Objectives: To investigate whether umbilical cord length (CL) is more recurrently associated with certain intrapartum complications, and to identify the correlation between (CL) and placental weight (PW), birth weight (BW), baby length (BL) & parity.

Subjects and methods: (CL), (PW) & (BW) were studied prospectively in 131 pregnant participants with single fetuses delivered in Misurata central hospital between January 2012 and February 2013. Patients divided into 3 groups according to (CL) measurement at delivery and compared with each other. Data collected and analysed using SPSS package. P-value considered to be significant if (< 0.05).

Results: mean (CL) was 60 cm ± 16.23. 91 cords (69%) of normal length (40-70cm). The 3 groups of normal, short and long (CL) were not significantly different in age, pregnancy, labour characteristics and perinatal outcome but were significantly different in parity status (r=0.19 ,p<0.05) & entanglement of cord( p<0.001). (CL) association with intrapartum complications was not significant (p > 0.05) as well as between (CL) and incidence of urgent C/S (p > 0.05). Relation between nuchal cord & incidence of urgent C/S was positively significant (z = 3.11, p< 0.001). Positive correlation between (CL) and (BW) (r=0.21,p<0.05) as well as (PW)(r=0.2,p<0.05). No significant correlation between (CL) and (BW)(r=0.053,p >0.05), but a significant correlation between (BW)and (PW)(r =0.72, p<0.001). Gestational age significantly correlated with (PW)(r=0.19,p<0.05) and (BL)(r=0.36,p<0.01).

Conclusion: No significant relation between (CL) and intrapartum complications but significant association of increasing urgent C/S with nuchal cord incidence. Increasing of (CL) is associated with advancing parity, increasing of (BW) and (PW). Strong correlation between (BW) and (PW) as well as between fetal length and gestational age.