

# Foetoscopic Laser Ablation: The Initial Experience

Tan LN, Ghani HP, Rohanita AZ, Naidu A

Hospital Raja Permaisuri Bainun, Jalan Raja Ashman Shah, Ipoh, Perak, Malaysia

## ABSTRACT

**Introduction:** Monochorionic pregnancies are at risk of adverse outcomes in pregnancy, which include twin-to-twin transfusion syndrome (TTTS), twin anaemia-polycythaemia sequence (TAPS), twin reversed arterial perfusion sequence (TRAP), selective intrauterine growth restriction (sIUGR) and discordant anomaly. Fetoscopic laser ablation (FLA) of vascular anastomoses have been shown to improve the survival of fetuses with complications from placental vascular anastomoses. **Objectives:** We hereby present our initial experience of foetoscopic laser ablation in three cases of monochorionic pregnancies in Hospital Raja Permaisuri Bainun, Ipoh. **Methods:** Two cases of monochorionic diamniotic (MCDA) pregnancies with TTTS (one with stage III TTTS and sIUGR at 25-week pregnancy, and another with stage II TTTS and sIUGR at 26-week pregnancy) and one case of TRAP sequence were treated with FLA under local anaesthesia. These cases were performed between March and April 2019. **Results:** For cases with TTTS, FLA of vascular anastomoses was completed by employing the Solomon technique to reduce the risks of TAPS, whilst for the case with TRAP sequence, cord occlusion was achieved with laser ablation. There were no intra-operative and immediate post-operative complications for all three cases and all women were discharged well the day after surgery. **Conclusions:** The initial experience of FLA in our centre has shown that the procedure is feasible with low rates of immediate post-operative complications from the procedure.

OB-36

# Effectiveness of Foetal-Scalp Blood Lactate Sampling (FBS) in Reducing Caesarean Section (CS) Rates in Cases of Suspected Foetal Compromise during Labour – A Retrospective Analysis in Hospital Bintulu, Sarawak, Malaysia

Lucas Luk Tien Wee<sup>1</sup>, Harris Ngoo Suharjono<sup>2</sup>, Chiang Kin Chun Marcus<sup>2</sup>, Mah Jia Mien<sup>2</sup>, Nur Khalisah Abdul Khudus<sup>3</sup>

<sup>1</sup>Landmark Medical Centre Sdn Bhd, Johor Bahru, Johor, Malaysia, <sup>2</sup>Hospital Umum Sarawak, Kuching, Sarawak, Malaysia, <sup>3</sup>Hospital Serdang, Kajang, Selangor, Malaysia

## ABSTRACT

**Introduction:** In Malaysia, CS rates are rising and presumed foetal compromise is a significant contributing factor (~30%). The specificity of intrapartum CTG in diagnosing foetal acidosis is poor (~50%), while introducing FBS yields ~93% specificity. Yet, the practise of FBS in the local setting is limited to a handful of hospitals. FBS is recommended in many developed nations, due to its purported effectiveness in reducing unnecessary obstetric interventions. **Objectives:** To determine the effect of FBS, in cases of suspected intrapartum foetal compromise, on CS rates in Hospital Bintulu. **Methods:** Retrospective cross-sectional study comparing foetal and maternal outcomes. Study Population comprised of all parturients at Hospital Bintulu between August 2016-January 2017. Data was extracted from the Hospital electronic patient database and results were tabulated in Excel Form, before being translated into SPSS2 for further analysis. **Results:** 309 subjects, with 144 CS (46.6%). 51 (16.5%) FBS performed (28 vaginal deliveries (VD), 23 CS), 17% reduction in CS rate (p=0.24). There was no difference in mean umbilical artery pH (7.29 vs 7.26) (ANOVA p=0.07). There was also no statistical difference between admission to nursery (p=0.54) and durations of maternal and neonatal hospital stay (ANOVA p=0.27 and 0.32 respectively). Only 1 FBS had to be repeated due to clotting. **Conclusions:** Our sample size was relatively small and FBS did not appear to reduce CS rates significantly. However, despite the seemingly modest reductions of FBS on CS rates, its clinical significance in reducing unnecessary CS cannot be underestimated.