

Challenges in the management of Omphalocele and Gastroschisis

Ernst Muller

Division of Paediatric Surgery

Steve Biko Academic Hospital

Gastroschisis



Omphalocele

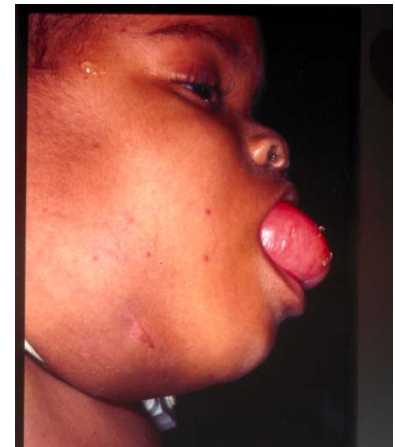


Omphalocele vs Gastroschisis

	Omphalocele	Gastroschisis
Incidence	1:6000	1:4000 and increasing
Associated abnormalities	Common	Rare
Perinatal mortality	Usually low, depending on associated malformations	Low in 1 st world (<5%) High in 3 rd world (>40%)
Long term prognosis	Depending on associated malformations	Good
Initial management	Usually easy	Difficult, especially in 3 rd world conditions

Omphalocele - initial management

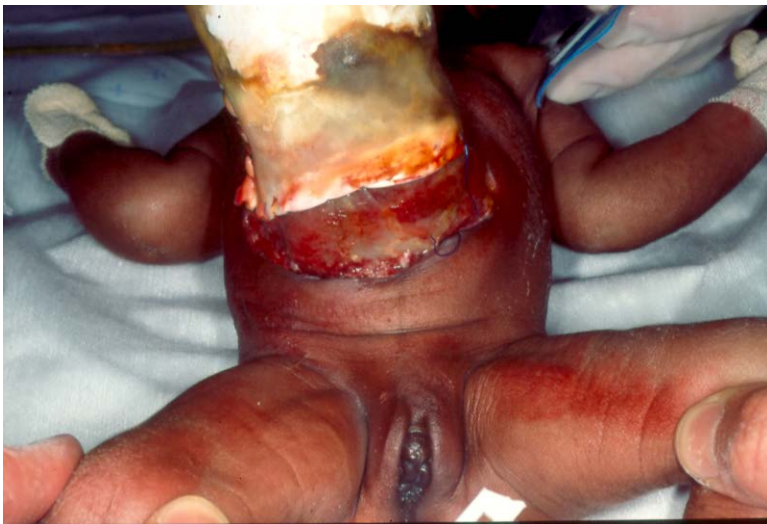
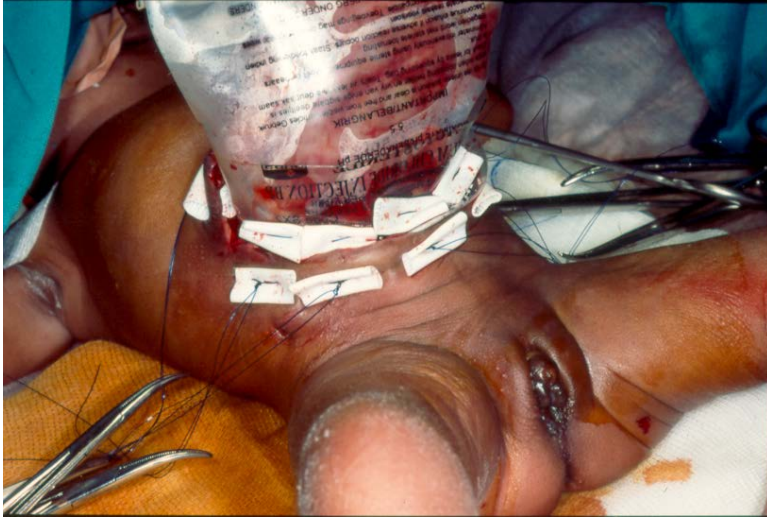
- Delivery in tertiary hospital is desirable
- Caesarian section vs normal vaginal delivery?
- Keep NPO, establish ivi access until intestines start working
- Paint sac with antiseptic, cover with gauze and crepe bandage
- Sonar for associated malformations



Surgical management – Small omphalocele



Big Omphalocele











Gastroschisis – initial management

- Baby prone to hypothermia, dehydration
- Long transport is hazardous, delivery in tertiary hospital therefore very desirable
- Intestine is not functional, therefore:
 - Intravenous access
 - Nasogastric tube
 - Protect intestines
 - Right side position



Management with Silo Bag



Complicated gastroschisis

Closing gastroschisis





Complicated gastroschisis

Atresia



Challenge - Dysfunctional bowel

- Long-term TPN
 - Associated with line sepsis
 - Associated with liver failure
- Intestinal bacterial translocation
 - Sepsis
- Multiple courses of antibiotics
- Multiple visits to ICU
- Death

Why is the mortality of gastroschisis in SBAH so high? What can be done about it?

- High incidence of complicated Gastroschises
- Late referrals with compromised bowel and poor general status (shock, acidosis)
- Limited access to PICU
- Limited access to theatre
- **Substandard nursing care? - high incidence of central line associated bloodstream infections**

Thank you!