

The Paradigm Shift from DR. ABCDE to Sr. MARCH-OT in PPH management Algorithm



1

**The Placental bed physiology**

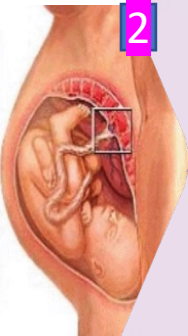
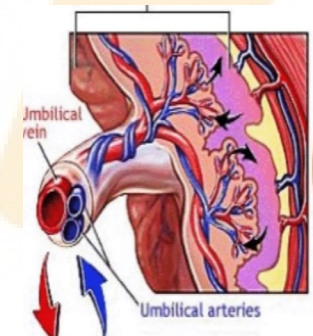
Spiral arteries open into the lacunar on the maternal side of the placental bed and **The placenta act as a stopper at the bottom of sink (The lacunar pool)**

At the time of delivery, blood flow to the uterus reaches 500-900 mL/min

**Judicious use of uterotonics , allowing adequate time for their peak blood levels and action will enhance the uterine contraction that tourniquets the spiral arteries . ( Peak oxytocin levels 60 sec after IV Bolus ; 3-7min after IMI injection)**

**Do not rush to pull out the placenta – allow time for uterus to contract and Auto separation of placenta then deliver placenta**

2



3

Tourniquet the Uterus and Stop the bleeding

**Close the Tap first**

DR –Danger , Response

(The crucial delay in Closing the Tap )

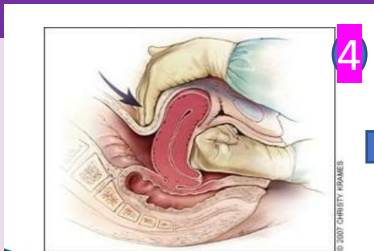
- A - Air Way opening / control
- B - Breathing support , HFO2 and HFNO2
- C - Circulation support
  - IVC-Blood , Drugs , TXA
- D - Disability & Do Not forget BGL
- E - Environment – keep warm



- SR –Shout for Response
- M – Rub & Manual compression, sustained pressure – **Closes the Tap**
- Medical compression- Uterotonics
- A – Air way opening / control
- R – respiratory support & HF02
- C – IVC – blood , Drugs , TXA
- H – Hypothermia prevention.
  - H+ (Prevent acidosis)
- OT - Early call for theatre team, Early decision to Operative interventions

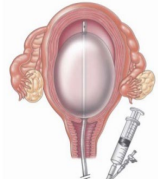
Manual compression externally / using Uterine tamponade balloon will close the tap while allowing the uterine muscles to contract and close the spiral arteries.

4



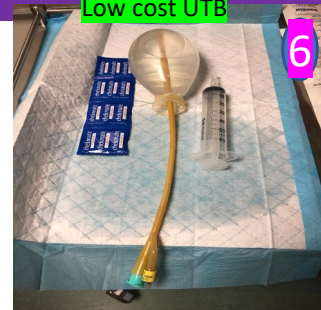
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Internal Uterine Tamponade-Bakri balloon

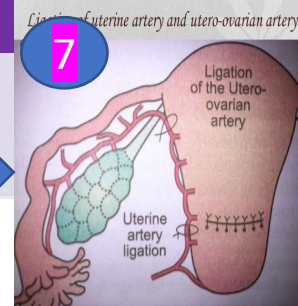


Low cost UTB

6

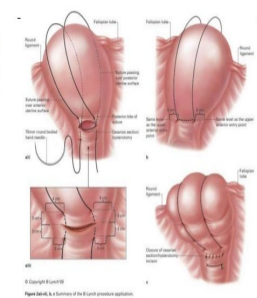


7



8

B-Lynch "Brace" Suture



Whole blood replacement is superior

Whole blood shelf life = 35 days @ (4 c)  
>If not used in 20 days – separate to components to red cell and platelets and Store plasma longer @ (-25'c) (35 months)

> Separate Albumin and Cryoprecipitate (-25'c) - (36 months)

Early Mobilisation of senior help and Theatre staff saves patients in severe PPH

1:1:1 or 2: 1:1 or TEG (ROTEM)

- Quick real time feed back on deficient component
- Lab team can concentrate on making components ready
- Expensive and needs extra training