Background With advance in perinatal care, knowledge, experience and technology:

The outcome of the extreme preterm infants (<30 weeks gestation, <1000 g has been upturning; King Faisal Sp. Hospital, we are lacking data for parents counseling, and bench mark for the unit.

Method Retrospective study to evaluate the short outcome experience results for extreme preterm infants whom inborn or transferred to our unit, within 2 weeks after birth, over 12 years. Infants with multiple congenital anomalies, or transferred with complications excluded.

SPSS version 20 to analyze the data collected in case report form (CRF). Several variables studied, the mortality rate and hospital stay were calculated.

Results 324 files studied 92 (28%) met inclusion criteria, 232 excluded 71%, 92 infants, (50% each males and females); All developed RDS (100) Mortality (10/92) 11%; ROP(24/92) 16%; NEC(6/92)%; SEPSIS(40/92) 43%; G+ve was 32%, G+ve was 23%; PNEUMONIA(5/92)%; PVL(3/92) 3%; BPD(16/92) 17%; IVH (17/92) 18%; MENCINGITIES(2/92) 2%; PDA(85/92) 92%, 64% self closed, 9% Indomethacin, 6% ibuprofen, 21% required surgery; length of stay (LOS) mean of 64 days.

Conclusion and recommendation Results comparable to results reported by National Institute of Child Health and Human Development (NICHHHD). Extreme preterm infants should be delivered or transferred within one week to a tertiary care facilities for best outcome.

Diabetes in pregnancy and the risk of severe perinatal complications: data from the French population in 2011

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Results The overall mortality was 17.3%. The average score CRIB-II, SNAP-II and SNAPPE-II was higher for preterm died versus those who survived (13.7 ± 4.1 vs. 5.8 ± 3.2, p < 0.001; 33.8 ± 16 vs. 12 ± 10, p < 0.001 y 52.7 ± 15.9 vs. 15.9 ± 13, p < 0.001, respectively). CRIB II score showed an area under the curve of 0.925 (95% CI 0.859 to 0.991), p < 0.001. A cutoff of 8.5 had a sensitivity 92.9% and a specificity 80.6% for predicting mortality. The SNAP-II score provided an area under the curve of 0.863 (95% CI 0.758 to 0.968) p < 0.001 and a cutoff of 20.5 presented a sensitivity 78.6% and a specificity 83.6%. The SNAPPE II score showed an area under the curve of 0.925 (95% CI 0.859 to 0.991), p < 0.001. A cutoff of 25.5 presented a sensitivity 85.7% and a specificity 82.1%. The correlation was higher for CRIB-II and SNAPPE-II, r = 0.766, p = 0.001.

Conclusion The use of SNAP-II, SNAPPE-II and CRIB-II scores has a high ability to predict neonatal hospital mortality.

Impact of neonatal morbidity on clinical outcomes and predictors of mortality in preterm infants with low birth weight


Results The average risk score calculators is a simple and easy tool to implement in neonatal units. The aim of our study was to evaluate the usefulness of CRIB-II, SNAP-II and SNAPPE-II scores in predicting hospital mortality in preterm infants with low birth weight.

Methods A total of 81 preterm infants with low birth weight and ≤32 weeks of gestation were evaluated. Morbidity and mortality data were recorded and CRIB-II, SNAP-II and SNAPPE-II were analysed. Discriminative value was evaluated by calculating the ROC curve.

Results The overall mortality was 4.1\% (95\% CI 1.6–3.7\%), respiratory distress syndrome (OR adjusted on mother age and gestational age: 2.6 [2.0–3.4] and 1.9 [1.5–2.5]), brachial plexus trauma and/or collarbone fractures in cases of vaginal delivery (8.5 [4.9–14.8] and 2.9 [1.5–5.9]), cardiac malformations (4.4 [3.0–6.5] and 3.2 [2.2–4.7]). In cases of GD, the risk was not increased for these complications compared to the population without diabetes, except for the respiratory distress syndrome (1.2 [1.1–1.3]).

Conclusion The risk of severe perinatal complications remains high in case of pregestational diabetes.