IC : PLACENTA PERCRETA

R3 RAWIWAN FAISAMRIT
AJ SITTHAPAN MANCHUPONG

“ 30 Years-old Female”

Diagnosis : G4P3003 GA34+5Weeks with previous c/s with hyperthyroidism with placenta previa low-lying with placenta percreta (Rectus abdominis muscle and superior urinary bladder wall involvement).

Operation : Cesarean section with Hysterectomy with internal iliac artery embolization

R1 HISTORY

HISTORY

Chief complaint : มีมูกเลือดไหลออกจากช่องคลอด 6 ชั่วโมง ก่อนมาโรงพยาบาล

Present illness : known case female 30 years G4P3003 GA 29+4 week with mathernal hyperthyroid (high TR-Ab) with placent percreta with placenta previa marginalis with previous c/s

- 6 ชั่วโมงก่อนมาโรงพยาบาล ขณะนอน มีมูกเลือดไหลออกจากทางช่องคลอด ปริมาณประมาณครึ่งแก้วน้ำชุ่มกางเกง เป็นเลือดสด ไม่มีท้องแข็ง ไม่มีน้ำเดิน ลูกดิ้นดี ไม่มีประวัติกระแทกบริเวณท้อง ปฏิเสธประวัติเพศสัมพันธ์ ไม่มีไข้ ปฏิเสธภาวะเลือดออกหยุดยาก ไม่มีตกขาวผิดปกติ ไม่มีอาการขี้ร้อง หงุดหงิด ใจสั่น คอโต

- Admission 10-13/10/64 due to 1st episode bleeding GA 29+4 week
- Tx: Dexamethasone 1 course ครบ 12/10/64 for promote lung maturity

HISTORY

- Plan for Operation 15/11/64 GA 34+5wk

- นัดมาadmit วันที่11/11/64 ลดโอกาสการexpose covid-19

- 12/11/64 : เลือดออกจากช่องคลอดตั้งแต่ 05:30 น เป็นเลือดสด ซึมออกมามากขึ้น ประมาณ 50 ml ,รู้สึกท้องแข็งเกร็ง PS7/10

- Transfer to LR (06:00 น): on EFM, Observe UC and bleeding, NPO

- 07:00 ขอset OR for bilateral UAE with C- hysterectomy, activated team Intervention , Onco-gyne , Uro-Sx , Gen-Sx , Anest , Ped, จอง ICU trauma ,ประสาน blood bank ขอเลือดด่วน

HISTORY

- 1st ANC ที่ GA 12+5 weeks โรงพยาบาลอื่น 2 ครั้ง (แพทย์แจ้งว่า 1st , 2nd u/s ผลปกติ)
- ANCที่โรงพยาบาลพระมงกุฎเกล้า 4 ครั้ง
  - 3rd u/s GA 17 week for scan anomaly ผล SAF male placenta anterior lower edge space of placenta at mathernal os , positive placenta lacuna >>suspected placenta accreta , no gross anomaly

HISTORY

- 4th u/s GA 18 week (follow up placenta) ผล SAF, placenta anterior previa marginalis , normal growth r/o placenta acreta ติดกับ bladder wall midline)

- 5th u/s GA 25+5 week (F/U placenta+ประเมินfetal goiter) ผล: gr.1 placenta previa , seen multiple placenta lacuna myometrial thining ,polyhydramnios not seen fetal goiter ,normal growthloss of uterine serosal-bladder interface 2cm.

- 6th u/s GA 32+6 week (F/U fetal growth) ผล: SAF,normal fetal growth

HISTORY

- Lab I,II : Normal thalassemia screen Hct 35% MCV 76.9 Hb typing A2A(A2 2.7%) , 50GCT=188(GA25+5wk, 13/09/64) , 100GCT(GA 32+6wk)=normal(72,165,126,64), BP<140/90mmHgตลอด, Urine albumin/sugar negative

- G1 ปี 57 C/S male NB 3406 g
- G2 ปี 62 C/S male NB 2830 g
- G3 ปี 63 C/S female NB 3344 g

HISTORY

- Underlying disease : Hyperthyroid (dx: 3-4ปีก่อนรักษารพ.เสรีรักษ์, poor compliance,เริ่มF/U med ได้ PTU(50)3*2 PO PC >>ปรับเป็นPTU(50)2*2 PO PC ตั้งแต่2/11/64) ช่วงนี้ทานยาดี clinical euthyroid

	FT3	FT4	TSH
23/8/64	6.35	1.86	<0.005
10/10/64	6.45	1.09	<0.005
2/11/64	4.154	1.34	<0.005

- Current medication : PTU(50) 2*2 po pc
  Calcium(1.5) 181 po pc
  Iron supplement
  Obimin 1*1 po pc

Past History

Drug allergy : no

No alcohol drinking ,No smoking

Previous anesthesia : ปี 57 G1 C/S under SA no complication,
ปี 62 G2 C/S under SA no complication ,
ปี 63 C/S under SA no complication

NPO : AMN

Functional class : I

INTER-DEPARTMENT CONFERENCE

Multidisciplinary team 4พย2564 (MFM team,Onco gyne team, Intervention, Gen- Sx, Uro-Sx, X-rays, Anesthesia team, Ped, Scrub)

INTER-DEPARTMENT CONFERENCE

- MFM ประสานเตรียมเลือดกับ Blood bank (For mather group B : PRC 10U,FFP 10U,PLT10U),(For NB LDPRC IR gr.O 1U), เตรียม uterotonic drug
- ICU Post-op
- ก่อนเริ่ม Operation Anest : A-line,C-line under LA
- Radiologist Intervention: ใส่catheter under LA + Fluoroscopy(Blow balloon +- gel foam for embolization หลังทารกคลอด ในช่วงที่เริ่มhysterectomy)ถ้าหากไม่สามารถทำUAE ได้หรือมีmassive bleeding จะทำ Internal iliac ligation

INTER-DEPARTMENT CONFERENCE

- Anest : GA with ETT
- Onco GYNE go on surgery skin incision เป็น low midline incision,uterine incision เป็น classical incision
- Gen-sx standby : placental extension beyond myometrial wall to right and left rectus abdominis muscle
- Uro-sx ประเมิน Leison ซ้ำใน intra-operative, คุย risk กับผู้ป่วยก่อนการผ่าตัด รับทราบหากมี bladder,ureter injury อาจจะต้องทำpartial cystectomy, radical cystectomy with ileal conduit, ureteral reimplantation
- Team newborn เตรียมรับเด็กพร้อมอุปกรณ์resuscitation
- กรณีคนไข้ติดCOVID-19สามารถทำที่OR traumaได้

Obstetric Management

- Planned delivery with multidisciplinary collaborators
- Expectant prolong the duration of pregnancy , at least 3rd tri-meter.
- Remove placenta likely to initiate hemorrhage.
- Pre-operative ureteral stents minimized urinary tract injury.
- Midline vertical skin incision optimal surgical exposure ; avoid cutting placenta.
- Preoperative insertion of internal iliac artery balloon catheters is controversial.
- Balloons inflated after delivery to less bloody surgical field and decrease blood loss.

R1 Physical Examination

PHYSICAL EXAMINATION

- **Vital sign** : BT37 c ,HR 90 bpm ,RR 18/min, BP 131/71 mmHg BW 88 kg, Height 160 cm, BW 70.4 kg
- **GA** : A Thai female, good consciousness
- **HEENT** : not pale conjunctivae, no jaundice, diffuse thyroid gland 40 gm ,not tender, no lid lag and retraction
- **Respiratory** : Lung clear and equal both, no adventitious sound
- **CVS** : normal S1S2 ,no murmur, no S3 gallop, no heaving ,no thrill, PMI at 5^{th} ICS MCL
- **EXT** : no pitting edema

PHYSICAL EXAMINATION

Neuro : E4V5M6, motor gr. V all extremity

Airway : Mallampati grade 1
Thyromental distance > 6 cm
Mouth opening > 3 cm
No prominent incisor
Upper lip bite test class I
No limit ROM of neck

R1 INVESTIGATION

INVESTIGATION

- CBC : Hb 15.3 %, Hct 47 %, Platelet 214,000 /mm2
- BUN : 14.1 , Cr : 0.89 mg/dl, GFR 81 ml/min/1.73m2
- Electrolytes : Na 140.1 K 3.74 Cl 102 HCO3 25.9
- Coagulogram : PT 10.8 INR 0.92 APTT 26.5 TT 12.2
- EKG : NSR bpm

INVESTIGATION

- **Thyroid function test**

	FT3	FT4	TSH
23/8/64	6.35	1.86	<0.005
10/10/64	6.45	1.09	<0.005
2/11/64	4.154	1.34	<0.005

TAS Bedside 10/10/64

SFV , Left dorsoinferior lie, transverse placenta anterior ,previa not seen retroplacental blood clot EFW 1605 gm ,AFI 17.8 cms

TAS Bedside 12/11/64

Single viable fetus,right Dorsosuperior lie
EFW 2,204 gm

MRI PLACENTA (11/10/64, GA 29+4 Wk)

- IUP, Single fetus , transverse lie
- Still seen focal interuped low intensity between myometrium and placenta (uteroplacental interface) at anteroinferior portion of uterus, corresponding with placenta percreta ;associated with
  - Progression of placental extension beyond myometrial wall to right and left rectus abdominis muscle
  - Newly seen focal interrupted low intensity between superior urinary bladder wall and extended placenta, more on the left side
- Seen anterior located placenta previa marginalis

R1

Problem list and ASA classification

Problem list and ASA classification

- 1. G4P3003 GA34+5Weeks with previous c/s with hyperthyroidism with placenta previa low-lying with placenta percreta (Rectus abdominis muscle and superior urinary bladder wall involvement).
- 2. Hyperthyroid
- 3. Full stomach

ASA classification : 2E

R2

Preoperative evaluation and preparation

Patient factor

- **Physiologic change in pregnancy**
  - Hematologic system
  - Cardiovascular system
  - Respiratory system
  - Gastrointestinal system
  - Neurologic chsnge

Patient factor

- **Hematologic system**
  - Increase plasma volume and total blood volume
    - Minerocorticoid activity increase>>Na retention >> increase body water
  - Physiologic anemia
    - Hb 11-12g/dl, Hct 35%
    - Small increase RBC volume compare with plasma volume
  - Decrease platelet count
    - Dur to dilutional

Patient factor

- **Hematologic system**
  - Hypercoagulable
    - Increase fibrinogen
    - Decrease protein-C, protein-S
  - Serum cholinesterase activity decrease 20%
    - No clinical significant

Postpartum Hemorrhage

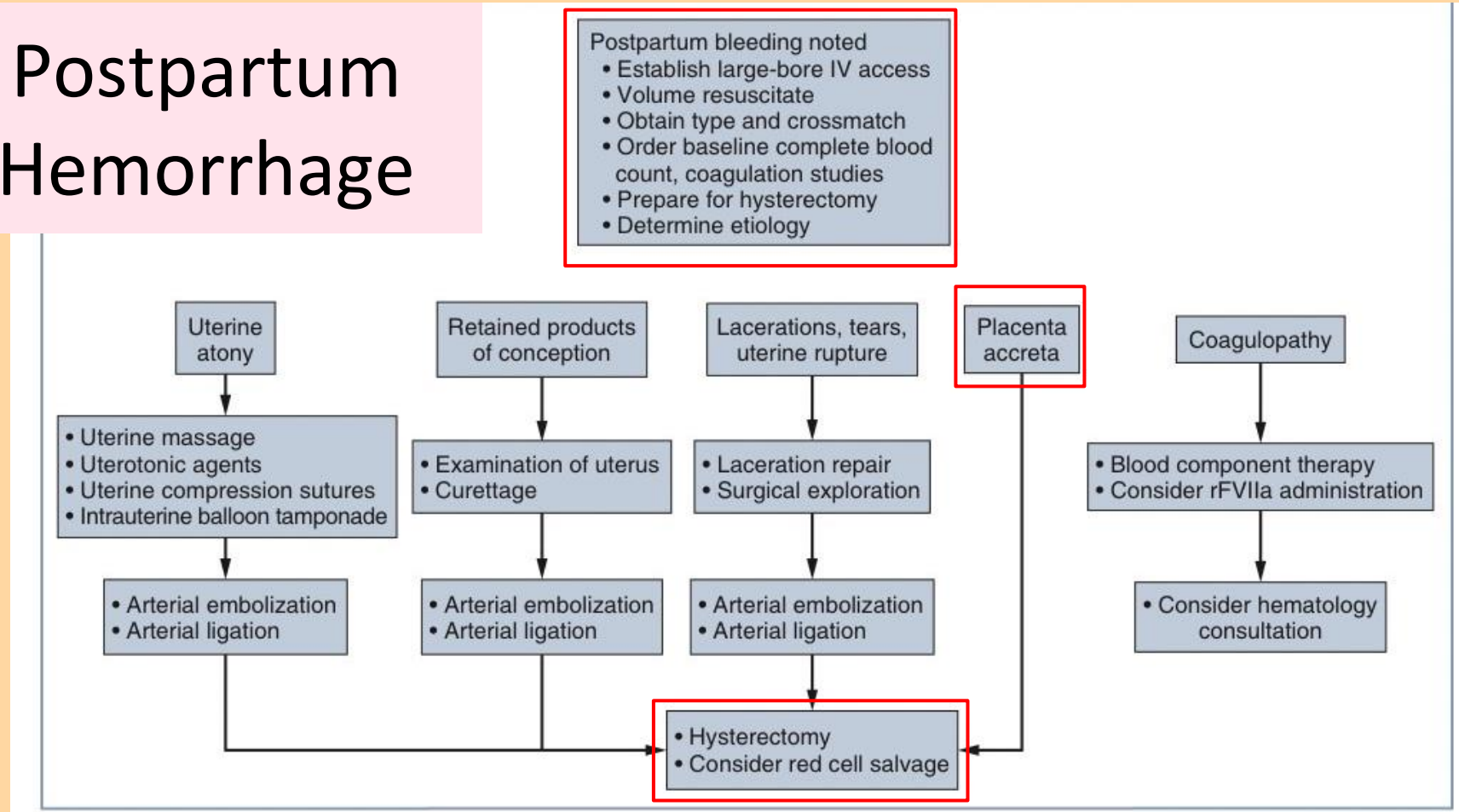

FIGURE 38-2 ■ Management options for postpartum hemorrhage. *IV,* intravenous.

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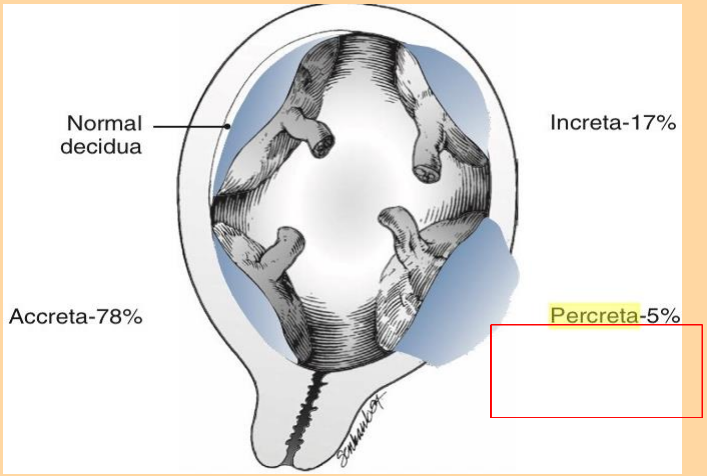
Placenta Accreta

1. **Placental accrete vera** : placenta directly to uterine myometrium

2. **Placenta increta** : chrorionic villi invade the myometrium

3. **Placenta percreta** : invasion through the myometrium into serosa and into adjacent organs



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Placenta Previa

1. Total placenta previa
2. Partial placenta previa
3. Marginal placenta previa

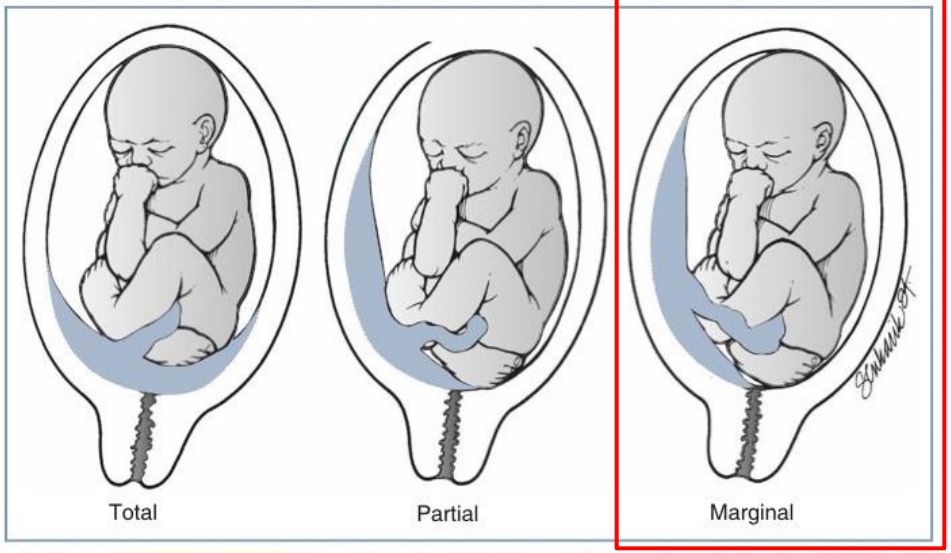

FIGURE 38-1 ■ Three variations of placenta previa. (From Benedetti TJ. Obstetric hemorrhage. In Gabbe SG, Niebyl JR, Simpson JL, editors. Obstetrics: Normal and Problem Pregnancies. 4th edition. New York, Churchill Livingstone, 2001:516.)

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Patient factor

Hyperthyroid

	FT3	FT4	TSH
23/8/64	6.35	1.86	<0.005
10/10/64	6.45	1.09	<0.005
2/11/64	4.154	1.34	<0.005

BOX 43-5 Etiology of Hyperthyroidism

ABNORMAL THYROID STIMULATION

- Graves' disease
- Gestational trophoblastic neoplasia
- Thyroid-stimulating hormone–secreting pituitary tumor

INTRINSIC THYROID AUTONOMY

- Toxic adenoma
- Toxic multinodular goiter

INFLAMMATORY DISEASE

- Subacute thyroiditis

EXTRINSIC HORMONE SOURCE

- Ectopic thyroid tissue
- Thyroid hormone ingestion

Modified from Houston MS, Hay ID. Practical management of hyperthyroidism. Am Fam Physician 1990; 41:909-16.

Patient factor

Hyperthyroid

BOX 43-6 Events Associated with Precipitation of Thyroid Storm

- Surgery
- Childbirth
- Trauma
- Iodinated contrast agents
- Treatment with iodine-131
- Emotional stress
- Pulmonary embolism
- Stroke
- Infection
- Diabetic ketoacidosis
- Hypoglycemia
- Congestive heart failure
- Bowel infarction

From Roth RN, McAuliffe MJ. Hyperthyroidism and thyroid storm. Emerg Med Clin North Am 1989; 7:873-83.

Hyperthyroid

BOX 43-7 Treatment of Thyroid Storm

General Supportive Measures

- Cooling blanket and ice
- Chlorpromazine (25-50 mg IV) or meperidine (25-50 mg IV) to diminish shivering
- Intravenous hydration
- Glucose and electrolyte replacement
- Acetaminophen
- Oxygen
- Glucocorticoids: dexamethasone (2-4 mg IV q8h) or hydrocortisone (100 mg IV q8h)
- B-complex multivitamins

Reduction of Synthesis and Secretion of Thyroid Hormones

- Antithyroid medications: propylthiouracil (200-400 mg orally q6-8h) or methimazole (20-25 mg orally q6h)
- Iodine: sodium iodide (1 g IV or Lugol's solution 4-8 drops orally q6-8h) or supersaturated potassium iodide solution (5 drops orally q6h)
- Glucocorticoids

Reduction of Peripheral Conversion of Thyroxine (T_4) to 3,5,3′-Triiodothyronine (T_3)

- Propylthiouracil
- Glucocorticoids
- Radiographic contrast agents
- Propranolol

Decrease in the Metabolic Effects of Thyroid Hormones

- Beta-adrenergic receptor antagonists (propranolol, esmolol)

Other Therapeutic Maneuvers

- Plasma exchange

Diagnosis and Treatment of the Underlying Illness That Precipitated the Thyroid Storm

Surgical factor

- Multidisciplinary team (Anesthesiologist, Obstetricians, Interventional radiologist,Hematologist, Urologist, Blood bank service, Pediatrician)
- Counselling patient and family
- Endovascular intervention
- Date of delivery : 34 weeks

Invasive Treatment Options

First-line : conservative measures.

Second-line : 1. Intrauterine balloon tamponade

2. Uterine compression suture

3. Angiographic arterial embolization

4. Bilateral surgical ligation

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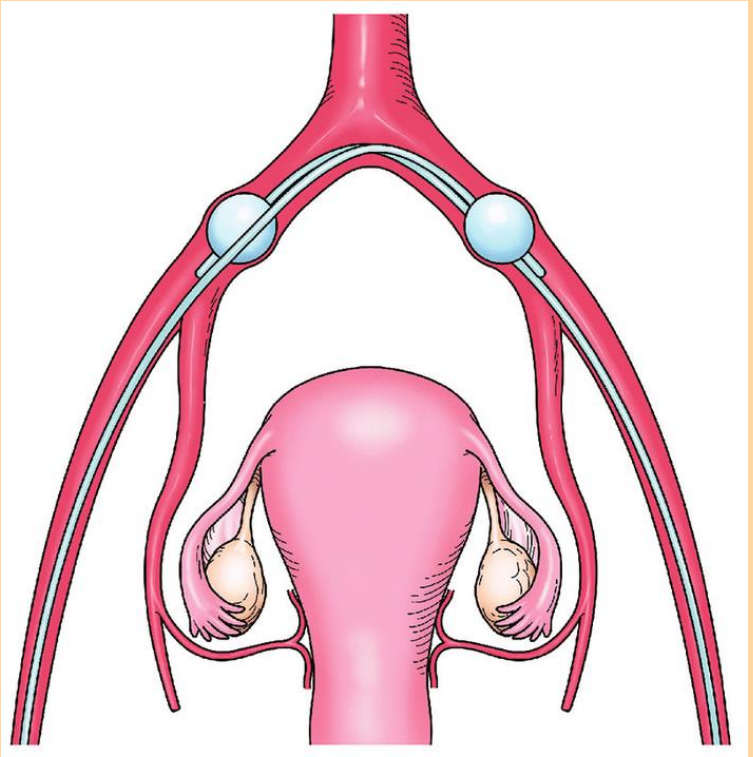
Complication from Internal iliac artery balloon catheters

- Disruption vasculature and lower extremity ischemia.
- Arterial catheters (without inflation) cause fetal bradycardia
  >> Emergency delivery.



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Anesthetic Management

Alert the anesthesia provider to massive blood loss.

Reported estimated blood loss >2000 ml in 66%, 5000ml in 15%, 10000ml in 6.5%.

Classification of shock

TABLE 38-1 Advanced Trauma Life Support (ATLS) Classification of Shock

	Class 1	Class 2	Class 3	Class 4
Blood loss (%)*	< 15	15-30	30-40	> 40
Heart rate (beats/min)	< 100	> 100	> 120	> 140
Systolic blood pressure (mm Hg)	Normal	Normal	Decreased	Decreased
Pulse pressure	Normal or increased	Decreased	Decreased	Decreased
Respiratory rate (breaths/min)	14-20	20-30	30-40	> 35
Mental state	Slightly anxious	Mildly anxious	Anxious, confused	Confused, lethargic

*Percent total blood volume.

From American College of Surgeons Trauma Committee. Advanced Trauma Life Support for Doctors. 8th edition. Chicago, American College of Surgeons, 2008.

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Trigger thresholds for MEOWS Parameters

TABLE 38-5 Trigger Thresholds for MEOWS Parameters

	Red Trigger*	Yellow Trigger*
Temperature (°C)	< 35 or > 38	35-36
Systolic blood pressure (mm Hg)	< 90 or > 160	150-160 or 90-100
Diastolic blood pressure (mm Hg)	> 100	90-100
Heart rate (beats/min)	< 40 or > 120	100-120 or 40-50
Respiratory rate (breaths/min)	< 10 or > 30	21-30
Oxygen saturation (%)	< 95	—
Pain score†	—	2-3
Neurologic response‡	Unresponsive, pain	Voice

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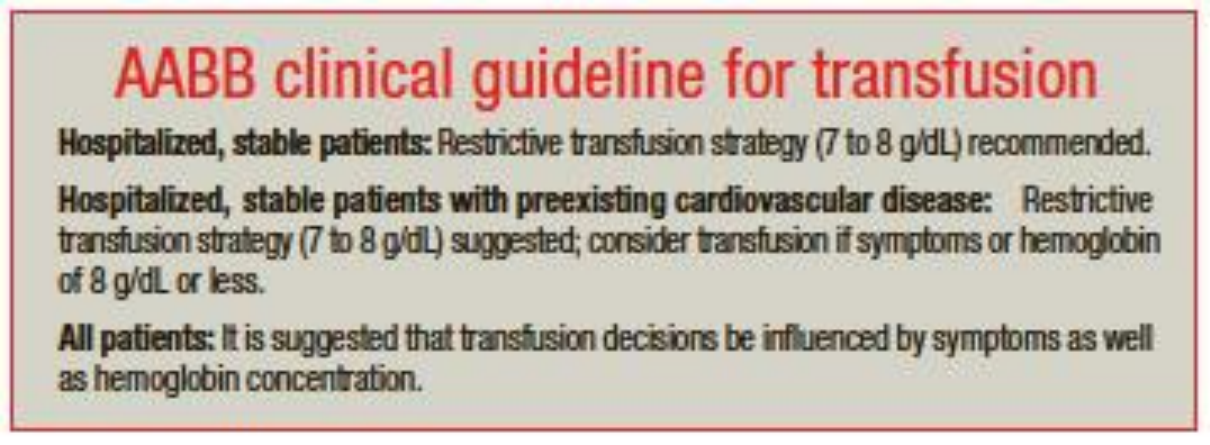
Transfusion Strategies



If blood required quickly , the safest option is to administer ABO- and Rh-specific blood.

If the blood type is unknown required immediately, type O Rh-negative blood .

Transfusion Therapy

Indicated for treatment anemia or preserve life during massive hemorrhage.

The AABB recommends Restrictive transfusion strategy

- In adult and pediatric intensive care unit patients, transfusion should be considered at hemoglobin concentrations of 7 g/dL or less.
- In postoperative surgical patients, transfusion should be considered at a hemoglobin concentration of 8 g/dL or less or for symptoms (chest pain, orthostatic hypotension or tachycardia unresponsive to fluid resuscitation, or congestive heart failure).

Risk and Benefits of transfusion

Risk of Anemia	Risk of transfusion
Decrease blood oxygen content and oxygen delivery	Transfusion-associated circulatory overload(TACO) Transfusion-related acute lung injury(TRALI) Transfusion-related immunomodulation(TRIM) Viral transmission, Bacterial contamination Hemolytic transfusion reaction Hypocalcemia, Hypokalemia Hypothermia

Preoperative preparation

Preoperative preparation

- Informed consent
- Multidisciplinary team (Anesthesiologist, Obstetricians, Interventional radiologist,Hematologist, Urologist, Blood bank service, Pediatrician)
- Uterotonic agent
- Blood component
- Anesthetic machine
- Intubation equipment : difficult airway equipment, Short handle laryngoscope, ETT various in size

Preoperative preparation

- Force air body warmer
- Fluid warmers, Rapid infusion fluid device
- Antibiotic
- IV anesthetic drugs
- Large bore IV catheters and Warm iv fluid
- A-line , C-line
- Ranitidine 5o mg iv , Metroclopamide 10 mg iv
- Antithyroid medication

Preoperative preparation

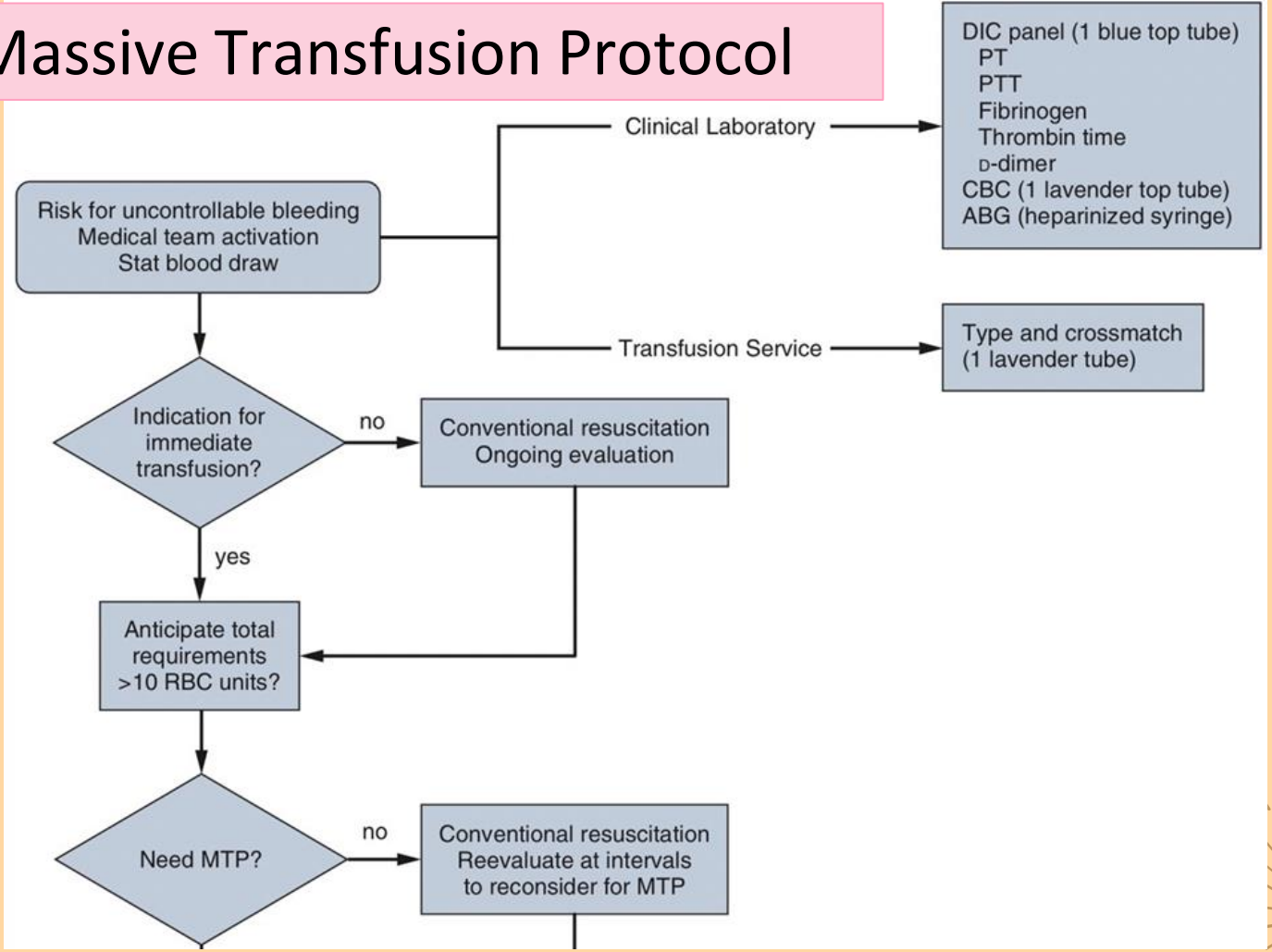
- Vasoactive drug (e.g. phenylephrine , epinephrine) , Inotropic drugs
- Local anesthetic drug
- Ultrasound
- Neonatal resuscitation equipment
- Radient warmer
- Postoperative ICU for maternal complication
- Postoperative NICU for Newborn

R3 Anesthetic consideration

Anesthetic Consideration

- **Intraoperative blood loss**
  - Massive transfusion protocol
  - Treatment of Massive blood loss
    - Blood product : PRBC, FFP, Platelet, Cryoprecipitate
  - Recombinant Activated Factor VII
  - Antifibrinolytic Therapy

Algorithm Massive Transfusion Protocol



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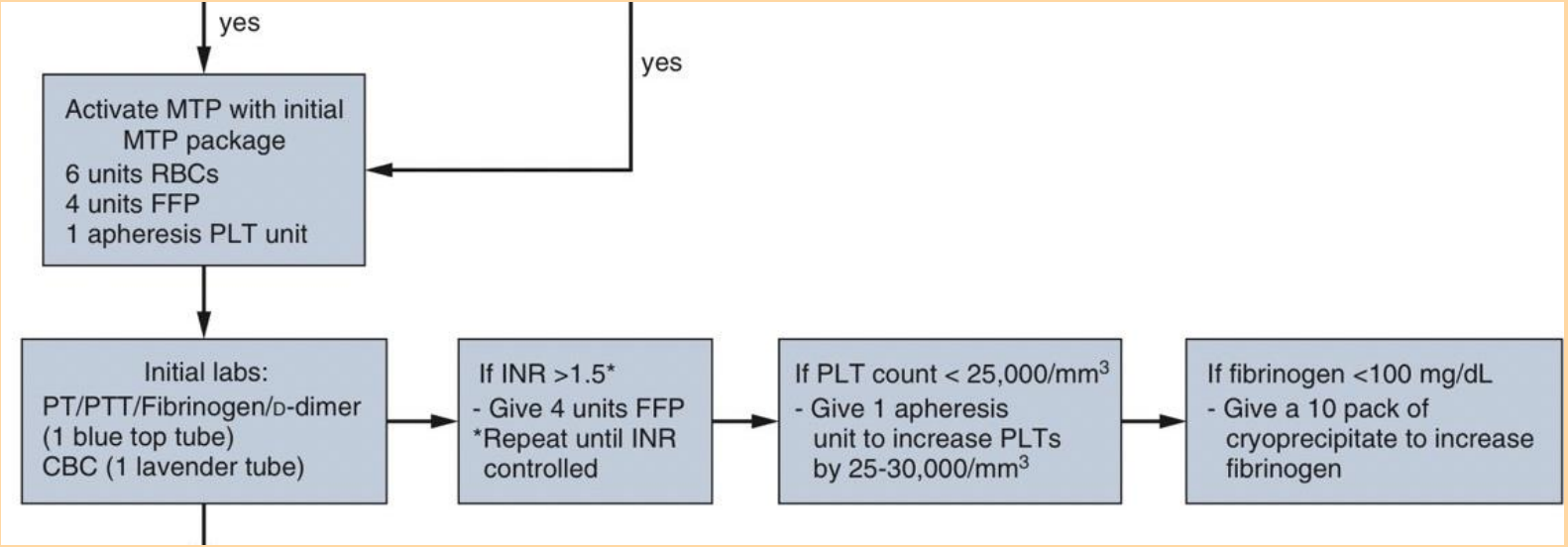
Algorithm Massive Transfusion Protocol



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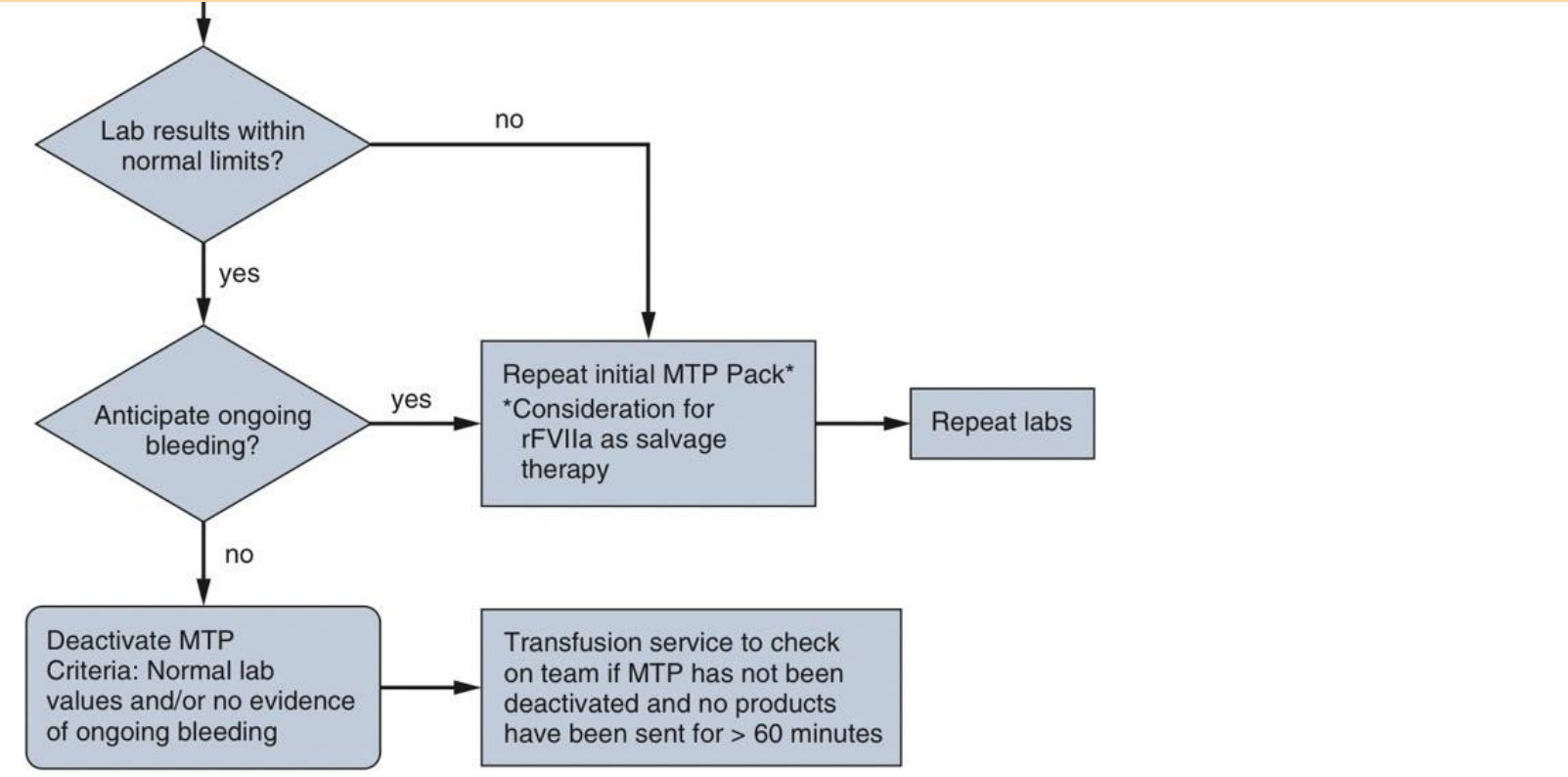
Algorithm Massive Transfusion Protocol



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Resuscitation strategy

- Physiologic changes hemostasis during pregnancy
- Damage control resuscitation
  - Transfusion RBC : FFP : Platelets = 1:1:1 ratio
- Massive transfusion

Uterotonic agent

TABLE 38-3 Drug Therapy for Uterine Atony

Agent	Dose and Route	Relative Contraindications	Side Effects	Notes
Oxytocin	0.3-0.6 IU/min IV infusion	None	Tachycardia Hypotension Myocardial ischemia Free water retention	Short duration of effect
Ergonovine or methylergonovine	0.2 mg IM	Hypertension Preeclampsia Coronary artery disease	Nausea and vomiting Arteriolar constriction Hypertension	Long duration of action May be repeated once after 1 h
15-Methylprostaglandin $F_{2\alpha}$	0.25 mg IM	Reactive airway disease Pulmonary hypertension Hypoxemia	Fever Chills Nausea and vomiting Diarrhea Bronchoconstriction	May be repeated every 15 min up to 2 mg
Misoprostol	600-1000 µg per rectum, sublingual, or buccal	None	Fever Chills Nausea and vomiting Diarrhea	Off-label use

IM, intramuscular; *IV*, intravenous.

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Choice of Anesthesia

- Neuraxial anesthesia
- General anesthesia

Neuraxial anesthesia

Advantage

- Avoid intubation
- Low risk aspiration
- Post operative pain control
- Decrease risk embolism

Disadvantage

- Hypotension
- Discomfort
- Insufficient duration
- Risk PDPH
- Spinal anesthesia ; total /high block
- Epidural anesthesia : slow onset

Neuraxial anesthesia

Contraindication
▪ Patient refusal ▪ Coagulopathy ▪ Hemodynamic instability ▪ Infection at site of injection

General anesthesia

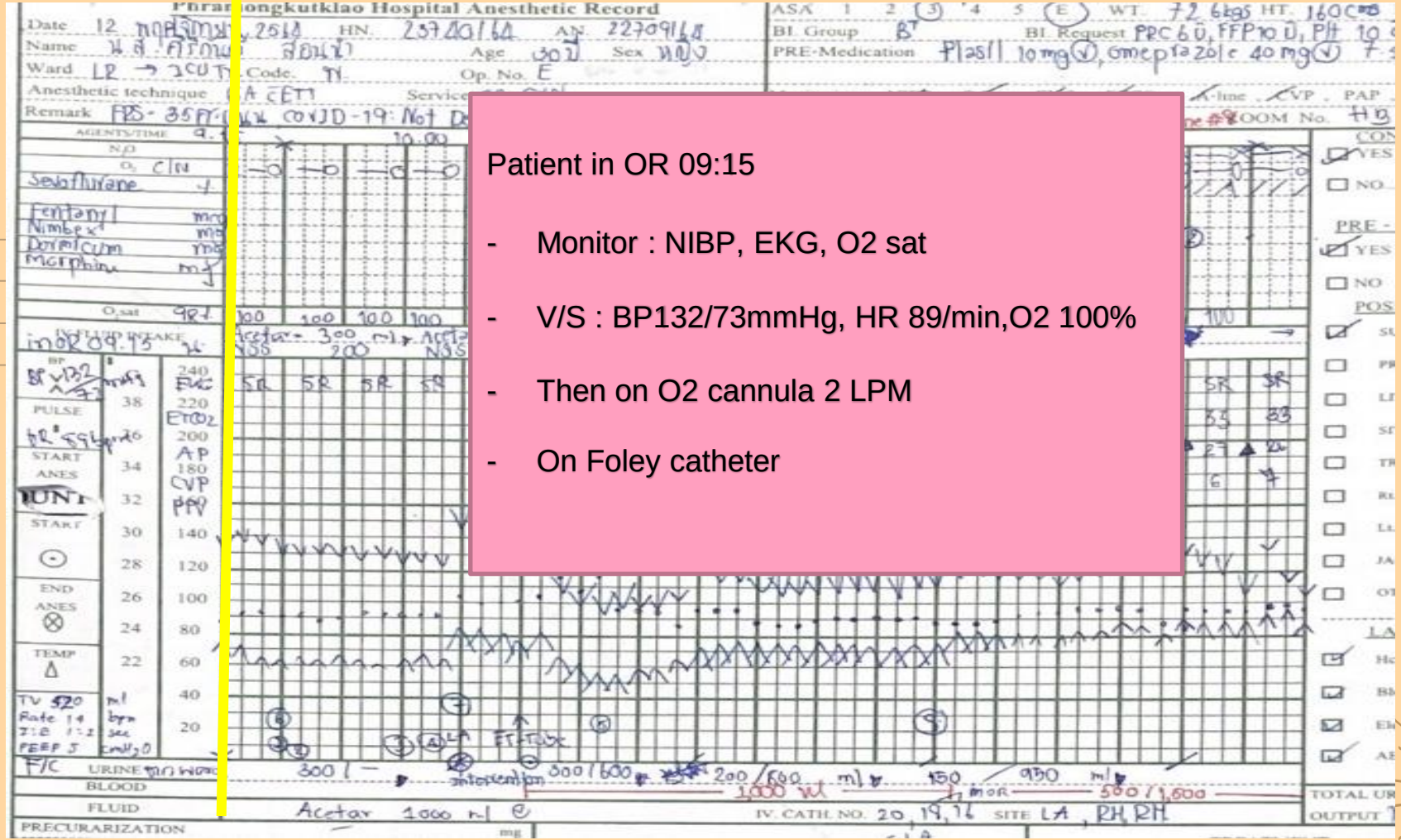
Advantage
▪ Speed of induction ▪ Control hemodynamic more easy
Disadvantage
▪ Difficult intubation ▪ Antepartum hemorrhage ▪ Hypertensive response to laryngoscope and tracheal intubation /extubation ▪ Expose anesthetic agent ▪ Risk of aspiration ▪ awareness

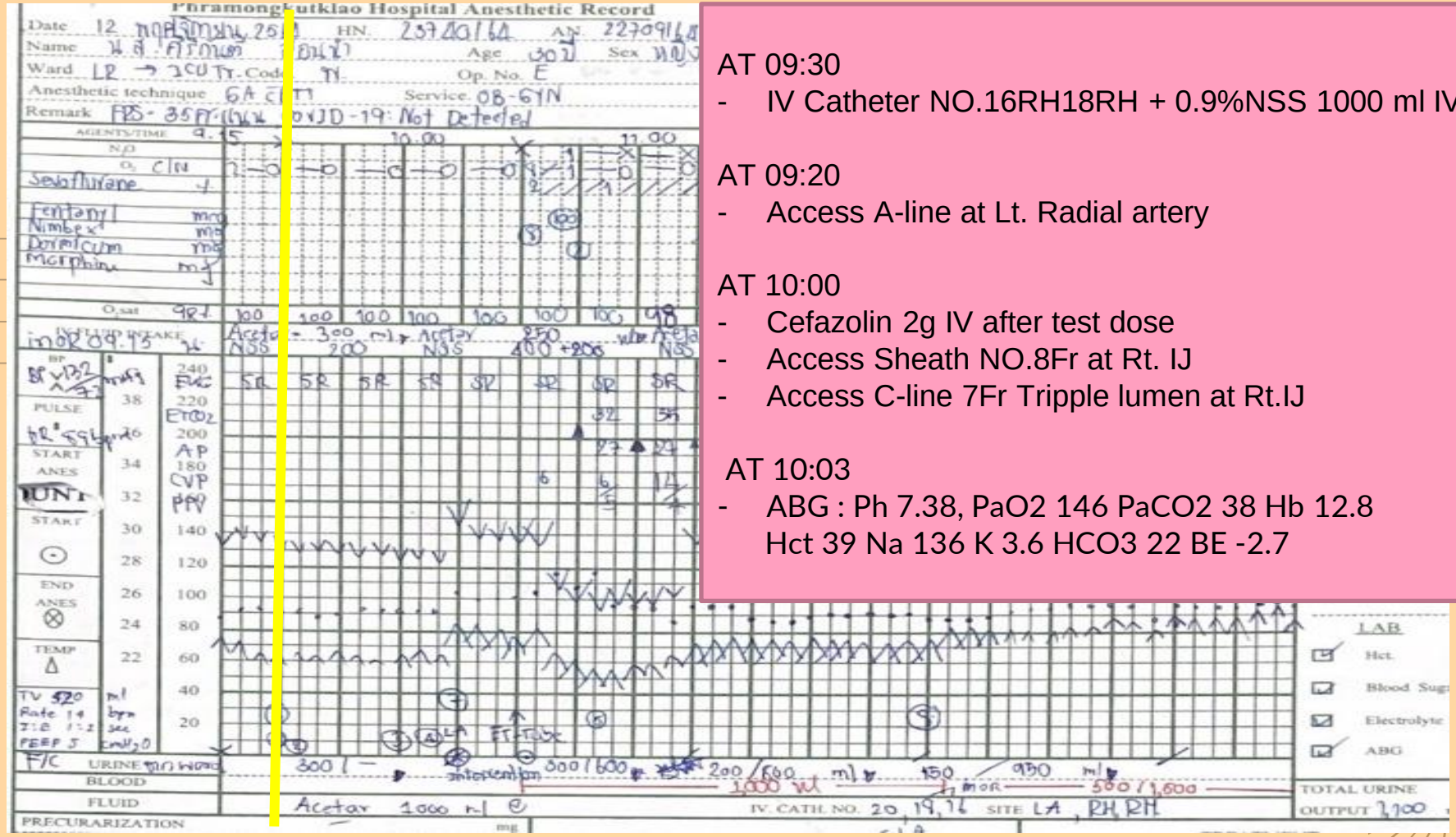
Intraoperative management

- LA during access A-Line, C-Line, insert catheter by intervention radiologist
- GA with ETT with RSI with cricoid pressure

Intraoperative management

- **Monitor** : NIBP ,EKG, O2 sat, Temp, EtCO2, Urine output
- **Invasive monitoring** : A-line, C-line
- **Position** : Supine position


Patient in OR 09:15
- Monitor : NIBP, EKG, O2 sat
- V/S : BP132/73mmHg, HR 89/min,O2 100%
- Then on O2 cannula 2 LPM
- On Foley catheter

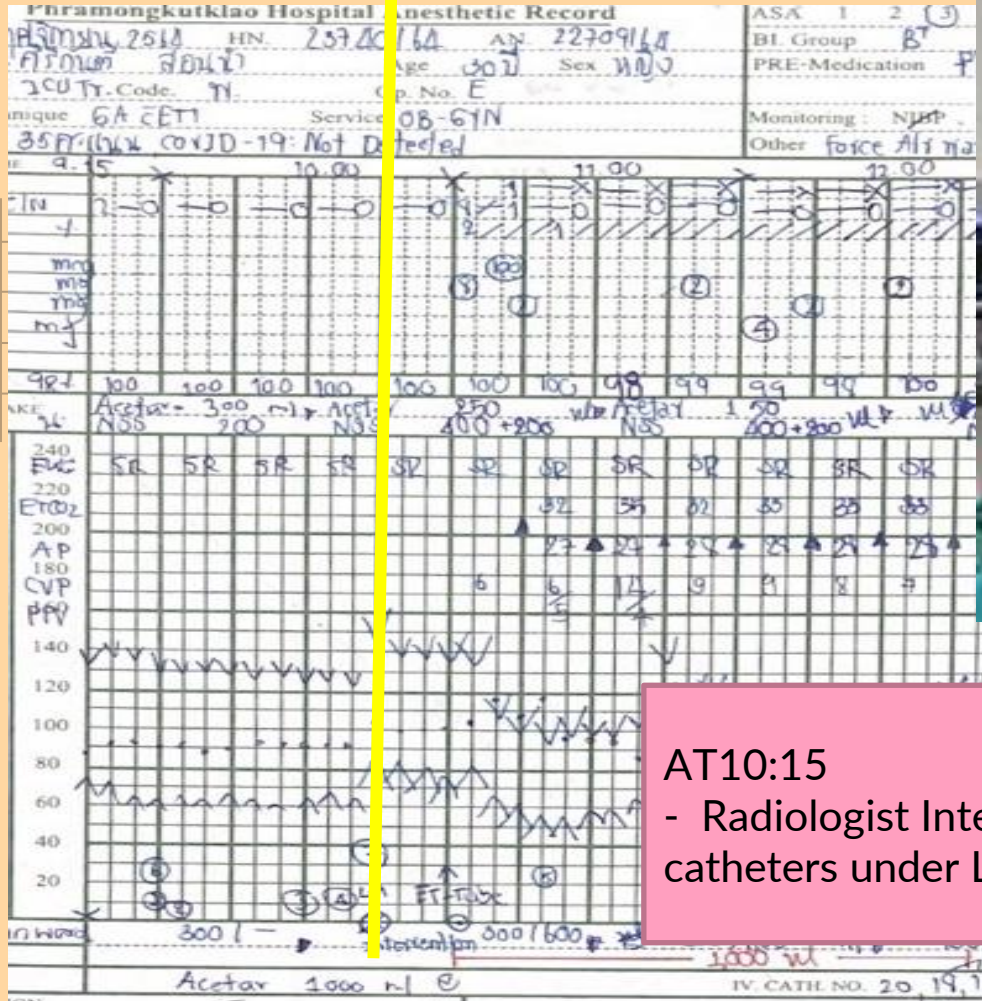


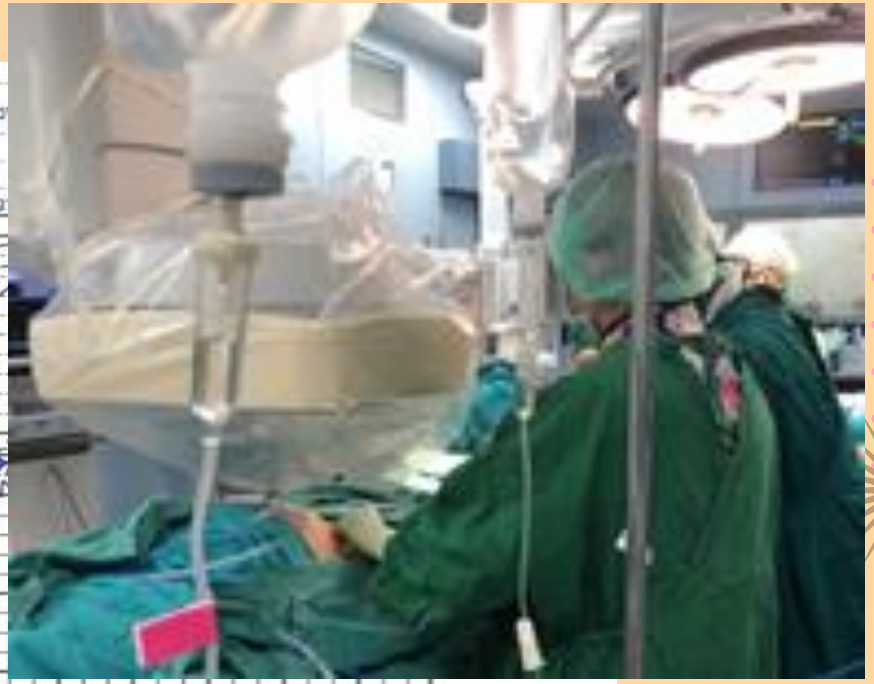
AT 09:30
- IV Catheter NO.16RH18RH + 0.9%NSS 1000 ml IV

AT 09:20
- Access A-line at Lt. Radial artery

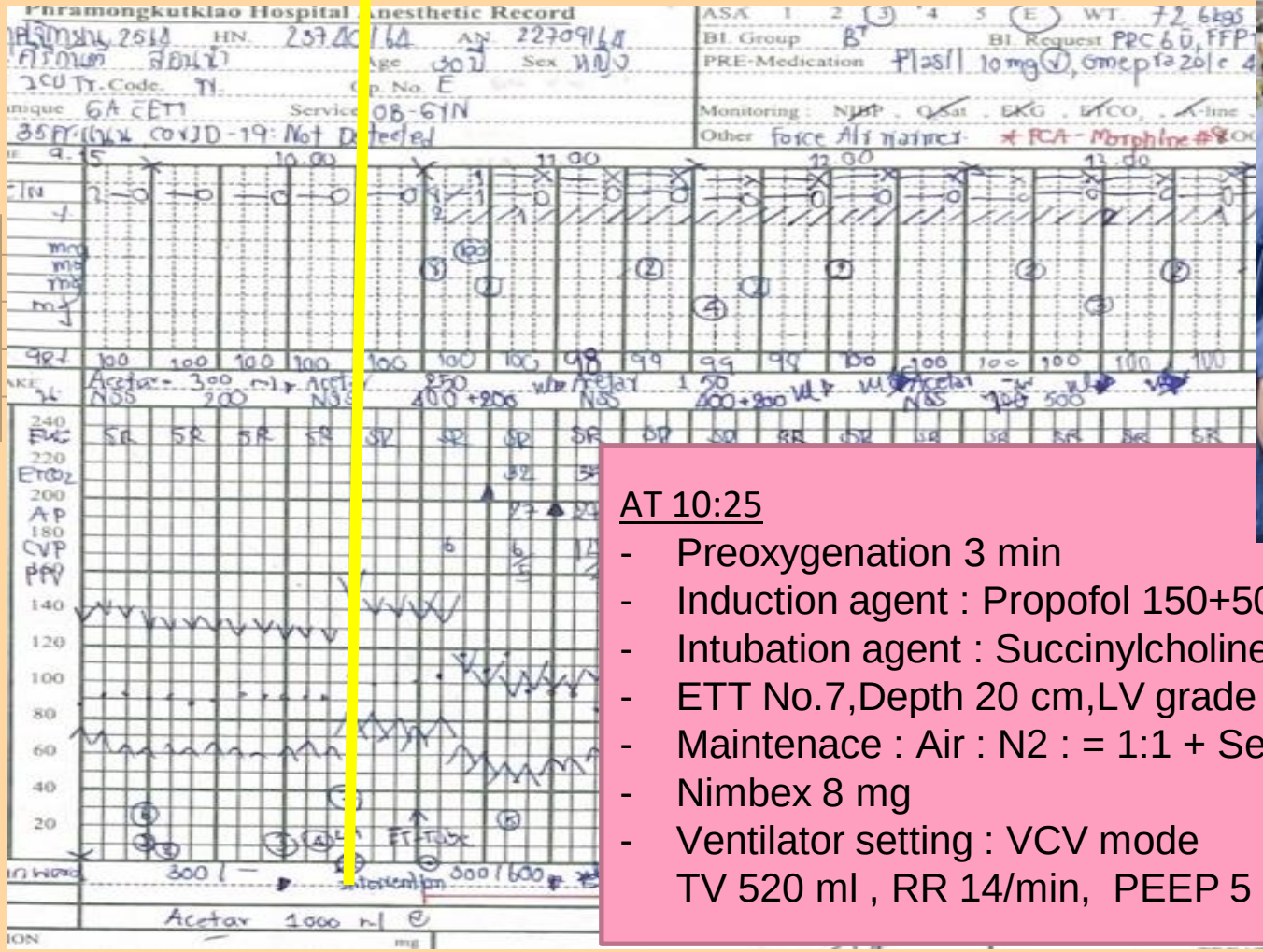
AT 10:00
- Cefazolin 2g IV after test dose
- Access Sheath NO.8Fr at Rt. IJ
- Access C-line 7Fr Tripple lumen at Rt.IJ

AT 10:03
- ABG : Ph 7.38, PaO2 146 PaCO2 38 Hb 12.8 Hct 39 Na 136 K 3.6 HCO3 22 BE -2.7



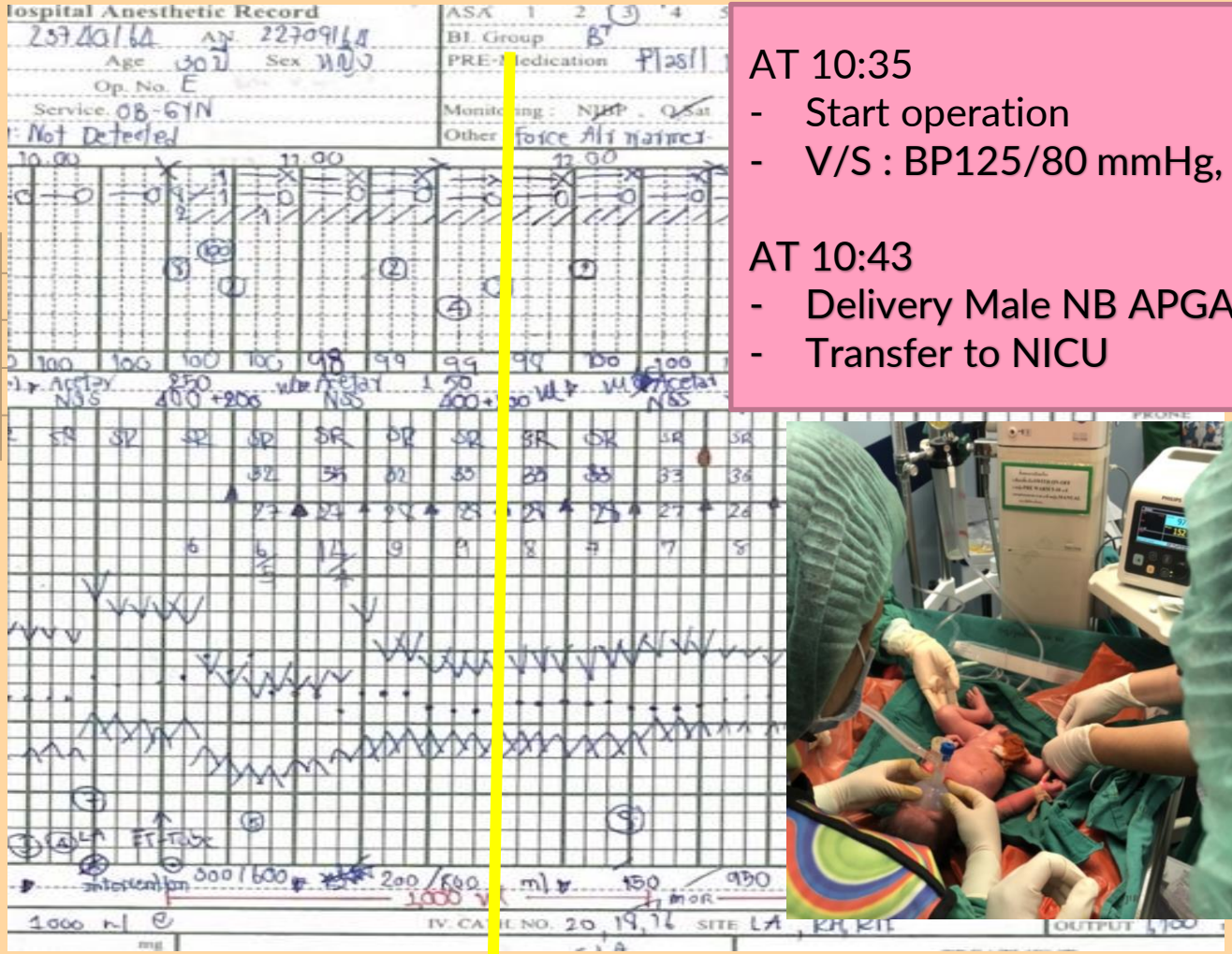


AT10:15
- Radiologist Intervention insert Internal iliac artery balloon catheters under LA



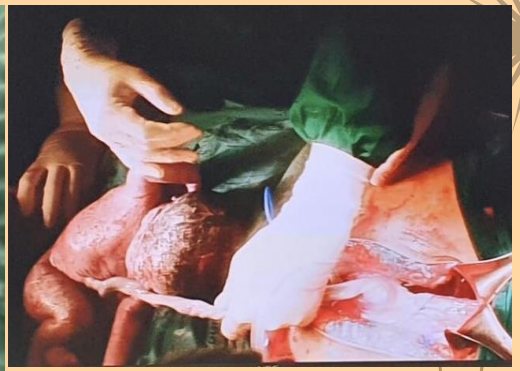
AT 10:25

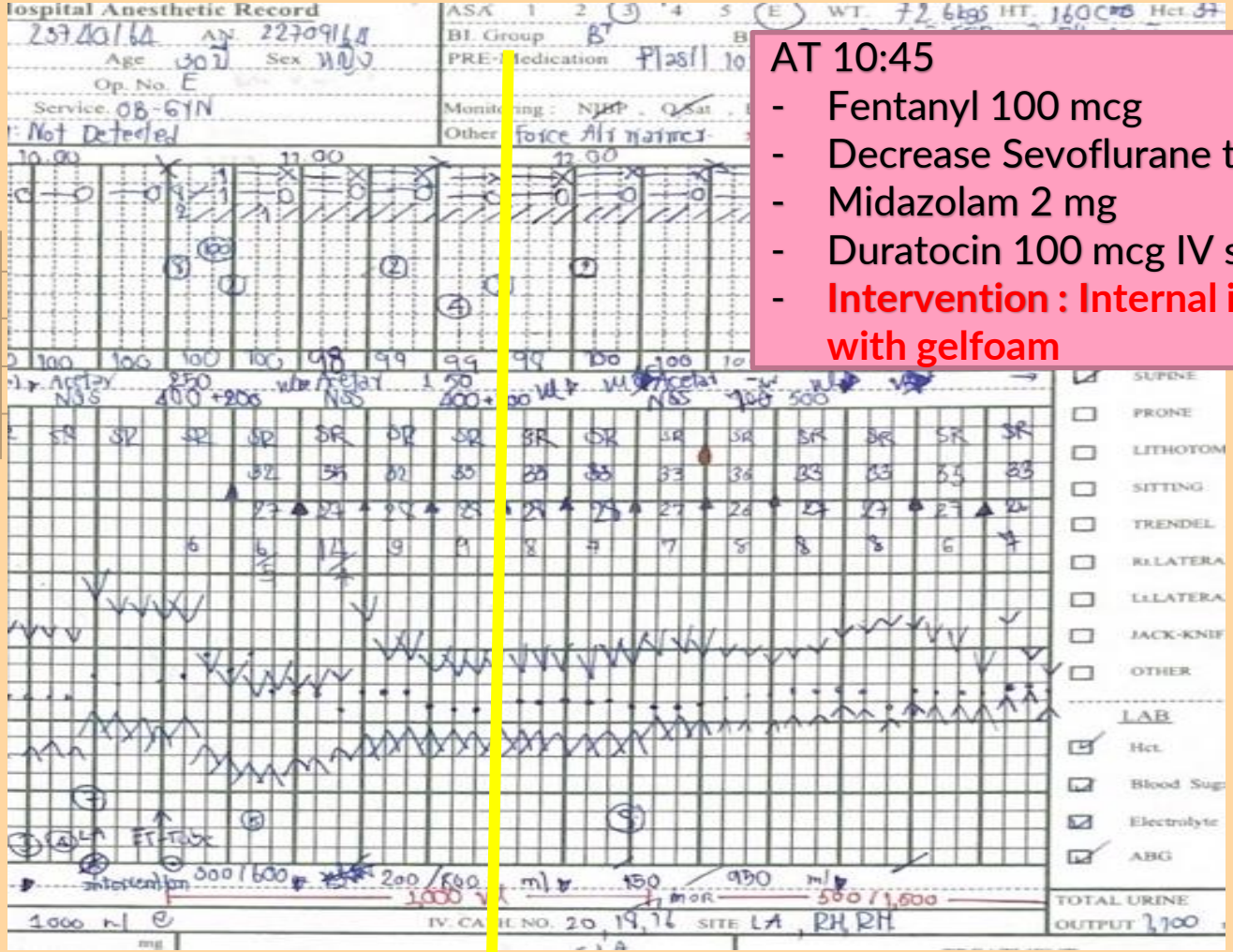
- Preoxygenation 3 min
- Induction agent : Propofol 150+50 mg
- Intubation agent : Succinylcholine 75 mg
- ETT No.7,Depth 20 cm,LV grade I by C-mac
- Maintenace : Air : N2 : = 1:1 + Sevoflurane up to 2 %
- Nimbex 8 mg
- Ventilator setting : VCV mode
  TV 520 ml , RR 14/min, PEEP 5 cmH2O, I:E 1:2



AT 10:35
- Start operation
- V/S : BP125/80 mmHg, HR 102/min, O2 sat 100%

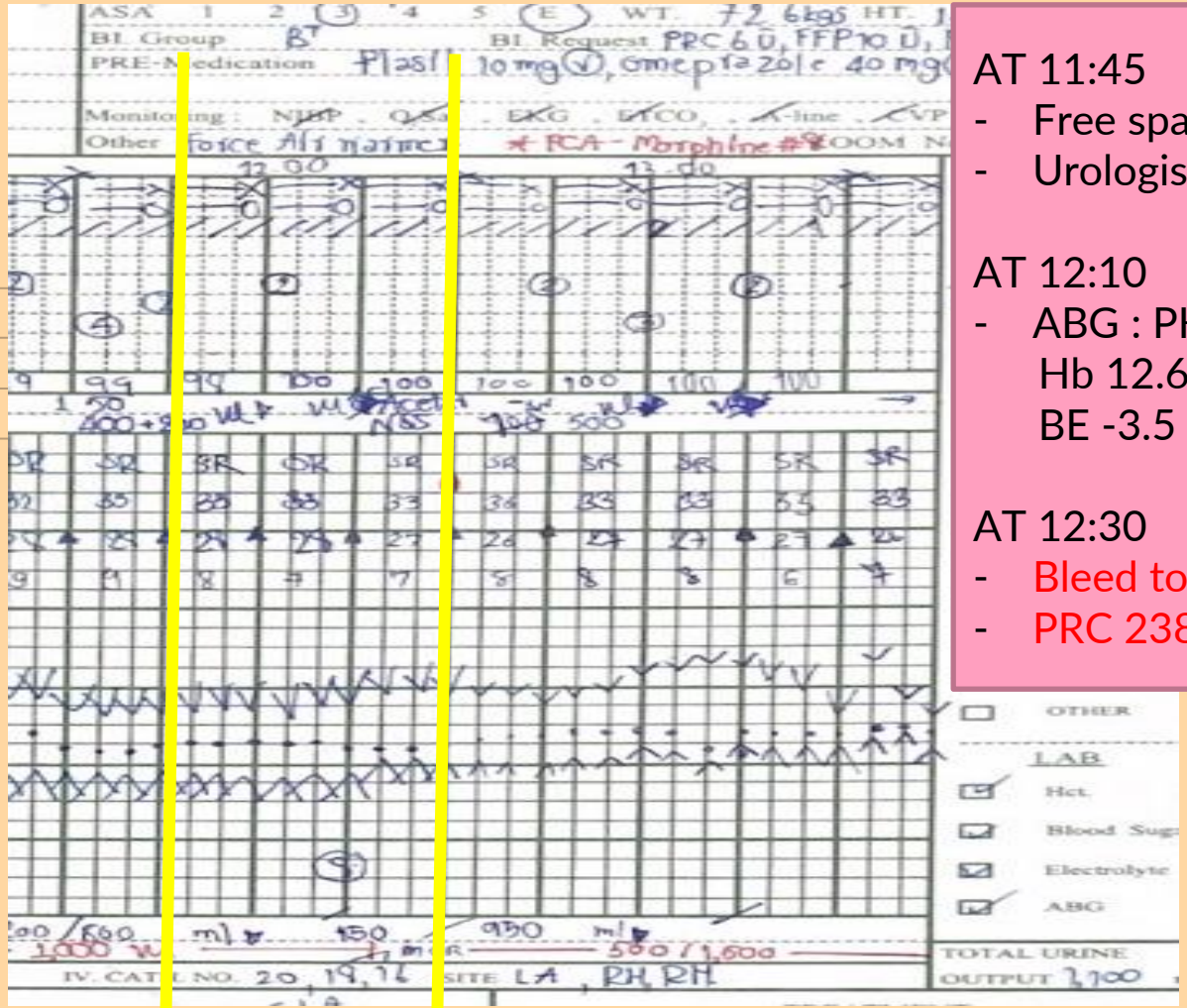
AT 10:43
- Delivery Male NB APGAR 7,9,10
- Transfer to NICU





AT 10:45

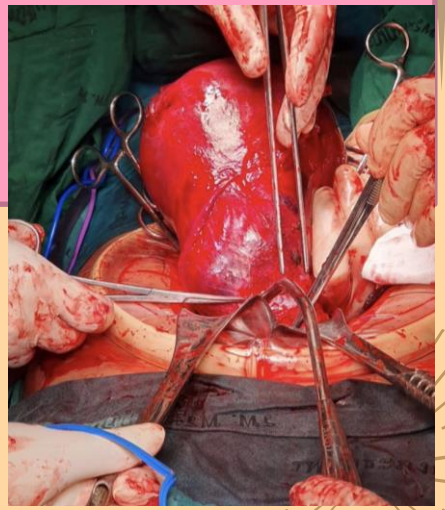
- Fentanyl 100 mcg
- Decrease Sevoflurane to 1%
- Midazolam 2 mg
- Duratocin 100 mcg IV slow push
- **Intervention : Internal iliac artery embolization with gelfoam**



AT 11:45
- Free space to rectus muscle
- Urologist repaired bladder

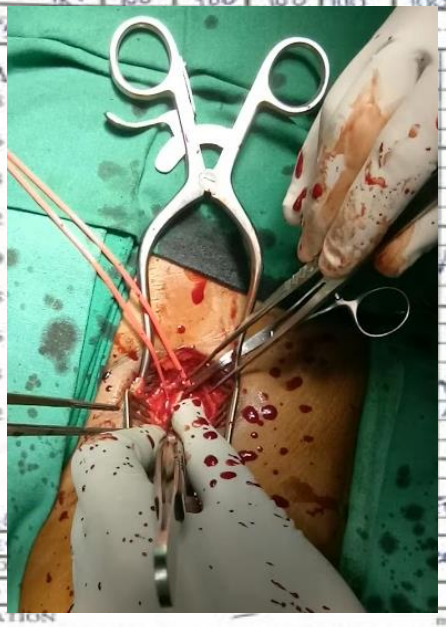
AT 12:10
- ABG : PH 7.39, PaO2 197 PaCO2 35
  Hb 12.6 Hct 38 Na 137 K 3.7 HCO3 20.8
  BE -3.5

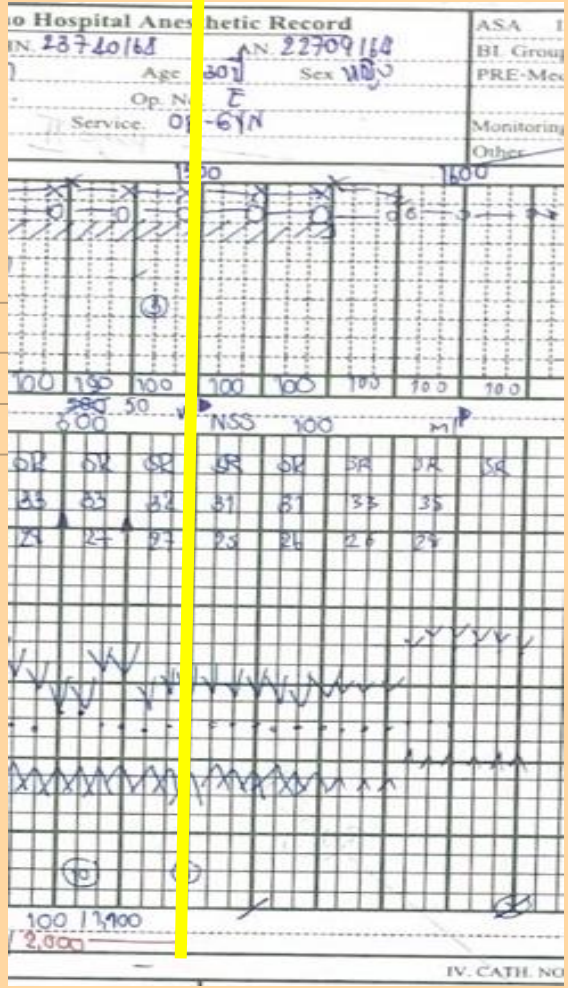
AT 12:30
- Bleed total 1000 ml
- PRC 238 ml



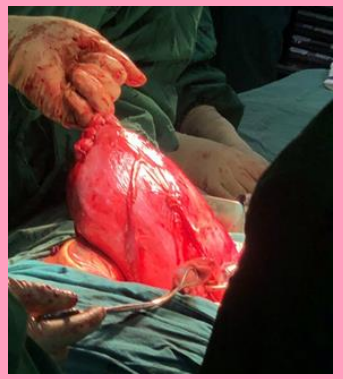
AT13:00

- Vascular surgery : Bilateral EIA embolectomy with thrombectomy iliac SFA with angiogram with repair CFA





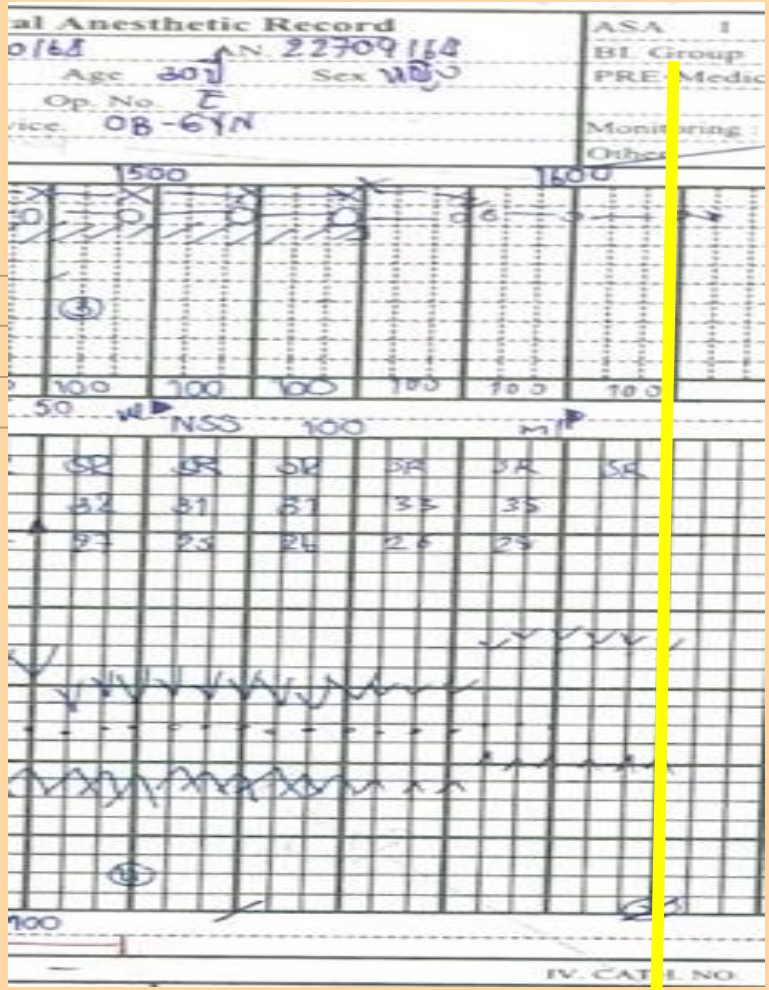
AT 13:35
- Bleed total 1500 ml
- ABG : PH 7.38, PaO2 277 PaCO2 34 Hb 12.6 Hct 38 Na 136 K 3.5 HCO3 19.8 BE -4.5



AT 14:35
- Infulgan 1000mg IV drip

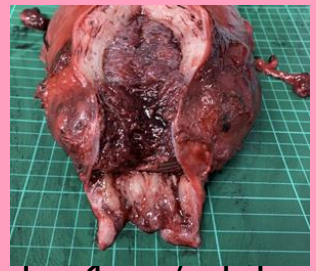
AT 15:00
- Onsia 8 mg IV

AT 15:00
- Reversal agent : Neostigmine 2.5 mg ,Atropine1.2mg
- Good emergence
- On O2 Face mask with bag 10 LPM



AT16:15

- End of operation
- Total op time : 7 hr
- Fluid isotonic crystalloid 3300 ml , PRC 238 ml
- Estimate blood loss : 2000 ml
- Urine 1100 ml/7hr
- Transfer to ICU



AT ICU

- Start PCA Morphine demand bolus 1mg/ml dose 1ml lockout 5 min

Cesarean section with Hysterectomy with internal iliac artery embolization by gelfoam with bilateral EAI embolectomy with thrombectomy iliac SFA with angiogram with repair CFA with bladder repair

Post operative DAY 0

- S : ผู้ป่วยตื่นดี พูดคุยรู้เรื่อง ไม่มีneuro deficit เจ็บแผลเล็กน้อย PS7 /10 แผลไม่ซึม ไม่มีไข้ ไม่คัน ไม่มีN/V
- O : Vital sign BP 135/70 ,Pulse 83 bpm ,RR 18 /min O2 sat 100%(RA), Hct 32
  HEENT : not pale conjunctivae
  CVS : normal S1S2 ,no murmur
  Lung : clear ,equal breath sound
  Neuro : E4V5M6 full EOM ,no facial palsy, motor grade V all extremity
- A : G4P3003 GA34+5Weeks with previous c/s with hyperthyroidism with placenta previa low-lying with placenta percreta s/p Cesarean section with Hysterectomy with internal iliac artery embolization , Bilateral EIA embolectomy with thrombectomy iliac SFA with angiogram with repair CFA with bladder repair
- P : Pain control : PCA MO ได้ total 24 mg continue ต่อ
  Dynastat 40 mg IV
  Para (500) 1 tab prn q 4-6 hr, Celebrex(200) 1*2 po pc
  Step diet

Post operative DAY1

- S : ผู้ป่วยตื่นดี พูดคุยรู้เรื่อง ไม่มีneuro deficit ไม่ปวดขา ไม่มีอาการชาหรืออ่อนแรง PS 5-7 /10 มีไข้ ไม่คัน ไม่มีN/V
  Hct 32 , Hypokalemia(K=2.95)
- O : Vital sign BT 38.2 ,BP 122/77 ,Pulse 95 bpm ,RR 16 /min O2 sat 100%(RA)
- HEENT : not pale conjunctivae
  Neuro : E4V5M6 full EOM ,no facial palsy, motor grade V all extremity
  Vascular : pulse 2+ all extremity, good muscle function
- A : G4P3003 GA34+5Weeks with previous c/s with hyperthyroidism with placenta previa low-lying with placenta percreta s/p Cesarean section with Hysterectomy with internal iliac artery embolization , Bilateral EIA embolectomy with thrombectomy iliac SFA with angiogram with repair CFA with bladder repair
- P : Pain control : Anest off service, MO 3 mg IV q 4 hr
- Para (500) 1 tab prn q 4-6 hr, Celebrex(200) 1*2 po pc
  Step diet , Promote ambulation
  Restart PTU(50)2x2
  Kcl 30 ml po q 4 hr x 3 dose, 50%mgso4 4 g+ nss 100 ml iv drip in 6 hr x 3 day
  Off A-line
  ย้ายไปนรี7

Post operative DAY 2

- S : ผู้ป่วยตื่นดี พูดคุยรู้เรื่อง ไม่มีneuro deficit ไม่ปวดขา ไม่ปวดคัดตึงเต้านม PS 2/10 ไม่มีไข้ ไม่คัน ไม่มีN/V
- O : Vital sign BT 37 ,BP 129/85 ,Pulse 100 bpm ,RR 16 /min O2 sat 100%(RA), Hct 28 , I/O 730/1800,0.6 ML/HG/HR

  HEENT : not pale conjunctivae,

  Vascular : pulse 2+ all extremity, good muscle function
- A : G4P3003 GA34+5Weeks with previous c/s with hyperthyroidism with placenta previa low-lying with placenta percreta s/p Cesarean section with Hysterectomy with internal iliac artery embolization , Bilateral EIA embolectomy with thrombectomy iliac SFA with angiogram with repair CFA with bladder repair
- P : Pain control : Dynastat 40 mg IV

  Para (500) 1 tab prn q 4-6 hr, Celebrex(200) 1*2 po pc

  Off c-line

  PRC 1 U IV drip

  Off PTU, MMI(5) 2x1 po pc

Post operative DAY 3

- S : ผู้ป่วยตื่นดี พูดคุยรู้เรื่อง ไม่มีneuro deficit ไม่ปวดขา ไม่ปวดคัดตึงเต้านม PS 3-4/10 น้ำนมออกน้อย
- O : Vital sign BT 36.8 ,BP 126/82 ,Pulse 94 bpm ,RR 16 /min O2 sat 100%(RA)
- A : G4P3003 GA34+5Weeks with previous c/s with hyperthyroidism with placenta previa low-lying with placenta percreta s/p Cesarean section with Hysterectomy with internal iliac artery embolization , Bilateral EIA embolectomy with thrombectomy iliac SFA with angiogram with repair CFA with bladder repair
- P : Pain control : ตามเดิม
  Hct หลังได้เลือด 35
  Hypokalemia improve

Post operative DAY 4

- S : ผู้ป่วยตื่นดี พูดคุยรู้เรื่อง ไม่มีneuro deficit ไม่ปวดขา ไม่ปวดคัดตึงเต้านม เดินมากขึ้น PS 3-4/10 ไม่มีไข้
- O : Vital sign stable BT 37
  HEENT : not pale conjunctivae
  Breast : not engorge
  Vascular : pulse 2+ all extremity, good muscle function
- A : G4P3003 GA34+5Weeks with previous c/s with hyperthyroidism with placenta previa low-lying with placenta percreta s/p Cesarean section with Hysterectomy with internal iliac artery embolization , Bilateral EIA embolectomy with thrombectomy iliac SFA with angiogram with repair CFA with bladder repair
- P : U/S : no evidence of DVT
  Breast feeding น้ำนมไหลดี
  On MMI(5) 2X1 PO PC
  Plan d/c tomorrow

Thank YOU