Sacrococcygeal teratomas in children in sub-Saharan Africa

Lydia Parker
Supervised by Miss Roba Khundkar & Prof Kokila Lakhoo

INTRODUCTION

Background
- Sacrococcygeal teratoma (SCT) is the most common congenital tumour with an incidence of 1 in 35,000 to 40,000 live births.
- Female to male ratio of 4:1.
- Good prognosis with prompt and complete surgical excision.

Aim
- To conduct a literature review of sacrococcygeal teratomas in children in sub-Saharan Africa.

Methods
- Literature search using PubMed identified 7 relevant cohort or case studies (within the last 20 years).

THE METIC ANALYSIS

Hidden mortality burden
- Very few hospital presentations compared to the estimated affected population.
  - E.g. only 15.2% of the estimated Ugandan population affected by SCT presented to Mulago National Referral Hospital, Kampala during 2012.

- Likely high intrauterine and perinatal mortality e.g. from obstetric complications such as dystocia, tumour rupture or haemorrhage.

- Antenatal diagnosis (see Fig. 2) improves outcomes by allowing fetal intervention or planned Caesarean sections, but access to antenatal care is currently limited in sub-Saharan Africa.

Late presentations
- Many patients present late, by which time tumour complications have often set in.
  - E.g. 80% of patients with SCT at Ilorin Teaching Hospital, Nigeria (from 1999-2012) presented with tumour complications.
  - E.g. 41.6% of patients with SCT at Jos Teaching Hospital, Nigeria (from 1990-2008) presented after the neonatal period.

- Delays in presentation linked to poverty and lack of access to healthcare facilities.

Patient outcomes
- Management complicated by lack of specialist paediatric surgeons and anaesthetists and by lack of neonatal intensive care facilities.
- Short-term post-operative complications.
  - E.g. Post-operative wound infection or wound dehisence in 9/21 patients treated for SCT at Maiduguri Hospital, Nigeria (from 1985-2003).
  - Some limited long-term follow-up data.
  - E.g. 2 cases of recurrent disease requiring re-excision and 5 cases of functional impairment (e.g. urinary incontinence, patulous anus) in a subset of 21 patients with SCT at Jos Teaching Hospital, Nigeria (from 1990-2008) followed up for a median duration of 6 years.

Fig. 2: Antenatal ultrasound showing a large sacrococcygeal teratoma (Tuladhar et al., 2000).

CONCLUSIONS

- Improved access to appropriate antenatal and obstetric care needed to address preventable mortality and morbidity due to SCTs.
- More multi-centre and longer-term data needed.

References: