The objective: Evaluation of fetal and neonatal immediate impact of pregnancy hypertensive disease, and a comparison between the severity of gestational hypertensive disease and neonatal outcome.

Materials and Methods This work was based on the analysis of the neonatology registers of the maternity service in Rabat’s university hospital during 2010. We selected the newborns from mothers with gestational hypertension, and we clarified the evolutionary stage of this disease. A standardized form of farm has been established for this purpose.

Results 560 newborns met the analysis criteria, that is 3.69% of all newborns during this period. The average age of the parturients was 28±12 years. Delivery has been caused by Caesarean in 53.2% of cases, perinatal asphyxia was associated in 12.8% of cases. The prematurity rate was 16.8%. The hypotrophy was observed in 44% and macrosomia in 3% of cases. Fetal mortality was observed in 10.7% of cases.

The pêclampsie represents 28.5% of cases, and retroplacentale hematoma which is the most frequent maternal complication was 9.1%. Mortality and neonatal morbidity changes depending on maternal complications. Mortality and neonatal morbidity vary significantly according to maternal complications. In this study, the retroplacentale hematoma, the helpp syndrome and eclampsia are responsible for a high rate of fetal mortality (27.5%), neonatal mortality (12%) and perinatal asphyxia (39.6%) compared to pêclampsie and uncomplicated gestational hypertension.

Conclusion There is a clear correlation between the stage of the gestational hypertension evolution and the newborn’s prognosis. The latter can be improved by a correct maternal prenatal monitoring.

Conclusion The simple Klimek Method is completely compatible with the New Ballard and LMP methods in determining neonatal maturity.

A COMPARATIVE STUDY OF KLIMEK AND BALLARD METHODS IN DETERMINING NEONATAL MATURITY IN IRAN

Background and purpose: Severe prematurity, as the most important factor in premature neonatal mortality, is of paramount importance and accounts for 60–80 percent of neonatal mortality without abnormalities. Therefore, by defining the exact time of fetus maturity, complications and side effects could be predicted and best decisions could be made. Since the present methods are complicated, time-consuming and stressful for the neonates, researchers decided to compare the simple Klimek method with the New Ballard method.

Methods and materials: This study is a descriptive cross-sectional research. Qualified neonates in a single group were examined for maturity by both Klimek and New Ballard methods. Neonate was examined by the first co-researcher with New Ballard method, and immediately examined by the second co-researcher with Klimek method. The second neonate was examined by the first co-researcher immediately by the second co-researcher with Klimek method and then immediately by the second co-researcher with Ballard method. All 229 neonates were examined in this way. The examinations were done in the first 6–12 hours after birth. Analysis of data was conducted in SPSS, using Mann Whitney U and Kappa Coefficient.

Results In 74.6% (171 cases) the same gestational age was obtained by both methods (p=0.664). Also, determination of gestational age by Klimek method and LMP was not statistically different; and 75.9% (174 cases) the same gestational age was obtained by both methods (p=0.943). In 51.5% (118 cases), both methods detected mature neonates (K=0.806).

GENOTYPIC EXPRESSION OF FADS2 IN PRETERM BABIES FED EXCLUSIVELY ON HUMAN MILK VERSUS FORMULA FED

Background Exclusively breastfed premature babies have been shown to have higher intelligent quotient scores and superior cognitive development than those deprived of human milk. However the underlying cause has not been clearly defined.

Aim The aim of this study is to measure genetic expression of FADS2 gene responsible for cognition in babies exposed to different modes of feeding.

Methods Thirty preterm babies were studied for gene expression of FADS2 at birth and three months later. They were randomized into those supported to exclusively breastfeed (15) and those exposed to the normal routine of formula feeding practices in the neonatal intensive care units.

Findings There was no difference between gene expression between the groups at birth. However FADS2 expression was shown to be significantly higher in the breast fed groups at three months of age.

Conclusions Exposure of preterm to human milk potentates cognition through influencing transfer and/or maturation of genetic information responsible for cognition.