**Comparison of Fenton and Intergrowth 21st growth charts in preterm neonates’-A Retrospective study.**

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**Introduction:** The proportion preterm births are increasing. There are no growth charts for these preterms’ which can be called ideal charts.

**Aims and objectives**: To identify the intrauterine growth status of babies at birth and incidence of extrauterine growth restriction (EUGR) at discharge in babies who are born ≤34weeks of gestational age.

**Material and methods**: This is a retrospective study conducted over a period of 1year between January and December 2019, included neonates born ≤34weeks of gestational age which are admitted and stayed for ≥14days in our hospital. The weight of all babies at birth and at discharge is collected and presented as standard deviation (SD). SGA was defined as ≤-1.28SD. The EUGR status of babies’ was assessed using a criteria of weight difference of >2SD scores between birth and discharge.

**Results**: A total of 118 babies were included who’s mean gestational age and birth weight were 31.6 (±1.42) weeks and 1608.06(±275gms) respectively. The proportion of small for gestational age (SGA) in our group was 13.5% which was comparatively less than Intergrowth 21st growth charts (15.2%). The EUGR proportion in our group were 48.3% and 39.8% according to Fenton and Intergrowth 21st growth charts respectively.

**Conclusion**: There is no significant difference in Fenton 2013 and Intergrowth 21st growth charts in identifying SGA at birth. Fenton growth charts overestimates the proportion of EUGR at discharge compared to Intergrowth 21st growth charts.

Key words: ≤34weeks, SGA, EUGR.