OBSTETRIC EMERGEN

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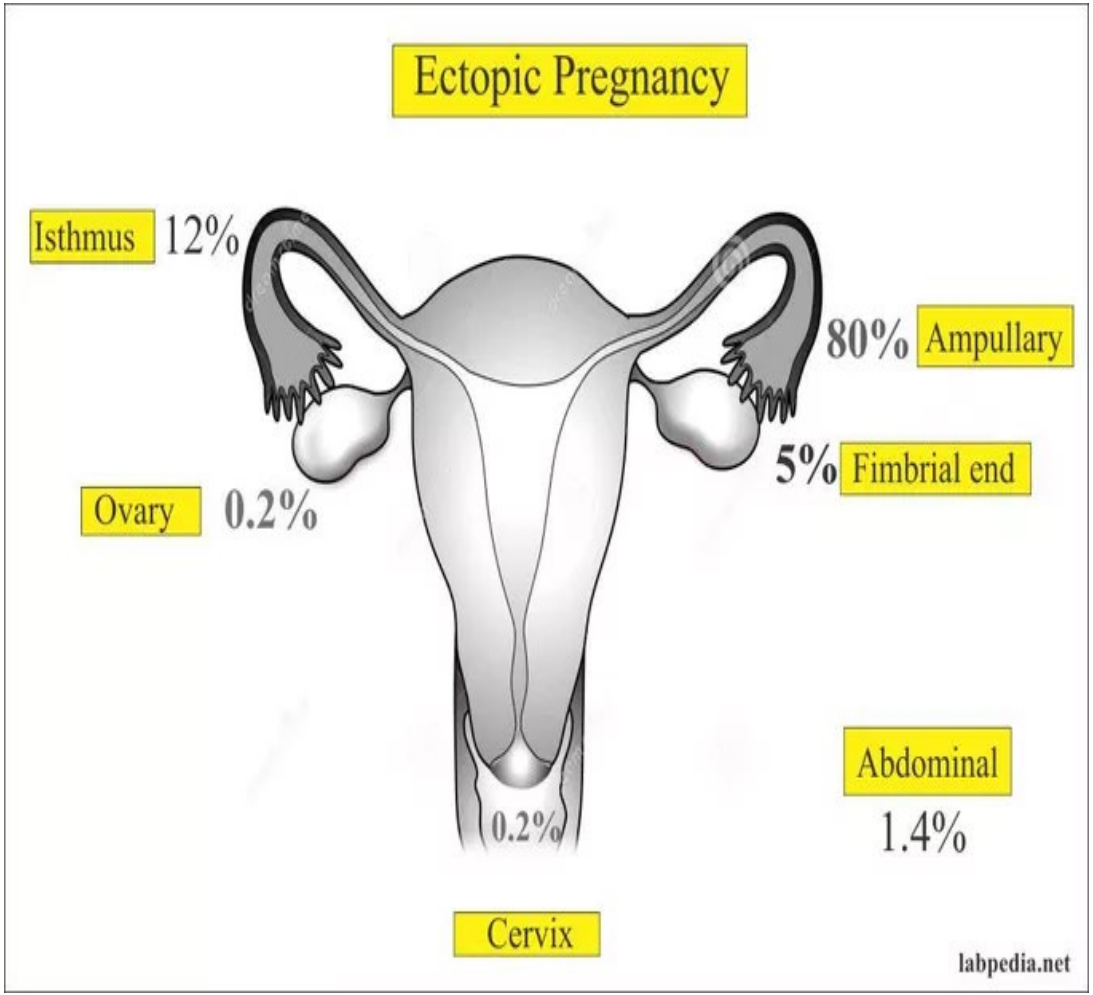
- 33 year old female with pelvic pain and vaginal spotting
- Undergoing IVF, positive pregnancy test at home 3 days ago
- HR 120, BP 80/40
- On exam, significant pelvic tenderness, scant vaginal bleeding. Pale in appearance, cool extremities
- FAST exam- +RUQ
- ?Diagnosis

RUPTURED ECTOPIC PREGNANC


Ectopic Pregnancy
Isthmus
12%
80%
Ampullary
5%
Fimbrial end
Ovary
0.2%
Abdominal
1.4%
0.2%
Cervix
labpedia.net

RISK FACTORS FOR ECTOPIC PREGNANCY

Tubal pathology	Prior ectopic pregnancy Tubal surgery (salpingectomy, tuboplasty) Tubal ligation Congenital tubal abnormalities
Infections	Pelvic inflammatory disease (PID), prior Chlamydia trachomatis or Neisseria gonorrhoeae infection
Reproductive technology	Assisted reproductive technology (IVF, ovulation induction)
Contraceptive use	Intrauterine device (IUD), progestin-only contraception Emergency contraception failur
Obstetric/ gynecologic	Prior induced abortion Prior miscarriage with fection
Medical history	Endometriosis Infertility
Lifestyle	Cigarette smoking Increasing maternal age

Diagnosis

- Clinical
- Beta hcg
- Ultrasound

Management

- OR
- Blood products

Follow Up

- CC: 8 weeks pregnant, confusion
- N/V for three weeks, minimal PO intake. Unable to tolerate prenatal vitamin
- Taking B6 and reglan without relief
- Onset of confusion the last 2 days.
- Husband describes “making up stories” and walking “like she is drunk”

HYPEREMESIS GRAVIDARUM

WERNICKE ENCEPHALOPATHY

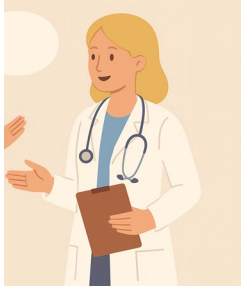
HYPEREMESIS GRAVIDARUM

DEFINITION

SEVERE NAUSEA AND VOMITING IN PREGNANCY

RISK FACTORS

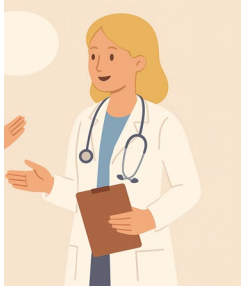
- PRIOR HISTORY
- MULTIPLE GESTATION
- OBESITY
- YOUNGER AGE



COMPLICATIONS OF HYPEREMESIS GRAVIDARUM

COMPLICATIONS

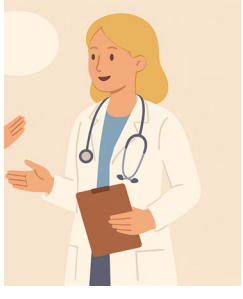
- DEHYDRATION
- ELECTROLYTE IMBALANCE
- NUTRITIONAL DEFICIENCY



TREATMENT OF HYPEREMESIS GRAVIDARUM

TREATMENT

- FLUID REPLACEMENT
- ANTEMETICS
- VITAMIN SUPPLEMENTS
- HOSPITALIZATION



Antiemetics

- **Pyridoxine (B6)**
- **Antihistamines**
  - Doxylamine
  - Diphenhydramine
- **Antidopaminergics**
  - compazine / prochlorperazine
  - reglan/metoclopramide
- **5HT3 antagonists**
  - zofran/ondansetron

Follow up

- Admitted for IVF, IV thiamine
- Full neurologic recovery with thiamine supplementation
- D/C home with scheduled IV fluids, IV thiamine, PO antiemetics

- Cc: headache
- 33F 38 w pregnant arrives with headache and vision changes
- VS reveal BP 145/100
- Shortly after arrival, has tonic clonic seizure activity

ECLAMPSIA

Definition

- generalized tonic clonic seizure during hypertensive disorder of pregnancy

Pathophysiology

- Largely unknown!

Eclampsia Treatment Algorithm

Step	Actions/Medications
Stabilization	• Ensure airway, breathing, circulation (ABCs) • Provide oxygen as needed • Position patient on left lateral side • Protect from injury during seizure
Saizure Control – Magnesjum Sulfate	• Loading dose: 4–6 g IV over 15–20 min i√m • Maintenance: 2 g/hr continuous IV infusion • If seizure recurs: 2 g IV bolus • Monitor: reflexes, urine outpu., respirations • Antidote for toxicity: Calcium gluconate 1 g IV
Blood Pressure Control	• Treat if SBP ≥160 mmHg or DBP/ ≥110 mV mHg • Labetalol: 20 mg IV– repeat 40–80 mg q10 min (max: 300 mg) • Hydralazine: 5–10 mg IV qv20 min prs needed • Nifedipine (oral): 10 mg PO qv20 min prnNma.x
Delivery Planning	• Definitive treatment: Delivery after stabilization • If not in labor. Induction once stable • Cesarean section Only for obstetrin dications • Transition to oral antihypertensives as need

Civil+exect.com

Follow Up

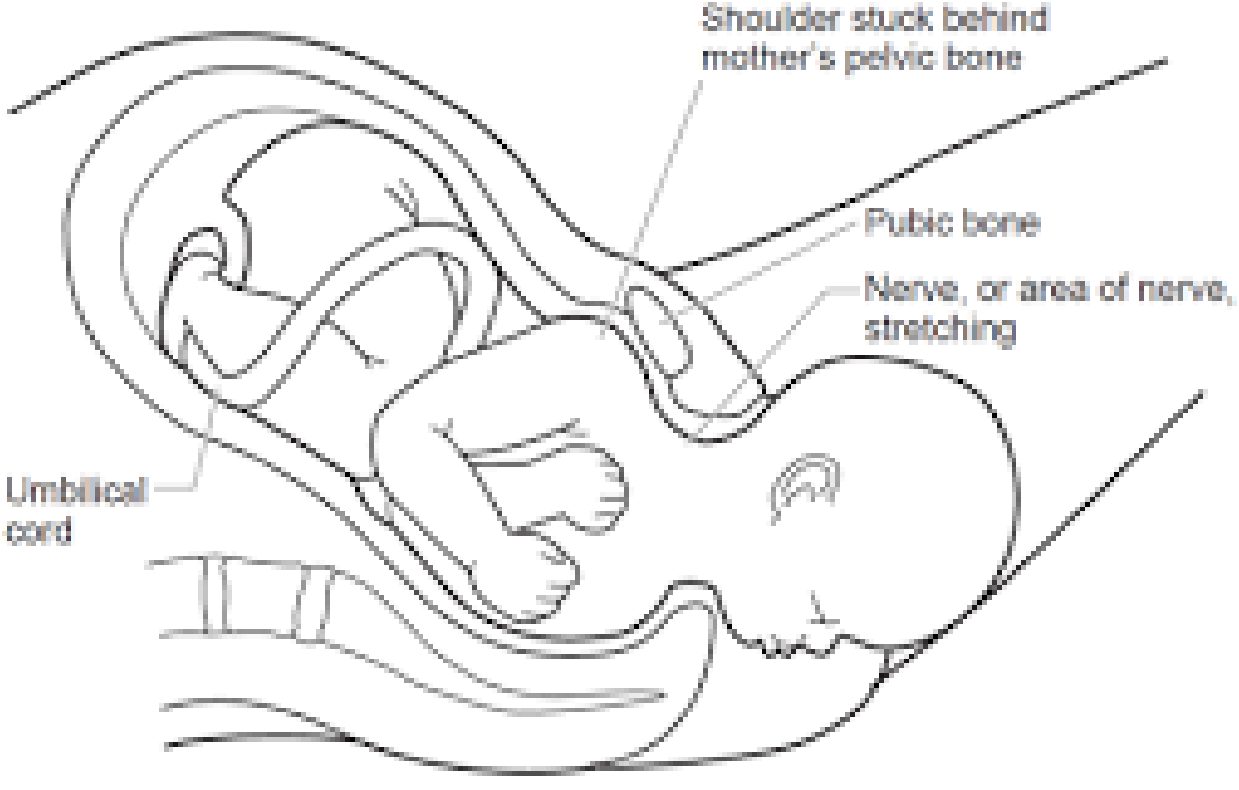
- Patient given midazolam and magnesium with cessation of seizure
- BP stabilized with IV labetalol and nicardipine drip
- Proceeds with induction of labor per patient request

- Following a successfully IOL, patient 10cm dilated and actively pushing
- Upon delivery of fetal head, fetal head retracts slightly despite gentle downward traction
- Rapid response to OB unit called overhead

SHOULDER DYSTOCIA

Definition

- failure to deliver the fetal shoulders solely using gentle downward traction following expulsion of the head.


Shoulder stuck behind mother's pelvic bone
Pubic bone
Nerve, or area of nerve, stretching
Umbilical cord

Management of Shoulder Dystocia

Call for Help

Announce "Shoulder Dystocia
Call atdocess, pediatrics

Initial Maneuvers (First-line)

McRoberts Maneuver
Hyperflex maternal hips ɔarol aring
Suprapubic Pressure
Apply pressure downward anc

Evaluate for Progress

If not delivered → proceed to next steps

Secondary Maneuvers

Rubin Maneuver
Push posterior aspet of anterior shouıedder
Wood's Corkscrew Maneuver
Rotate posterior shoulder 180°
Deliver Posterior Arm
Sweep across chest and out out

Last Resort / Advanced

Gaskin Maneuver

Follow up

- Following failure of Mcroberts maneuver, Posterior arm delivered with successful resolution of shoulder dystocia

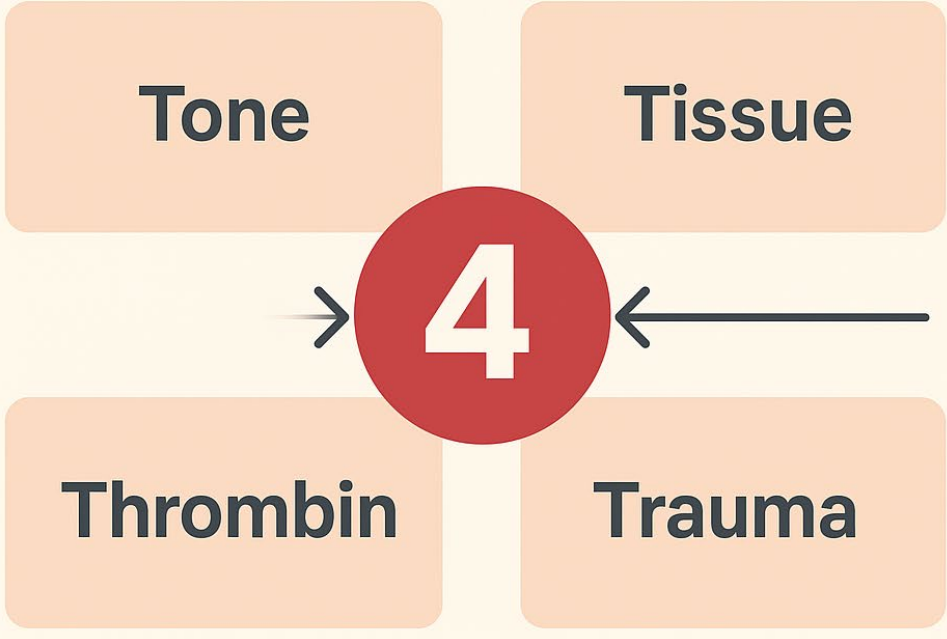
- Rapid response paged overhead to L & D floor
- On arrival to room, vigorous baby, mom looks ashen. The OB reports 800cc blood loss shortly after delivery with ongoing brisk bleeding

POSTPARTUM HEMORRHAGE

Definition

- >1000 mL blood loss with signs + sx of hypovolemia within 24 hrs of birth

4 Ts of Postpartum Hemorrhage



Treatment of Postpartum Hemorhage

Call for help

↓

Assess vitals, establish IV access, and start flu-

↓

Monitor urine output

↓

Identify & Treat Cause (4 Ts)

- **Tone:** Uterine massage, uterotonics
- **Tissue:** Remove retained products
- **Trauma:** Repair lacerations or hematomas
- **Thrombin:** Correct coagulopathy

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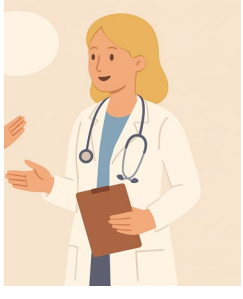
If Ongoing Bleeding

- Tranexamic acid
- Bakri balloon or uterine packing

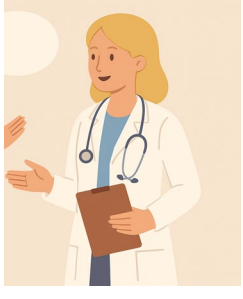
↓

Escalation



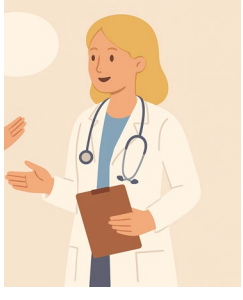
Uterotonic Medications for Postpartum Hemorrhage

Medication	Dose & Route	Mechanism	Contraindications	Key Side Effects
Oxytocin	10 IU IM or 20–40 IU in 1 L IV fluid	Stimulates uterine smooth muscle	None (in recommended doses)	Hyponatremia (rare)
Misoprostol	800–1000 mcg rectally/orally/sublingually	Prostaglandin E_1 analog	None (relative caution in fever)	Fever, chills, diarrhea
Carboprost (Hemabate)	250 mcg IM, may repeat q15–90 min (max 2 mg)	Prostaglandin $F_{2\alpha}$ analog	Asthma, cardiac/hepatic/renal disease	Bronchospasm, diarrhea
Methylergonovine (Methergine)	0.2 mg IM q2–4 hr (avoid IV)	Ergot alkaloid; uterine smooth muscle constrictor	Hypertension, preeclampsia	Hypertension, nausea, vomiting
Tranexamic Acid	1 g IV over 10 min (within 3 hrs of birth)	Antifibrinolytic	Active thromboembolic disease	Nausea, visual changes (rare)



Procedural Options for Postpartum Hemorrhage

- Uterine Massage
- Intrauterine Balloon Tamponade
- Uterine Artery Ligation
- Hysterectomy



Follow up

- Postpartum hemorrhage recognized early by the OB team. Blood product resuscitation initiated, uterotonics administered, Jaida inserted with resolution of brisk bleeding.

Take Aways

- **RUPTURED ECTOPIC PREGNANCY** - be suspicious in all women of child bearing age with +FAST!
- **HYPEREMESIS GRAVIDARUM** - this is a huge quality of life issue, treat aggressively and empathetically
- **ECLAMPSIA** - suspect in first time seizure in women of child bearing age! Seizures are treated differently, remember magnesium!
- **SHOULDER DYSTOCIA** - anticipation and preparation are key!
- **POSTPARTUM HEMORRHAGE** - focus on tone! Uterine massage and pitocin will resolve the majority.