Greater Glasgow & Clyde
Neonatal Guidelines

Neonatal pre-surgical care pathway:
Fetal airway compromise detected antenatally

1. New antenatal diagnosis of fetal airway compromise

- Refer to Fetal Medicine Department at SGH (or Fetal Medicine Clinic, Yorkhill), irrespective of base hospital for:
  - Detailed fetal USS with assessment of degree of airway involvement
  - Multidisciplinary counselling from Fetal Medicine and Paediatric ENT
  - Later reviews should include
    - Regular USS to monitor the location, size and structure of neck mass, liquor volume, placental position and presence of complications
    - Fetal MRI to determine the type of lesion, airway calibre and presence of associated anomalies
    - Neonatal consultation
    - Site visit to NICU, Yorkhill
- As the pregnancy progresses and the degree of fetal airway compromise is established an airway multidisciplinary team (MDT) discussion should ensue to facilitate delivery planning. This meeting should be co-ordinated by the Fetal Medicine consultant and the conclusions must be clearly documented
  - The airway MDT should comprise of:
    - Obstetric anaesthesia, fetal medicine, neonatology, paediatric ENT, paediatric anaesthesia and ECLS representation where appropriate
  - The airway MDT should:
    - Assess risk stratification
      - High risk (polyhydramnios, tracheal compression or deviation, large anterior neck mass)
      - Low risk (none of above)
    - Assess delivery options – site and method
      - SGH versus Yorkhill
      - If fetal condition considered very high risk ensure plenty of notice for booking an operating theatre for delivery at Yorkhill

- The method of delivery will be determined by the risk factor stratification (see below)
    - Feedback to parents
- Regular review / updates at weekly Fetal Medicine MDT meetings
    - Discuss at Fetal Medicine MDT meeting 2 weeks prior to planned delivery
    - NICU in both SGH and Yorkhill to be consulted re timing of delivery to ensure neonatal cot available and that appropriate teams are aware
    - Antenatal details to be available to SGH and Yorkhill NICU staff
        - Counselling details
        - Risk stratification
        - Results of the airway MDT meeting and feedback to parents

2. Delivery following antenatal diagnosis of fetal airway compromise

Fetal Risk Category	Delivery Method	Teams present	Delivery Site
Low	Elective CS with no delayed cord clamping / OOPS	Neonatologist, ENT, Paediatric anaesthesia	SGH
High	Elective CS with maintenance of feto-maternal circulation (OOPS / EXIT)	Neonatologist, ENT, Paediatric anaesthesia	SGH / RHSC
Very High	Elective CS with EXIT ± ECLS	Neonatologist, ENT, Paediatric anaesthesia, ECLS Team	RHSC

CS = Caesarean section, OOPS = operation on placental support, EXIT = ex utero intrapartum treatment, ECLS = extra corporeal life support

- Unplanned deliveries will be at SGH

3. Postnatal patient pathway from SGH

- Individualised assessment of need for transfer to RHSC for ongoing management
- Stabilisation of airway
- Secure intravenous access and obtain baseline bloods including cross match sample

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Title

Neonatal Pre-Surgical Care Pathway – Diaphragmatic Hernia

Implementation / Review Dates

Implementation 01/08/10 Review Date 01/08/12