

**OP/O – 04**

**MACROSCOPIC PLACENTAL PARAMETERS OF HEALTHY, TERM NEWBORNS DELIVERED TO HEALTHY MOTHERS IN A TERTIARY CARE CENTRE IN SRI LANKA**

Ranaweera, GG<sup>1</sup>, Ranaweera, AKP<sup>2</sup>, Marious, WDS<sup>2</sup>, Abhayasundara, D<sup>2</sup>, Priyani, AAH<sup>1</sup>

<sup>1</sup> Department of Pathology, Faculty of Medicine, University of Colombo, Sri Lanka

<sup>2</sup> Department of Obstetrics and Gynaecology, Faculty of Medicine, University of Colombo, Sri Lanka

**Introduction**

Examination of the placenta provides many insights into the nature of the in-utero journey of a fetus. Placental weight (PW) is one of the main parameters assessed in the pathological examination of placentae. The PW in each case is compared with standard weight charts for the stated gestation. The charts currently used for this purpose are developed based on data obtained from European countries. No weight charts are available for South Asian countries.

**Objective**

To describe the PW and other macroscopic parameters of normal placentae at term and to determine whether PWs are comparable to those given in European weight charts.

**Design**

A prospective descriptive cross-sectional study was conducted in the Professorial Obstetric Unit of De Soysa Hospital for Women, involving the examination of 67 placentae.

**Methods**

We examined the macroscopic parameters of 67 placentae (30/67 male) of healthy mothers who delivered healthy newborns via normal vaginal delivery at term. Fresh PW were compared with existing weight charts. Fetal to placental weight ratio was calculated.

**Results**

The POA of the placentae ranged from 37+3 – 41 weeks. Mean placental weight (fresh) for male and female fetuses were 379.96g and 440.53g and ranged from 230–525g and 251-633g respectively. PW was within the normal range for the gestational age in 60% and less than the normal range in 40%. Umbilical cords had a mean diameter of 12.39 mm. All had three vessels. Hypo/hyper/normal coiling was seen in 3.0%, 26.9%, and 43.5% respectively. The mean birth weight was 3.02 kg (Range: 2.54 – 3.68 kg). Fetal to placental weight ratio was less than normal/normal/more than normal in 11.67%, 55%, and 33.34% of cases suggesting reduced, normal, and increased placental efficiency respectively.

**Conclusion**

Close to half of the otherwise healthy newborns in this population showed placental abnormalities when compared with European standards. A larger scale study is required to determine whether these changes are due to factors inherent to populations in our parts of the world and to develop our very own placental charts.

**Keywords**

placental weight, fetal /placental ratio, healthy newborns