Oh Sh*t Obstetrics

Developing EM, Fiji

3rd December 2018

Ben Shepherd

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ÓbCast

Ob-Gyn Podcast

Plan

6 topics, 5min each

1. Shoulder Dystocia
2. Vaginal Breech Birth
3. Placental Problems
4. Postpartum Haemorrhage (PPH)
5. Pre-eclampsia
6. Resuscitative Hysterotomy

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Shoulder Dystocia

- Bony entrapment of shoulder behind symphysis pubis
- Diagnosed by delivery of head with failure to deliver shoulders
- Big issue -- > cord trapped & occluded -- > rapid hypoxia/acidosis

- Simplified approach
  - 1. Call for Help & Expect Neonatal Resus
  - 2. Lie flat & Legs Up (Knees to nipples)
  - 3. Pressure Suprapubically
  - 4. Roll on All 4s

HELPERR

for Shoulder Dystocia

H Call for **H**elp!

E **E**valuate for **E**pisiotomy

L **L**egs – McRoberts Maneuver

P Suprapubic **P**ressure

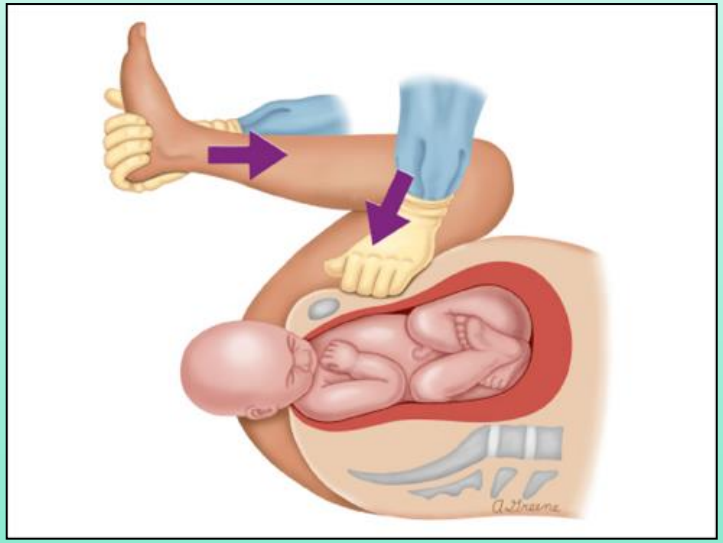
E **E**nter: rotational maneuvers

R **R**emove the posterior arm

R **R**oll the patient to her hands and knees

ALSO

www.aafp.org/also



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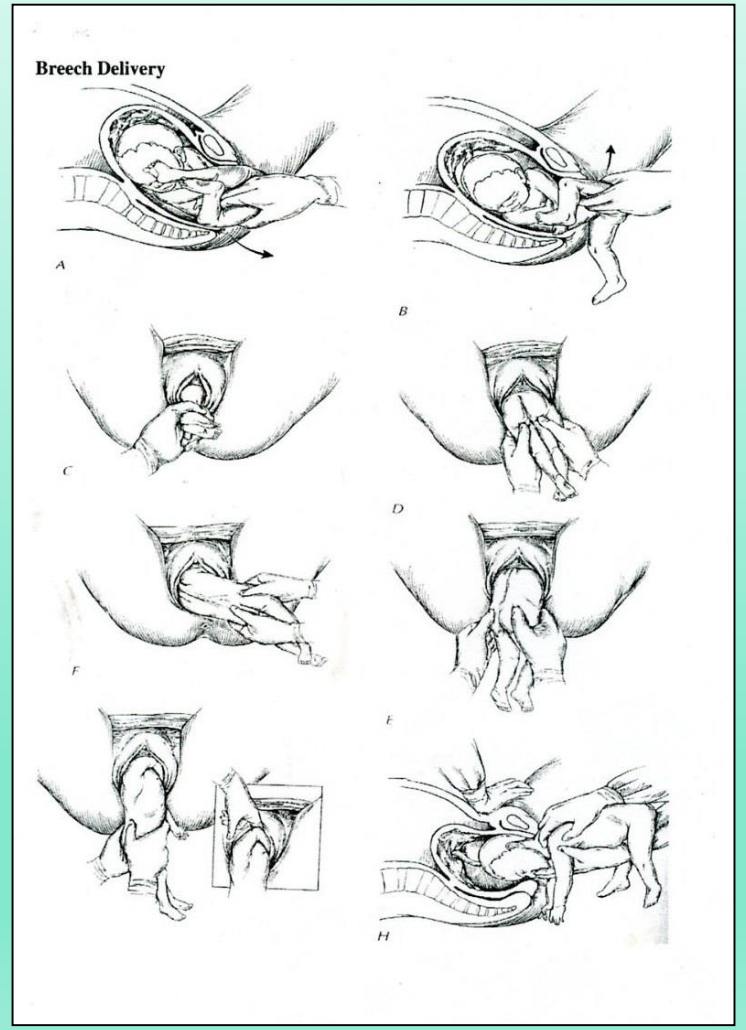
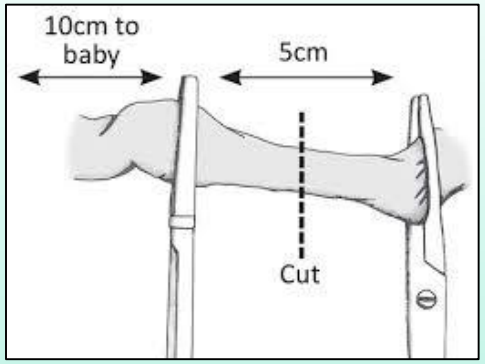
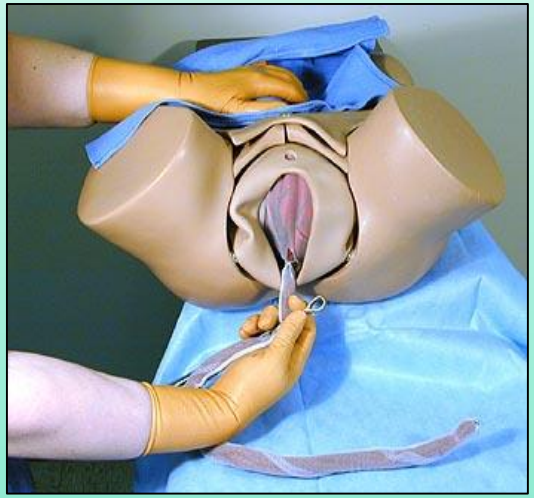
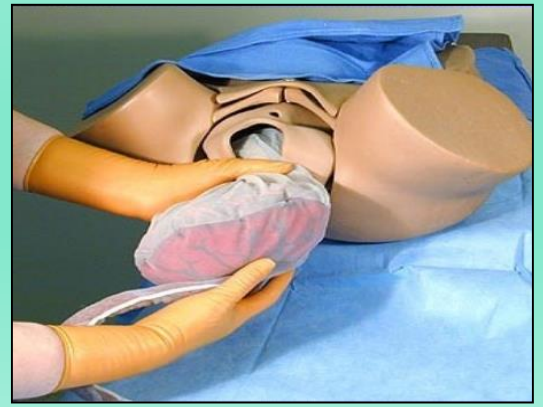
Vaginal Breech Birth

- Uncommonly done, usually only 2nd twins
  - Began with ‘Term Breech Trial 2000’
  - Exacerbated by lack of experience
  - Specialised breech services in major centres
- Main risk = entrapped head
- Key = sit on hands +/- stand mum up -- > baby likely to deliver itself
- If not delivering -- > breech extraction
- By the time you need to use the manoeuvres, someone from O&G should be there
- Expect the baby to require resuscitation









Placenta Delivery & Cutting the Cord

Cut the cord early & fairly long ~10 cm

- But if mum and baby are well – no rush

Firstly NO rush to deliver placenta unless bleeding

- Normal time ~5-30min

If you do deliver the placenta, remember to used ‘controlled cord traction’ and await signs of separation:

- Rush of blood
- Cord lengthens
- Fundus rises

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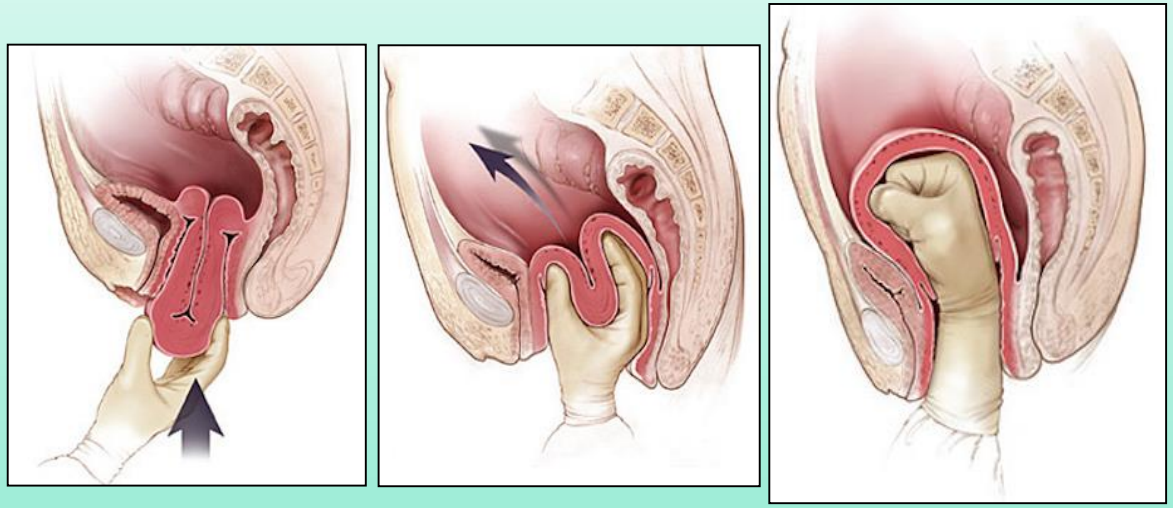
Uterine Inversion

- Usually iatrogenic
- Analgesia +/- Dissociate
- Clues:
  - Severe pain
  - Visible uterus (not always)
  - Shock
- Replace fundus, then bimanual compression
- May need tocolytic
  - Terbutaline 250mcg sc
  - GTN 50mcg IV [s/l might be quicker]
- Do NOT remove placenta [will be done in OT]



Post Partum Haemorrhage

PPH = 500mL after vaginal birth

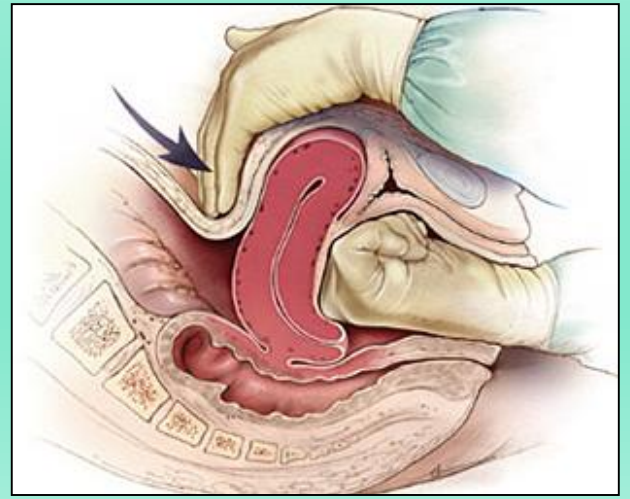
Can be scary / still kills women all over world

Causes: 4 Ts

- *Tone* = uterine atony
- *Trauma* = genital tract trauma
- *Tissue* = retained placenta
- *Thrombin* = coagulopathy

Management in ED

- Check Ts
- Rub fundus & Call for Help
- IVC & Resuscitate [? MTP / TXA]
- Give some drugs
- Bimanual compression (and do this early!)



Drugs for PPH

- Ergometrine
  - 250mcg IV
  - 500mcg IM
- Syntocinon
  - 5u IV bolus +/- repeat
  - 10u IM
  - Infusion 40u/1L q4h *= 1u IV q 6min*
- Misoprostol
  - 1000mcg PR [can be given buccally – works quicker]
- Prostaglandin F2alpha
  - Originally intramyometrial, now IM

Pre-Eclampsia

- Poorly understood pathogenesis, disorder of placentation
- > 20 / 40*
- Diagnosis = High BP + ANY end-organ dysfunction
- BP > 140/90* + any of:
    - Kidney involvement
        - Urine protein [dipstick >+ suggestive], protein:creatinine ratio > 30
        - Oliguria/Elevated Cr
    - Neurological
        - Headaches, visual changes, hyperreflexia, clonus*
        - Seizures = Eclampsia
    - Hepatic [transaminitis -> subcapsular haematoma/rupture]
    - Haematological [haemolysis, low platelets]
    - CVS [pulmonary oedema]
    - Fetal [IUGR]

Pre-Eclampsia

- Cure = delivery*
- Balance maternal condition vs. prematurity
- BP lowering if >160/100, definitely >170/110
  - aim 140/90
- Seizure prophylaxis if severe [MgSO4]
  - NNT 90 for seizure prevention
  - NNH 200 for resp depression

Eclampsia

- Cure = delivery*
- Seizures typically self-terminate
- MgSO4 = mainstay
  - 4g loading dose over 30min
  - 1g/hr infusion
  - 2g over 5min for recurrent seizures
- Then follow status algorithm
- Think of other causes if prolonged, focal, resistant to Rx

Maternal ALS

- Adaptations to ALS in Pregnancy
  - Manual Uterine displacement [better than tilt]
  - Establish resuscitation
  - PMCS = resuscitative hysterotomy
    - Consensus guidelines >20/40 [Uterus > umbilicus]
  - Otherwise no difference

- Old mantra “Start by 4, Baby by 5min”
  - Easy to remember, logistically difficult
  - Available data suggests:
    - No big outcome change beyond 5min (more linear)
    - 50% injury-free threshold 25min for mum and baby

- How far into a resuscitation could it help?
  - Longest time to maternal survival = 37min
  - Longest time to newborn survival = 57min [...45 / 30 min]

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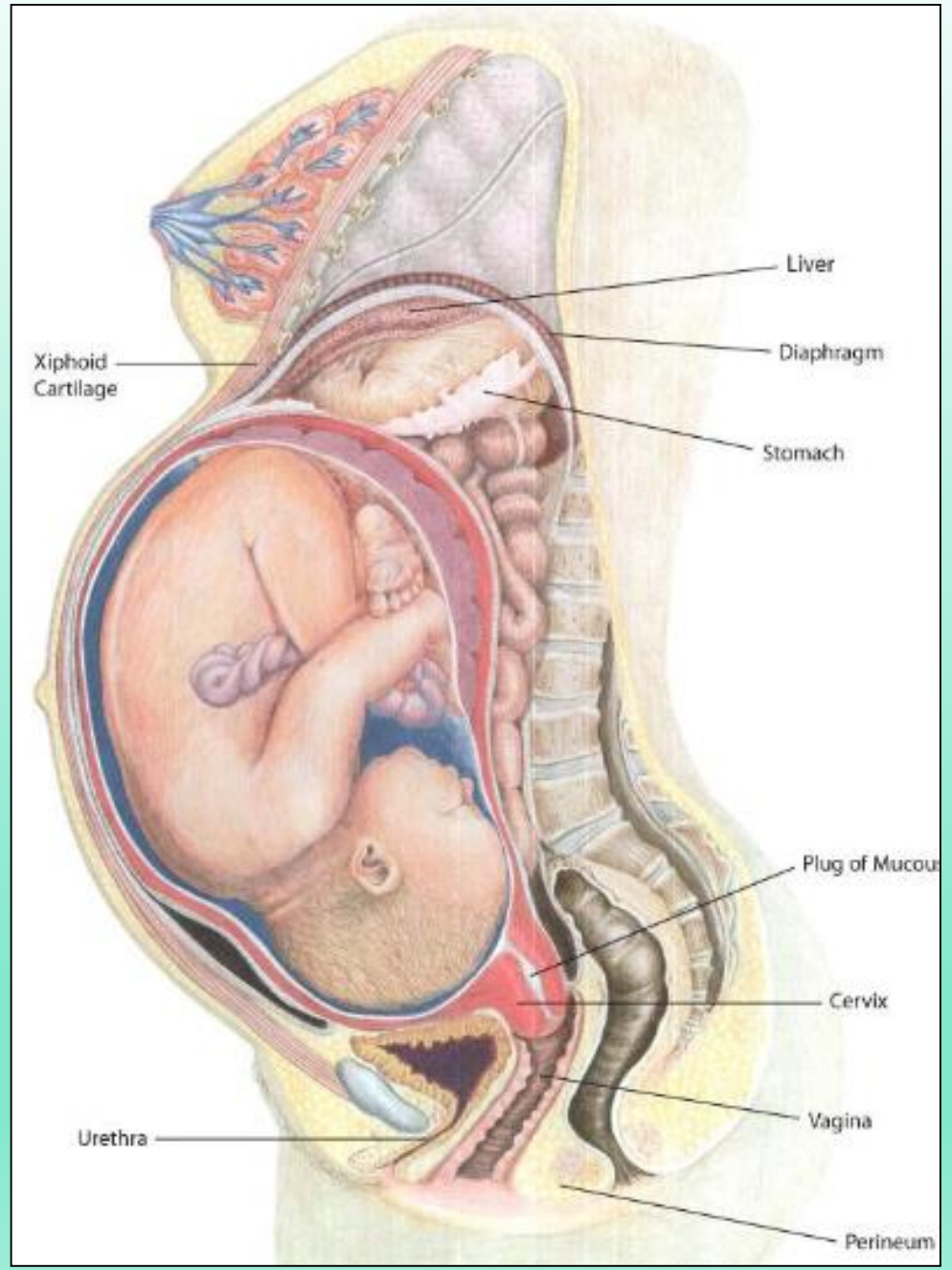

REVISED SURGICAL STEPS

- Continue ALS with manual uterine displacement until knife-skin
- Big scalpel -- > Big cut (vertical midline)
    - Top of uterus -- > just above symphysis
- Cut down to uterus
- Cut uterus down to baby/liquor & extend with scissors or scalpel
- Pull out baby & clamp/cut cord LONG
- Pull out placenta
- Pack & clamp
- Back to work on Mum

EQUIPMENT REQUIRED

- Big scalpel (x2)
- Scissors (sharp)
- Extra set of hands (instead of retractors)
- Suction & big swabs (depending on output)
- Clamps & Big Vicryl (or other suture)

This is an Emergency Medicine procedure

Take Home

- Women have been delivering babies for a while, it will probably be fine
- Breech = sit on hands & use gravity
- Shoulder dystocia = lie flat, knees2nipples, suprapubic pressure, all 4s [mum pushing & gentle in-line traction]
- PPH = >500mL, treat early & hard in the ED
  - Causes = 4 T's [tone, trauma, tissue, thrombin]
  - Mx = Rub fundus, call help, resuscitate, find cause, give drugs, bimanual compression
- No rush to deliver placenta
  - Don't pull too hard, too early → if you do, put it back & bimanual compression
- Pre-eclampsia = BP >140/90 + just about anything else [proteinuria]
- Eclampsia Mx = MgS04, then treat as status PRN, arrange delivery
- PMCS = ALS + Cut hard & do it early [Not an O&G procedure]

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