Can Neonatal Birth Weight be predicted using Umbilical Cord Circumference?

Nur Aini Mohd Zain, Nur Azurah Abdul Ghani, Muhammad Azrai Abu, Chew Kah Teik, Nor Azlin Mohamed Ismail, Shuhaila Ahmad

Department of Obstetrics and Gynaecology, Universiti Kebangsaan Malaysia Medical Centre

ABSTRACT

Objective: To determine the association between umbilical cord circumference (UCC) and actual foetal weight. Methods: This was a prospective study conducted in a tertiary university hospital between January 2018 and October 2018. Participants were obstetric patients planned for an elective caesarean delivery. The umbilical cord circumferences (UCC) were measured on the day of admission by a trained personal and estimated foetal weight was predicted using a formula utilising the value from UCC findings. Subsequently, the actual foetal birth weight was recorded after the delivery of the baby. Results: A total of 72 patients were recruited into the study. The mean UCC was 45.20+4.49mm. Male foetuses had larger UCC (45.57+3.78mm) as compared to female foetuses (44.86+5.10mm). The mean estimated foetal weight derived from a formula based on UCC was 3649+0.55kg. A larger measurement of UCC associated with heavier actual foetal weight. A cut off point of 50mm of UCC was associated with actual foetal weight of 4kg or more. The estimated foetal weight using UCC formula has higher specificity compared to conventional method with no significant difference in the actual foetal weight. Conclusion: There was positive correlation between the UCC and the actual foetal weight. Hence, sonographic assessment of the UCC may improve the prediction of foetal weight.

OB-16

Successful Transabdominal Cervico-Uterine Cerclage during Pregnancy for the Treatment of Cervical Insufficiency: A Case Series

Chua Ai Chen, Albert Tan Chao Chiet, Tham Seng Woh

Department of Obstetrics and Gynaecology, Hospital Melaka

ABSTRACT

Introduction: Transabdominal cerclage was first described in 1965. This procedure aims to strengthen the cervix by placing a suture at the level of the internal os. The main indications for transabdominal cerclage are a grossly deficient cervix, an absent cervix and previous failed elective vaginal cerclage. Some of the complications of transabdominal cerclage are bleeding from uterine vessels, visceral or major blood vessel injuries and miscarriage. Objectives: To describe two successful pregnancy outcomes following transabdominal cerclage in women with disrupted and absent cervix. Method: Both patients were followed up from pre pregnancy, antenatal to postpartum period between 2015 till 2017. Description: We report two cases of successful transabdominal cerclage. The first case was for a 28, G3P2 at 14+4w who had history of trachelectomy done 1 year earlier for CIN III and adenocarcinoma-in-situ. The second case was for a 29, G2P0+1at 12+3w who had a history of LLETZ done for CIN III. Both operations were done under spinal anaesthesia using Mersilene tapes which were placed at the cervicoisthmic junction and the knots were tied posteriorly in the pouch of Douglas. The patients were discharged well one week after the operation. Results: Both patients carried their pregnancy until term and had elective caesarean section done at 37 weeks. Conclusion: Transabdominal cerclage, if done by skilled personnel provides excellent and safe outcomes in well-selected patients.