TITLE -CORRELATION OF APGAR SCORE AND CORD BLOOD pH AS INDICATORS OF BIRTH ASPHYXIA

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INTRODUCTION

Perinatal asphyxia is a dreadful condition because of its potential for causing permanent damage, even death of the fetus or new born infant. It is an important cause of static developmental and neurological handicap in term and preterm neonates. So early detection and treatment can significantly reduce morbidity and mortality. Umbilical cord blood gas assessment seems to be the most objective determination of the fetal metabolic condition at the time of birth.

AIMS AND OBJECTIVES

 • To study the correlation between APGAR score and severity of birth asphyxia. To correlate the severity of birth asphyxia with umbilical cord blood pH • To study neonatal outcome in patients with birth asphyxia • To study the association of neonatal outcome with umbilical cord pH • To study association between APGAR score and neonatal outcome

MATERIALS AND METHODS

 prospective observational study

The study population was all term newborns with APGAR score < 7 at 1 min of life or normal respiration not established at 1 min after birth or requiring resuscitative measures in the tertiary care hospital. SAMPLE SIZE:A total sample size of 60 babies who did not cry immediately after birth in the hospital was included in the study population.

RESULTS

there was significant negative correlation of Apgar score at 5 min and cord blood pH at birth with the severity of birth asphyxia i.e. as the severity of birth asphyxia increases,the APGAR score and pH of blood decreases with statistical significance. (P<0.001)

CONCLUSION

From the present study it can be concluded that APGAR Score at 1 min and 5 min as well as cord blood pH remains an important tool in the assessment of asphyxia in new born babies. Alteration in cord blood gases lead to various levels of severity of asphyxiated newborn babies. i,e , severity of Hypoxic Ischemic Encephalopathy increases as umbilical cord blood pH decreases. We also found out significant negative correlation of APGAR Score at 1 min, 5 min and cord blood pH at birth with the severity of birth asphyxia.