une grossesse unique évolutive à terme (de 39SA, TE)

KEY FINDINGS

FETUS

Single, cephalic presentation, FHR 154 bpm

BIOMETRY

BIP 91 mm, FL 68 mm; estimated weight 3,100 g (±10%)

AMNIOTIC FLUID

Index 14 cm, clear

PLACENTA

Anterior grade II, lacunar spaces (BIE type 3) with irregular utero-placental line and hypervascularity over the cesarean scar

Paraclinical Exam — Laboratory (17.05.2025)

Parameter	Value	Parameter	Value
Hemoglobin	**10.4 g/dL**	AST	**19**
Hematocrit	**32.1%**	ALT	**13**
Platelets	**207 × 10^3/µL**	Urea	**10**
Blood Group	**B+**	Creatinine	**0.6**
TP / aPTT	**98% / 25 sec**	Proteinuria	**Negative**

ECG

Normal

Electrolytes: normal

Diagnosis

Central placenta previa with placenta percreta on two prior cesarean scars, in a term pregnancy at 39 weeks gestational age.

Management Plan

1

Consent

Informed consent form completed with the patient and family

2

Indication

Cesarean section + total hysterectomy, with conservation of the annexes

3

Blood Preparation

5 units of red cell concentrate prepared and on hand before surgery

Operative Technique — 4 Steps

Abdominal approach: midline incision, 1 cm above the umbilicus

1 Deliver the Fetus

Fundal uterine incision with fetal extraction avoiding placental rupture. Female newborn, 2,750 g, Apgar 7/8/9. Cord ligated with Vicryl 1/0; hysterotomy closed with Vicryl 1/0, simple suture × 5 points.

2 Open the Pararectal Space (Latzko)

Two goals: ligation of the hypogastric artery and lateral dissection of the ureter.

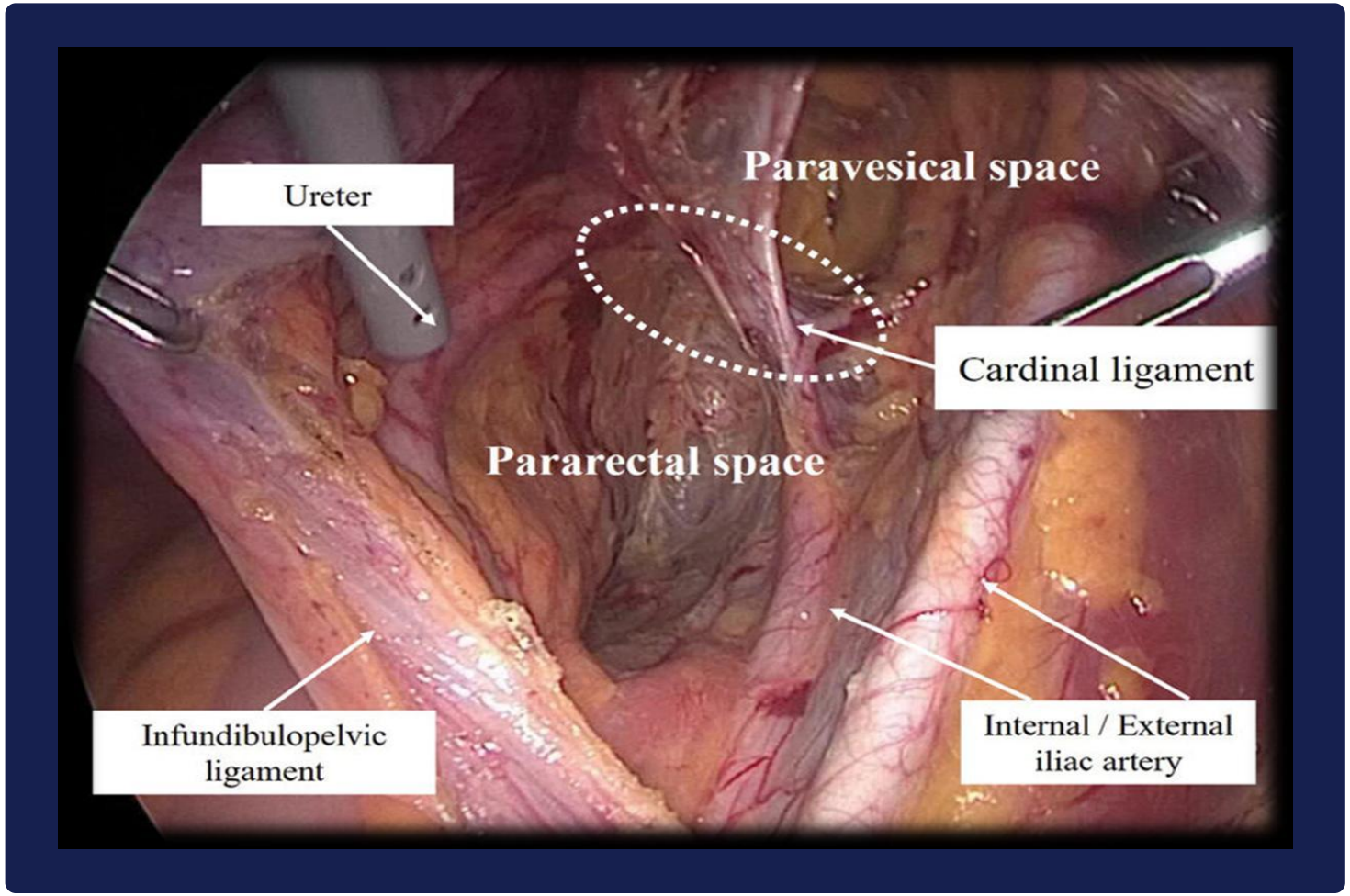
3 Dissect the Cervico-Vesical Fascia

Slow dissection with low diathermy current to push the bladder down to the lower cervix.

4 Total Hysterectomy

Definitive hemostatic control of the invaded uterus with conservation of the annexes.

Surgical Anatomy



LANDMARKS

- Ureter
- Paravesical space
- Cardinal ligament
- Pararectal space
- Infundibulopelvic ligament
- Internal / External iliac artery

Intraoperative Summary

800 mL

Estimated blood loss

2 units

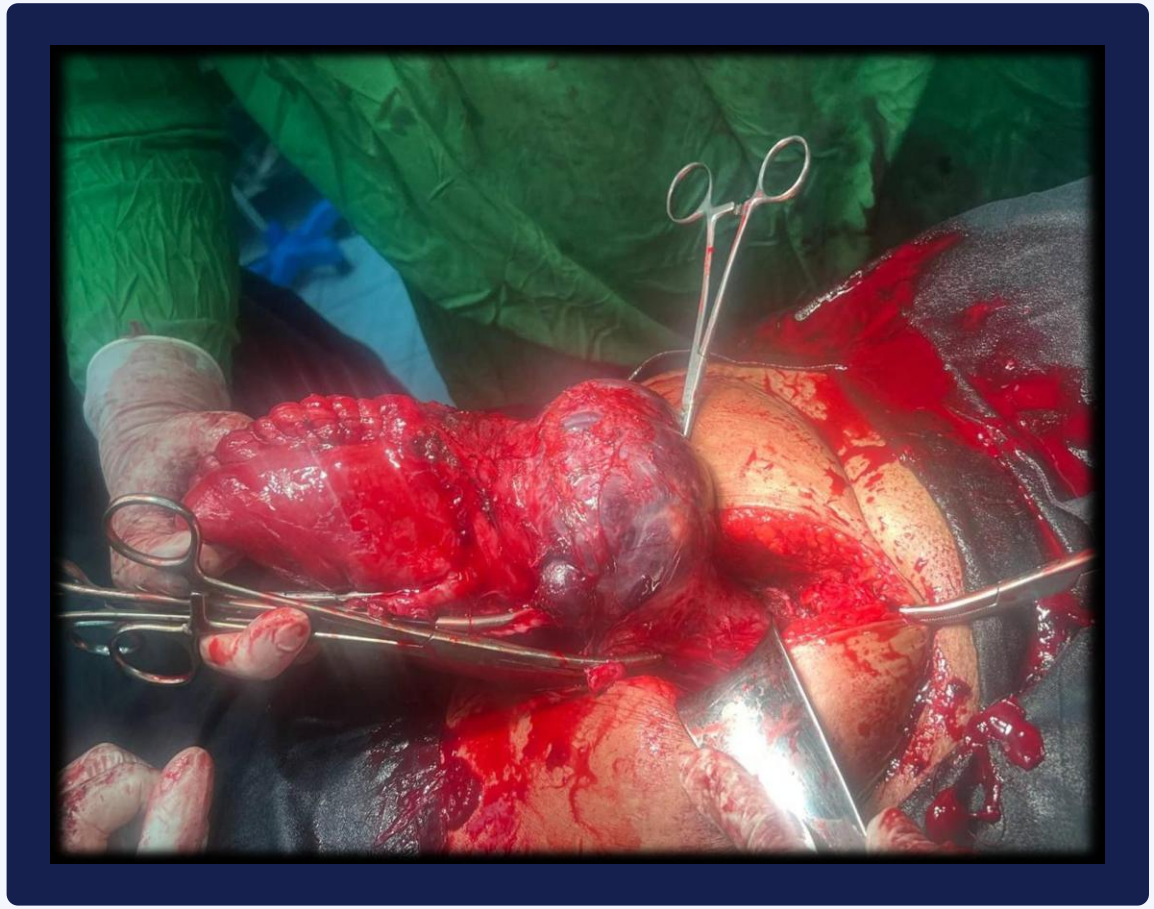
Red cell transfusion during operation

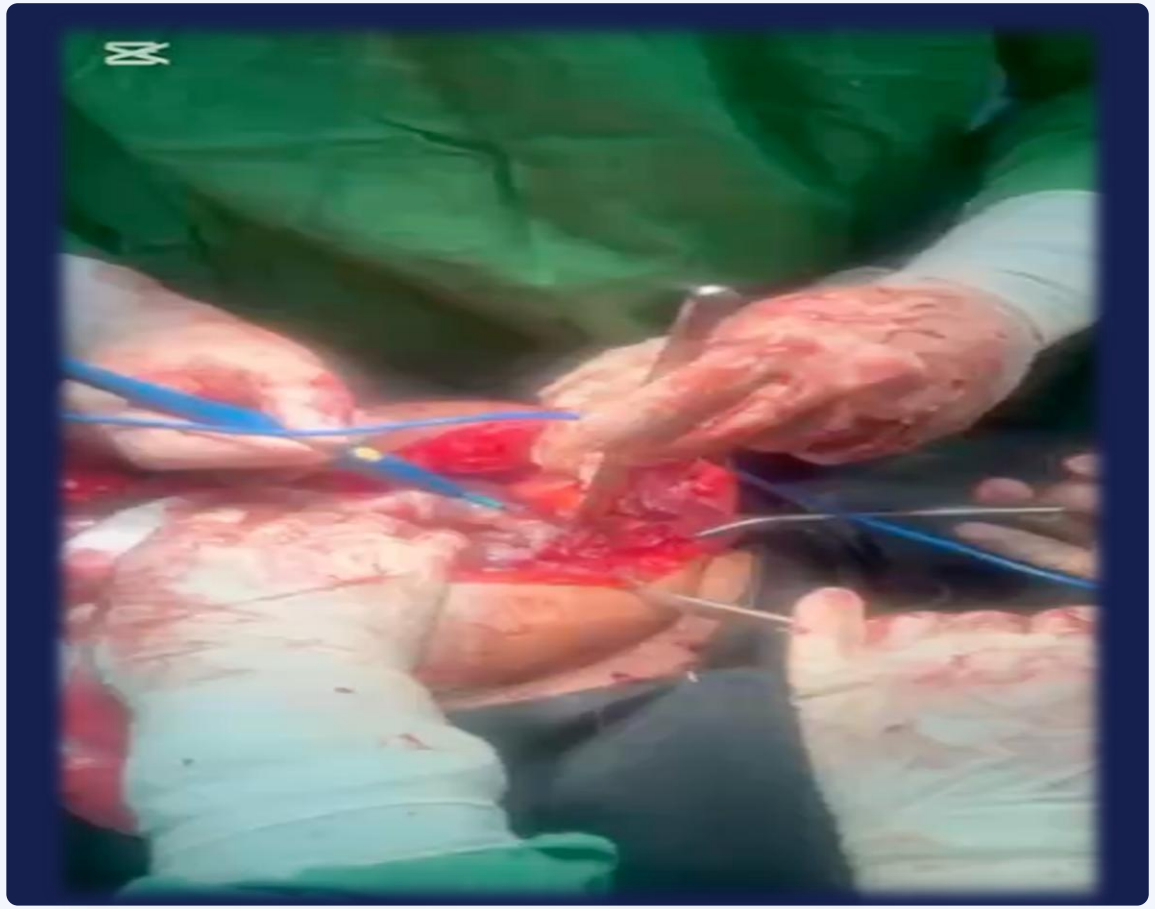
3 h 30 min

Total duration of operation

Intraoperative Findings

Clinical photographs — for professional medical audiences





Postoperative Laboratory Results

Result dated 20 May 2025

HEMOGLOBIN **11 g/dL**	HEMATOCRIT **33.3%**	PLATELETS **$173 \times 10^3/\mu L$**
UREA **23**	CREATININE **0.5**	ALBUMIN **27.8 g/L (low)**

Postoperative Evolution — Day 1

20 May 2025

BP	HR	Temp	SpO_2
116/78mmH	87/min	36.4°C	99% RA

CLINICAL EXAM

- General appearance alert; conjunctiva mild redness
- Lungs and heart normal; abdomen soft, bowel sounds present
- Wound pain 2/10 (VAS); no vaginal bleeding
- Urinary catheter normal, yellow; drain: minimal serosanguinous fluid

MEDICATIONS

- IV Fluids
- Antibiotics
- Pain-killer
- Vitamins

Postoperative Evolution — Day 2

21 May 2025

BP	HR	Temp	SpO_2
124/63mmHg	78/min	36.8°C	99% RA

CLINICAL EXAM

- General condition good; conjunctiva mild redness
- Soft abdomen; lungs and heart normal
- Wound pain 2/10 (VAS); urine output 2,600 mL/24h, yellow
- Flatus present; stools not yet passed

MEDICATIONS

- IV Fluids
- Antibiotics
- Pain-killer
- Vitamins

Outcome & Discharge

Final Diagnosis

Two prior cesarean sections + placenta previa with placenta percreta in a term pregnancy — post-cesarean total hysterectomy, day 3, hemodynamically stable.

Passed to

Maternity Department

for continued postoperative management

Discharged home

Day 7 — 26 May 2025

Recommendations

1 Multidisciplinary Team

A coordinated team — obstetrics, anesthesia, urology and blood bank — is needed for PAS management.

2 Blood Bank Readiness

Ensure adequate cross-matched blood products are available before surgery.

3 Hypogastric Artery Ligation

Perform bilateral hypogastric artery ligation before hysterectomy.

4 Ureteric Dissection

Dissect the ureter laterally before proceeding with hysterectomy.

TAKE-HOME MESSAGES

Placenta Accreta Spectrum: Key Messages

1. Assess risk factors early
2. Confirm the diagnosis and extent of PAS before surgery whenever possible
3. Plan delivery (34-36 weeks GA) and surgery carefully
4. Prepare blood and a multidisciplinary team
5. Use a systematic surgical approach to reduce complications
6. Postoperative monitoring is essential for maternal recovery

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Thank You for Your Attention

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