MASSIVE OBSTETRIC HEMORRHAGE-

HOW TO TACKLE?

DR J P RATH

CONSULTANT CRITICAL CARE OBSTETRICS

What is massive----
and why is it difficult to handle

Massive Obstetric Hemorrhage
What is it??

- Blood loss from uterus or genital tract >1500ml
- Fall in Hemoglobin > 4g/dL
- Acute transfusion > 4 units blood
- Any blood loss seriously compromising life of patient

Massive Obstetric Hemorrhage

- Blood loss may be:
  - Antepartum:
    - Placenta previa
    - Abruptio placentae
    - Uterine rupture
  - Postpartum
    - Uterine atony
    - Retained products
    - Genital tract trauma
    - Uterine inversion
    - Coagulation disorder

Massive Obstetric Hemorrhage

Blood loss notoriously difficult to assess in Obstetrics May be concealed

Presence amniotic fluid makes accurate estimation challenging

Hypotension is a late sign in the parturient

Extreme Haemorrhage: Type of Delivery

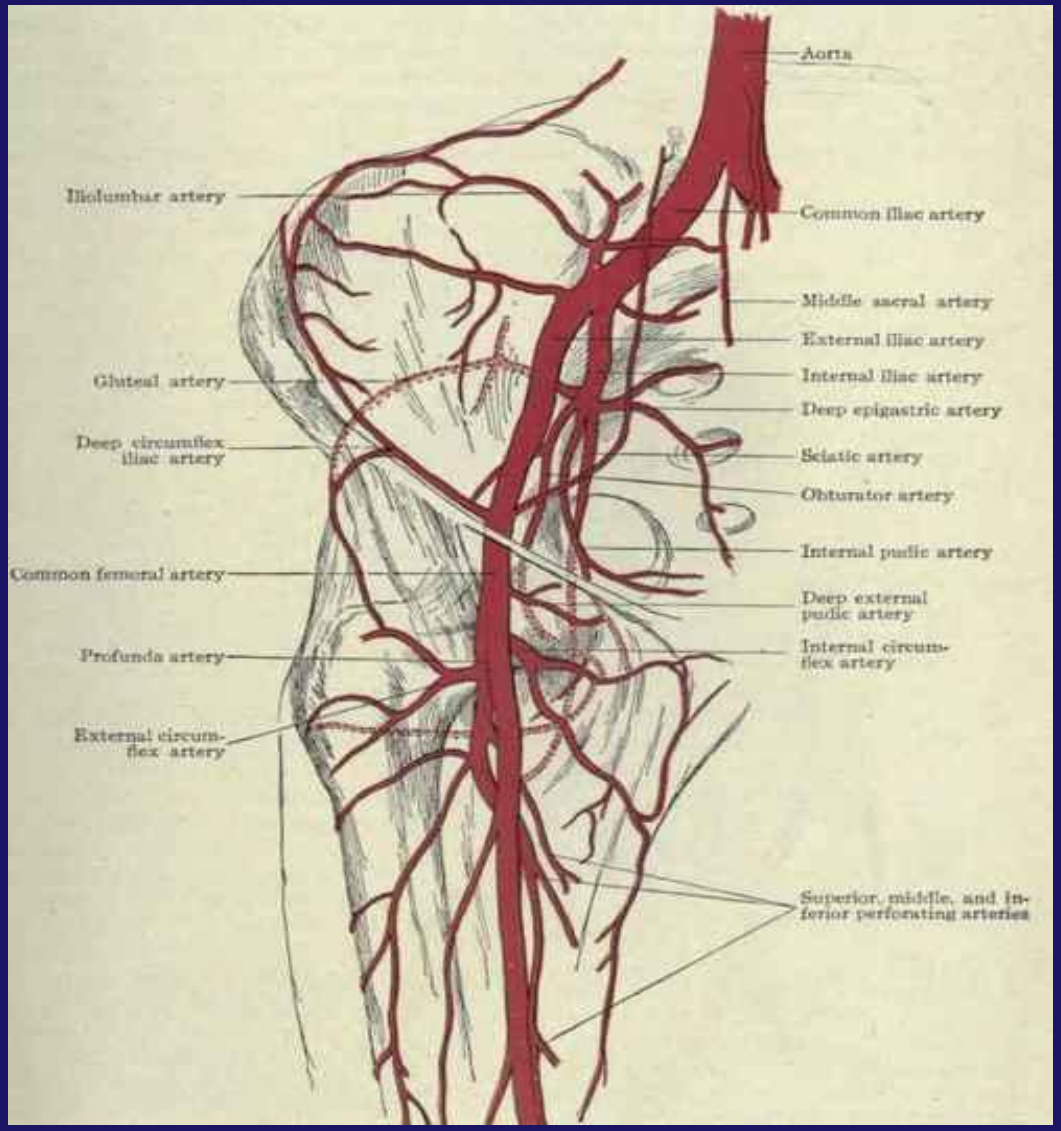
normal vaginal	20%
instrumental vaginal	8%
elective caesarean	13%
emergency caesarean	50%

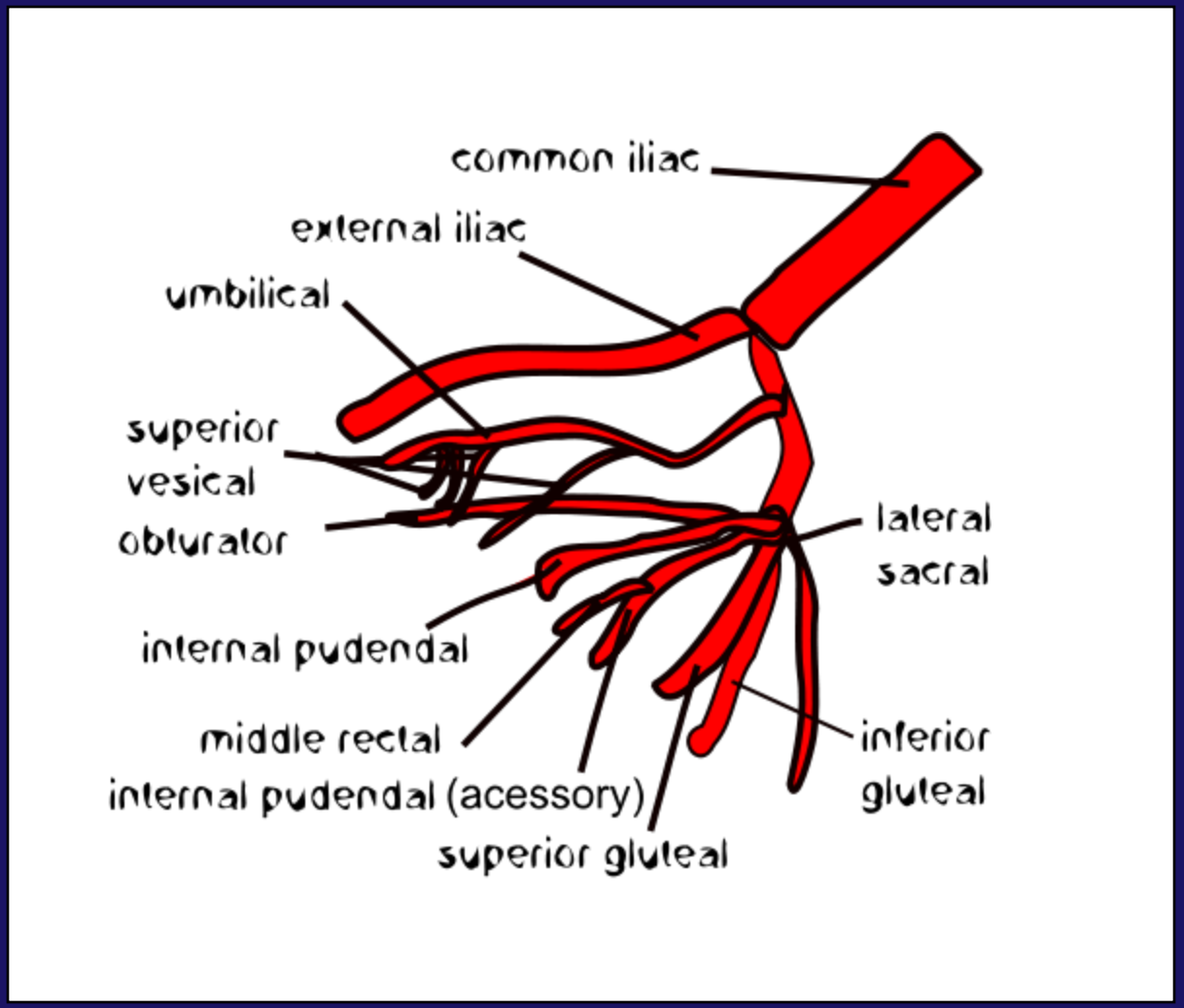
ASSESSING SEVERITY

Loss in ml	Appearance	MAP	Heart Rate	Respiration
500-1000	Normal	80-90	<110	normal
1000-1500	Clammy, sweating	60-80	120	tacchypnea
1500-2000	Clammy, collapsed	50-60	thready	shallow
2000-2500	Unconscious	<40	Unrecordable	Air hunger, gasping

Count down in reverse

- Very clear about Management
- **HELP**
- Time in hand
- Resource setting
- Inform relatives
- ICU shift
- SOS shift with precaution to tertiary setting


Aorta
Iliolumbar artery
Common iliac artery
Middle sacral artery
External iliac artery
Gluteal artery
Internal iliac artery
Deep epigastric artery
Deep circumflex iliac artery
Sciatic artery
Obturator artery
Internal pudic artery
Common femoral artery
Deep external pudic artery
Profunda artery
Internal circumflex artery
External circumflex artery
Superior, middle, and inferior perforating arteries


common iliac
external iliac
umbilical
superior
vesical
obturator
lateral
sacral
internal pudendal
middle rectal
internal pudendal (acessory)
superior gluteal
inferior
gluteal

Approach to Severe Haemorrhage

- Anticipate
- Prepare
- Recognize
- Mobilise assistance
- Communicate
- Diagnose
- Delegate

Resuscitation

- High inspired oxygen
- Left lateral tilt if antepartum
- Adequate venous access (2), central line with Rapid infuser kit
- Pressure bags
- Crystalloid or colloid until blood available
- Replace blood 1:1 if using colloid, 3:1 for crystalloid
- Vasopressors to maintain BP until circulating blood volume restored

PPH - The 4 “Ts”

- **T**one (uterine atony)
- **T**issue (retained products)
- **T**rauma (cervical and genital tract damage during delivery)
- **T**hrombin (coagulation disorder), eg severe pre-eclampsia

SATISFACTION GUARANTEED

COMPLEXITIES