# EP.0242 CORD LENGTH AND ARTERIAL LACTATE OF BABIES WITH NUCHAL CORD IN NIGERIA.

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**•Introduction:** The perinatal outcomes of fetuses with nuchal cords depend on institutional capacity for intrapartum monitoring and emergency interventions. Outcomes of fetuses with nuchal cords however remain to be optimally documented in Nigeria. This study aimed to compare the umbilical cord lengths, umbilical artery lactate concentrations and stillbirth rates of newborns with nuchal cord and matched-controls.

**Methods**: All babies born with nuchal cord between 2015 and 2016, and gestational age-matched controls were prospectively recruited. The sum of cord lengths from the placental and neonatal ends for each baby was recorded. Umbilical artery lactate concentration was measured with Lactate-Plus meter (Novo-Biomedicals). The cord length, liquor status, mode of delivery, APGAR score <7 at 5minutes and stillbirth rates were compared with controls.

**Results:** There were 144 babies with nuchal cords and 4,218 deliveries within the period, giving an incidence of 3.4%. Babies with nuchal cords had higher cord length (57.7cm vs 45.4cm; p<0.01), with a positive correlation between cord length and number of loops (r = 0.5, P<0.01). Twenty-three and five babies had meconium-stained liquor in the nuchal and control groups respectively (16% vs 3.2%; RR =4.6). Babies with nuchal cord had significantly higher mean umbilical artery lactate (4.93mmol/L vs 3.58mmol/L; P = 0.04). Stillbirths were higher in the nuchal cord group, but not significantly (7 vs 2; p= 0.178).

**Conclusion:** Nuchal cord is associated with significantly longer cord length, higher cord lactate concentration and adverse perinatal outcomes in Nigeria. Prenatal reporting may improve intrapartum preparedness.