Exit or not to Exit? A Review on Delivery of Foetuses with Large Neck Masses

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ABSTRACT

Introduction: Ex-utero intrapartum treatment (EXIT) is a procedure in which foetal airway is secured prior to delivery of placenta in an effort to improve foetal outcomes. **Objective:** The aim is to review the outcomes of foetuses with large neck masses in HKL from January to April 2019. **Method:** We report three cases of large foetal neck masses during the study period. All of them were detected via ultrasound in the third trimester. Foetal MRI was performed between 34-36 weeks to determine the severity of intraoral extension and anticipation of oropharyngeal narrowing to guide the need for an EXIT procedure. The multidisciplinary team included the Maternal-Foetal-Medicine specialist, paediatric anaesthesiologist, otorhinolaryngologist, paediatric surgeons, neonatologist and obstetric anaesthesiologist. The decision for the EXIT procedure was made antenatally based on the ultrasound and MRI findings. **Results:** Ultrasounds were valuable in determining the nature and size of the neck masses. Polyhydramnios and upper airway obstruction can be demonstrated on ultrasound, but MRI can be used as an adjunct to guide the need for EXIT procedures. Based on the MRI, one foetus had intraoral extension with narrowing of oropharyngeal airway, while two other foetuses did not have an airway obstruction and as predicted, only one foetus required an EXIT procedure. All three foetuses had good outcomes and are well. **Conclusion:** EXIT procedure is an essential option for foetuses with large neck masses and antenatal MRI's can be used as an adjunct for anticipation of airway compromise to guide the need for EXIT procedures.

Maternal Obesity and Neural Tube Defects – A Malaysian Perspective

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ABSTRACT

Introduction: Obesity is associated with an increased risk of having a pregnancy affected by neural tube defect (NTD). It is not clear whether this relationship can be observed in the Malaysian setting. **Objectives:** To investigate the relationship between maternal body mass index (BMI) and NTD. **Methods:** This is a single-centre retrospective analysis involving women who delivered a singleton with NTD in 2015, including live birth and termination of pregnancy. Summary data of all deliveries in the hospital was obtained from the National Obstetric Registry. Maternal body mass index (BMI; kg/m^2) at the first antenatal visit was obtained and categorised into six groups: underweight (<18.50), normal weight (18.50-24.99), overweight (25-29.99), obesity class I (30-34.99), obesity class II (35-39.99) or obesity class III (≥40). **Preliminary Results:** A total of 13 (0.09%) women had NTD-affected pregnancies, and the most common subgroup was for anencephaly (n=7;0.05%). Among the cases of NTDs, mean age of subjects is 30±4.04. The majority of subjects were Malays (53.8%). Almost 70% of subjects were multiparous and 53.8% are non-diabetes. Average time of booking was 13.08±5.39 weeks. Mean maternal BMI was 26.8±5.25kg/m2. The percentages of women categorised as underweight, normal, overweight and obese class I are 7.7%, 38.5%, 30.8% and 23.1% respectively, with the majority (53.9%) of subjects has more than normal BMI. Compared to women with BMI <25, there were no significant difference between age (p=0.638), ethnicity (p=0.372), parity (p=1.000), diabetes status (p=0.050) and time of booking (p=0.488) in women with BMI≥25. This lack of differences in all other maternal characteristics between women with normal and increased BMI could indicate that BMI itself may be the risk factor for NTDs.