POSTPARTUM HAEMORRHAGE – NEW THOUGHTS TO AN OLD PROBLEM

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Any emergency is best managed by stepwise progression using an algorithm. We are proposing **'HAEMOSTASIS'** as an Algorithm for management of Atonic PPH :

H- Ask for Help

A- Assess (vital parameters, blood loss) and Resuscitate

E- Establish etiology, Ensure availability of blood. Ecbolics (Oxytocics)

M- Massage Uterus

O- Oxytocin infusion / prostaglandins - IV / IM/ per rectal / intra-myometrial

S- Shift to theatre – exclude retained products and trauma/ Bimanual compression

T- Tamponade – Balloon / uterine packing

A- Apply compression sutures – B- Lynch or modified

S- Systematic Pelvic devascularisation – Uterine / Ovarian / Quadruple / internal iliac

I- Interventional Radiologist – If appropriate, Uterine artery embolisation

S- Subtotal / Total abdominal hysterectomy.

The vast majority (>90%) of massive PPH are due to uterine atony. New knowledge and advances in technology/techniques has helped us to reduce morbidity and mortality. Prostaglandins potentiate the action of oxytocin, hence prostaglandins (IM/IV/ Rectal) should be immediately used when there is no response to oxytocin infusion. During PPH, vast amount of clotting factors are utilized and lost with the bleeding ('wash out phenomenon'). The lack of clotting factors, activation of fibrinolysis, large infusion of fluids, metabolic acidosis and hypothermia aggravates the situation and need to be controlled by giving fibrinogen and other clotting factors. Adequate blood and fluids need to be transfused to maintain the circulation and to prevent shock. Shock is proportionate to blood loss - mild 15%, moderate 30%, and severe 45% - but this need to be calculated based on the woman's blood volume which depends on her weight (approx Blood volume in Litres = 70 X wt in Kg).

Failure to arrest haemorrhage by medical therapy should be followed by a 'Tamponade Test' once trauma and retained tissue are excluded. If the tamponade fails to stop the bleeding, laparotomy and compression sutures (B- lynch or 2 to 5 vertical) should be employed. Failure of this should lead to systematic devascularisation by tying the infundibulopelvic and uterine vessels and/or anterior branch of the internal iliacs. Failure to arrest haemorrhage or deterioration of general condition should prompt subt-total or total hysterectomy.