

INTRODUCTION

- Congenital malformation requiring surgical corrections in the neonatal period contribute significantly to morbidity and mortality.
- Some conditions are acquired or iatrogenic.
- Majority of this problem are amenable to surgical correction in adequately prepared tertiary institutions
- Prenatal diagnosis is crucial if outcome is to be optimized

CRITICAL REQUIREMENTS FOR OPTIMUM CARE OF A SURGICAL NEONATE

- Manpower
- Multidisciplinary Team care approach
- Pediatric surgeon/Neonatal surgeon/fetal surgeon
- Neonatologist/pediatrician
- Pediatric/neonatal nurses
- Neonatal Anaesthesiologist
- Other surgical specialists neurosurgeons, plastic surgeon, orthopedic surgeon, cardiothoracic surgeon, ENT surgeon
- Radiologists
- Pathologist
- Biomedical engineers/technician
- others

INFRASTRUCTURES

- Dedicated ward
- Special care baby unit
- Neonatal intensive care unit
- HDU
- Basic equipment ----incubators, radiant warmers, warming blankets, phototherapy box, oxygen concentrators oxygen cylinders
- Side lab/adequately equipped laboratory with trained personnel
- Blood bank
- Theatre adequately prepared for neonatal surgery
- Instruments
- Monitoring devices
- Ventilators
- Heating devices



EQUIPMENT













PRE OPERATIVE PREPARATION

- Evaluation, diagnosis and parental counseling
- Consent
- Intravenous access
- Blood workup
- Fluid/electrolyte/nutrition
- Vitamin k
- Antibiotic therapy
- Maintenance of body temperature

INTRAOPERATIVE CARE

- Transportation
- Timing of surgery emergency/elective
- Checklist
- Appropriate temperature
- Sutures/instruments/Tubes/intubation
- Monitoring devices
- Fluid warming devices
- Antibiotics

RUNDOWN OF SOME SURGICAL CONDITIONS

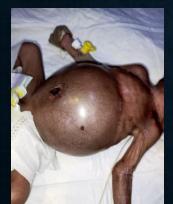
- Head & Neck
- Cystic hygroma
- Cervical teratoma
- Co anal artesia
- Neural tube defects







- GIT anomaly
- Oesophageal atresia
- Pyloric stenosis
- Duodenal atresia
- Jejunal-ileal atresia
- Malrotation anomaly spectrum
- Hirschsprung's disease
- Anorectal malformations

















ACQUIRED/IATROGENIC CONDITIONS













COMPLEX ANOMALIES

- Anterior abdominal wall defects
- Omphalocele
- Gastroschisis
- Bladder extropy complex
- Epispadias/hypospadias
- PUV/PUJ obstruction
- Diaphragmatic hernias
- Conjoined twin
- Skeletal anomalies









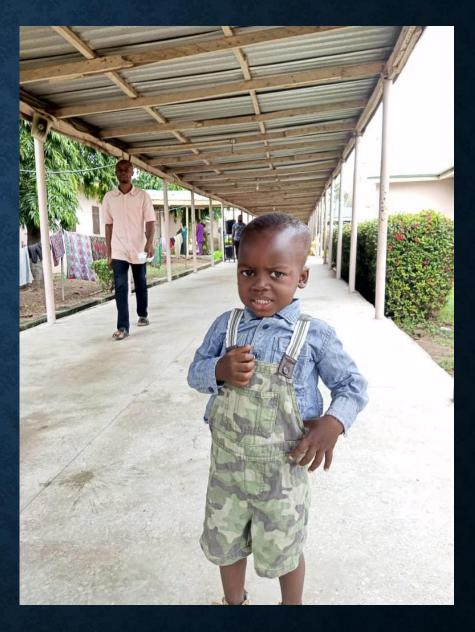












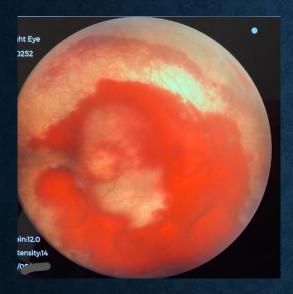
POST OP CARES

- Cardio respiratory support
- Temperature control
- Monitoring
- Nutrition
- Wound care
- Plaster reaction / dressing agent

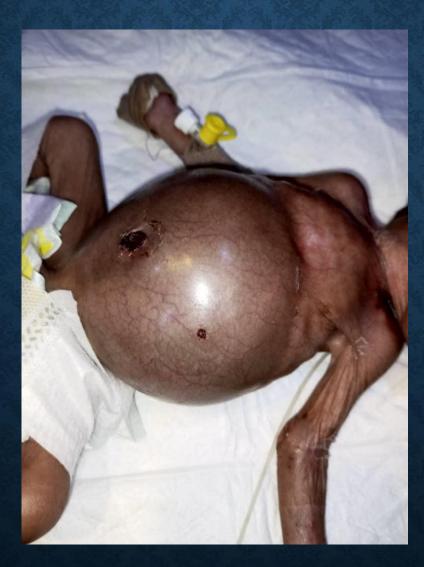
FOLLOW UP

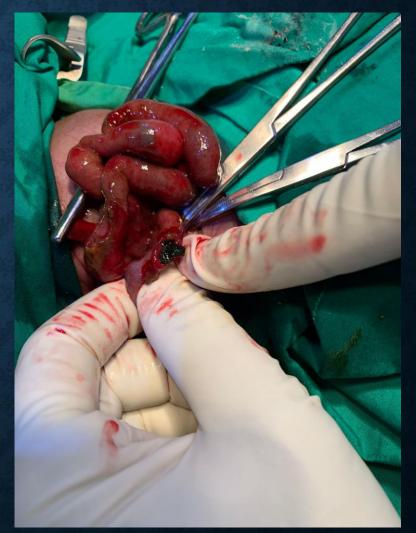
•Some surgical conditions requires long term follow up.

INTER-INSTITUTIONAL COLLABORATIVE CARE









FUTURE

- Establishments of centers of excellence for some malformations to improve outcome
- Improvements in funding
- Investment in training and retraining of care providers
- Special funding for care of the newborn





THANK YOU