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Letters to the Editor

Dear Editor,

Low Birth Weight and Its Related Risk Factors

Birth weight is one of the main factors determining the future physical growth and mental development of newborns, and it is an important indicator of intrauterine growth.[1] The prevalence of Low Birth Weight (LBW) infants is high in developing countries.

In some Asian regions, one in every two infants is born with Low Birth Weight (LBW-weight of newborns less than 2500 g), while in Europe one in every seventeen infants is born with LBW.[2] Due to the paucity of studies investigating LBW-related risk factors in Iran, This study was conducted to determine the prevalence of LBW and its related risk factors in an appropriate sample of neonates in the east of Iran (Shahroud Hospital).

This study was carried out in two separate phases. The first phase was a cross sectional study for the prevalence of LBWs in 1000 neonates. In the second phase, a case-control study was conducted to evaluate the LBW risk factors through using univariate and multivariate logistic regression methods.

From among the study subjects, 7.2% of neonates were underweight and 6.1% of them were born before 37 weeks of gestation. In the final model, only three variables showed significant statistical association with LBW: prematurity ($p<0.001$), high-risk pregnancy ($p=0.002$) and maternal age ($p=0.013$). Odds Ratio (OR) for prematurity was 42.82 (CI; 21.93-83.57), for high risk pregnancy was 2.76(CI; 1.47-5.19) and for maternal age group more than 35 in comparison to 19-35 age group was 4.96 (CI;1.41-17.46). The overall prevalence of LBW was about 10% in Iran (in 2000).[2] The prevalence of LBW in this study was similar to several studies.[2,3] Some studies reported it to be greater than our estimation (10%-13%).[4] However, there were studies with lower than 7% of LBW.[5]

Based on this study findings; prematurity and high risk pregnancy were the most important risk factors for LBW. There was also a reverse association between maternal age and LBW.

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Dear Editor,

We would like to share our experience in using oro-gastric tube in feeding a harlequin baby.

This is the 2nd pregnancy of a lady with prior history of spontaneous abortion. Parents are not consanguineous. To parents' surprise, the baby was born with very strange appearance as the whole face and body was covered by hard, thick and rigid skin with deep fissures (Figures 1 & 2). The ears were underdeveloped. There was severe ectropion and eclabium with chemosis obscuring the globe. External genitalia was ambiguous. Limbs showed pseudo contractures involved all joints with hypoplastic fingers and toes. Nails were absent and hair was hypoplastic. Baby was transferred to NICU immediately and put under humidified environment. Since sucking reflex was poor, the baby was put on bolus oro-gastric tube feeds with expressed breast milk. Coconut oil was applied along with neomycin skin ointment. Isotretinon was prescribed. However, the baby died of septicaemia on 6th day of life.

Figure 1

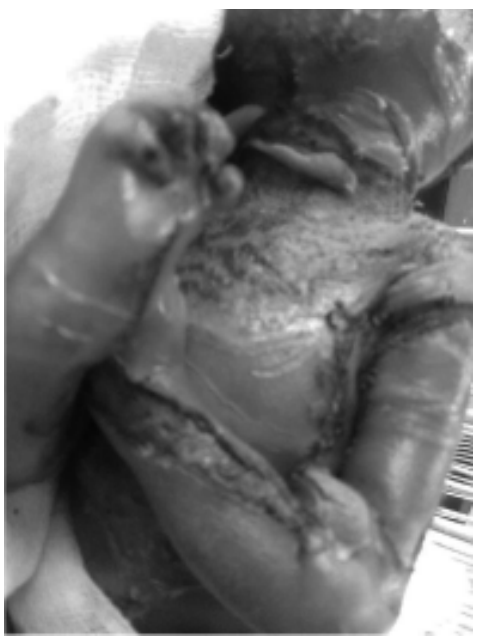

Figure 2

Harlequin baby is a rare congenital abnormality with grave prognosis. The inheritance is mainly autosomal recessive. Genetic defect involves the mutation of ABCA12 gene on chromosome 2 which is necessary for production of proteins required for normal skin growth. This finding paves the way for early prenatal diagnosis.[1] Consanguinity was not found in majority of cases despite its autosomal recessive mode of inheritance.[2] Most of the babies have problem with sucking so feeding difficulties predispose them to dehydration and hypoglycaemia. Others complications are acute renal failure, superimposed infection and respiratory distress.

Diagnosis is mainly by the spot diagnosis of typical appearance. Histologically, the skin shows compact hyperkeratosis. Treatment is mainly supportive in nature including humid temperature-controlled environment, strict hygienic handling and topical skin care with emollient every 6-8 hours until hyperkeratosis resolved. Specific therapy such as Isotretinoin at a dose of 0.5 mg/kg can be tried. Genetic counselling of the family is important for prenatal diagnosis can be made by fetal skin biopsy.[3]

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