INTRODUCTION

The introduction of cranial ultrasonography(USG) as a regular diagnostic investigation has resulted in increased awareness of the frequency of intracranial lesions in the preterm infant. Periventricular and intraventricular hemorrhage and cerebral ischemia are important causes of mortality and short term and long term morbidity in the preterm infant. The present study was undertaken to detect such intracranial lesions by performing ultrasonography (cus) in the preterm neonates. **(S. Chaudhari 1995).**

Cranial ultrasonography (CUS) was introduced into neonatology in the late 1970s and has become an essential diagnostic tool in modern neonatology.The non-invasive nature of ultrasonography makes it an ideal imaging technique in the neonate. In the neonate and young infant, the fontanels and many sutures of the skull are still open, and these can be used in cranial ultrasound. **(GerdaVan Wezel-Meijler., 2007).**

Evaluation for intracranial hemorrhage (ICH) is a common indication for sonography. Most cases occur during the first few days after birth, particularly within the first 24 hours. Ultrasound is more observerdependent than CT or MRI for detection of intraventricular hemorrhage, and CT and MRI are more sensitive for detecting intraparenchymal hemorrhage. **(Blankenberg, et al.2000).**

The sonographic appearance of cerebellar hemorrhage, a possible complication of extreme preterm birth, includes unilateral or bilateral hyper echoic lesions in the cerebellar hemispheres or vermis. This appearance is distinct from a posterior fossa subarachnoid hemorrhage, in which echogenic areas may surround the cerebellum. Parenchymal architecture distortion including central hypoechogenicity. (**Limperopoulos C& Benson CB& Bassan H., 2005)**.