Obstetric Haemorrhage and the NASG

Obstetric Haemorrhage

Definition: ***obstetric haemorrhage*** *is heavy bleeding during pregnancy, labor or the postpartum*

- Bleeding in excess of 500mL or in any amount that causes changes in vital signs
  - Blood Pressure decreases
  - Pulse increases
- Woman may go into hypovolaemic shock

Obstetric Haemorrhage: Causes

WHEN IN PREGNANCY BLEEDING OCCURS	HAEMORRHAGE DIAGNOSIS OR ETIOLOGY
Antepartum Haemorrhage	Placenta Previa
	Abruption
	Ruptured uterus
Postpartum Haemorrhage	Uterine atony
	Retained placenta/tissue
	Lacerations
	Placenta accreta
Early Pregnancy Haemorrhage	Ectopic pregnancy
	Molar pregnancy
	Complications of abortion
	Retained placenta/tissue
Any of the above etiologies can contribute to the woman developing DIC, disseminated intravascular coagulopathy	

Signs of Hypovolaemic Shock

A woman in shock may show one or more of the following signs:

- Increased pulse/tachycardia
- Decreased blood pressure/hypotension
- Pallor (pale skin)
- Sweating/diaphoresis
- Clamminess
- Cold extremities
- Confusion or agitation
- Loss of consciousness
- May or may not have heavy external bleeding

Obstetric Haemorrhage and the NASG

- The NASG helps in the management of patients with obstetric haemorrhage and hypovolaemic shock.

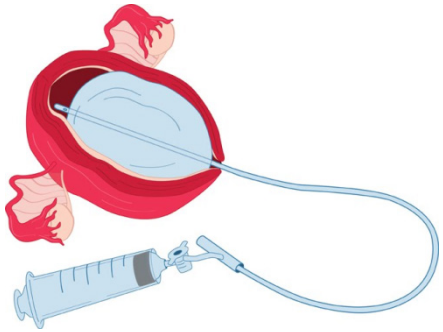
The NASG

NASG FOLDED

NASG OPENED

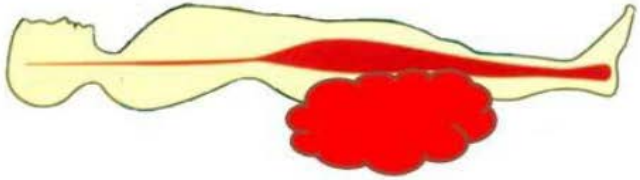
NASG's Unique Role in Obstetric Haemorrhage and Hypovolaemic Shock

- Used with haemorrhage therapies, uterotonics, massage, vaginal procedures, even surgeries
- Does **not** compete with other approaches: Not an either/or situation
- Buys time to access definitive treatment
- A technology that can be used when patient does not respond to uterotonics
- Only technology that reverses shock, until blood transfusions are available



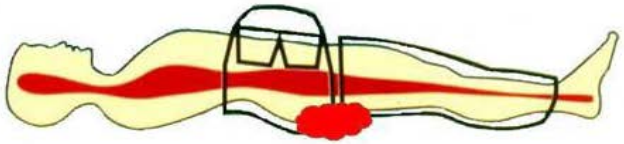
Mechanism of Action

In decompensatory shock, the heart, lungs and brain are deprived of oxygen as blood accumulates in the lower part of the body



In obstetric haemorrhage, blood also leaves the body through the vagina or pools in the retroperitoneal area

Circumferential compression of the abdomen and legs reduces the volume of blood in the compressed areas while expanding central circulation, reversing shock



Decreases the radius of blood vessels. When the radius of a blood vessel is decreased, blood flow through the vessel is decreased

Effects of the NASG

- The NASG provides efficient, simple, and safe circumferential counter pressure
- Reduces haemorrhage in lower body
- However, the NASG is not a tourniquet, it does not completely cut off blood supply to lower limbs
- Decreases arterial perfusion pressure to uterus, comparable to ligation of the internal iliac arteries
- Overcomes pressure in capillary and venous system (15-25 mmHg)
- Reduces transmural pressure, vessel radius, and blood flow

Use of the NASG

- Stabilizes patient while evaluating, transporting, or preparing for definitive surgical treatment
- Can be safely and comfortably used up to 48 hours
- May help avoid unnecessary emergency hysterectomy for intractable uterine atony
- May decrease need for or number of blood transfusions

What the NASG does NOT do:

- The NASG does not avert the necessity for:
  - Evaluation to identify causes of shock
  - Uterotonics if the patient has uterine atony
  - Fluid and blood replacement
  - Therapy for coagulopathy
  - Standard care for treatment of hypovolaemic shock

Contraindication

- Do not use the NASG with:
- A viable fetus (unless there is no other way to save the mother's life and both mother and fetus will die)
- Bleeding above the diaphragm
- Open thoracic wounds

When to Apply the NASG

- When a woman shows signs of hypovolaemic shock from obstetric haemorrhage
- Applying the NASG before inserting an IV may improve access to veins
- Use the NASG along with standard treatment protocols (the NASG does not replace them)