

**Background and Aim** Acute renal failure occasionally occurs in neonates secondary to generalized sepsis or major cardiac surgery. Insertion of a peritoneal dialysis (PD) catheter is needed in majority of cases. Open laparotomy techniques are prone to bleeding and dialysate leakage. Percutaneous bed-side insertion of PDs is the preferred method in our setting.

**Methods** In a retrospective study, over a 8-year period, neonatal PDs were inserted using Palmer's point at the bed-side in intensive care unit. Palmer's point is an anatomical landmark; it is on the left anterior axillary line and just in front of the 10<sup>th</sup> rib. This point is known to have the least amount of adhesions and therefore blind insertion of catheters and trocars are least likely to cause iatrogenic gut perforations.

**Results** 51 PDs were inserted in that period; in 7 cases previous gastrostomy or pacemaker forced an insertion of PD in the right hypochondrium resulting in 2 minor liver injuries. The remaining 44 PDs using Palmer's point were successfully placed. Dialysis was carried out for 2 weeks on average and was successful in controlling renal failure in all cases. However, in the long-term, 12 patients succumb to their septic, respiratory or cardiac lesions subsequently.

**Conclusion** Percutaneous bed-side insertion of PD catheter in neonates is possible, safe and successful using Palmer's point.

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#### TRANSFORMING GROWTH FACTOR-B1 IN CHILDREN WITH CHRONIC LIVER DISEASE

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**Background** Chronic liver disease is marked by the gradual destruction of liver tissue over time. Hepatic fibrosis is a wound healing response ending eventually with cirrhosis. Transforming growth factor beta among the cytokines and growth factors known to influence lipocyte collagen synthesis.

**Objectives** The aim was to study the correlation between serum TGF- $\beta$ 1 and liver fibrosis and dysfunction.

**Patients and methods:** This retrospective descriptive study was carried out in the Pediatric Hepatology Clinic, Benha University Hospital, to review the files of patients diagnosed with chronic liver disease during the period from June 2008 to January 2009 and they were 40 cases. They were classified to; group IA (minimal or no liver fibrosis), group IB (marked liver fibrosis), 10 normal children (group II, control group) were collected matching with patients in sex and age.

**Result** Using METAVIR score, the mean TGFbeta1 in group II was higher than in group I, and the difference was highly significant between group IA and group II. Moreover the difference was highly significant between group IB and group II, but no significant difference between group IA and group III. The mean TGF beta is highly significant ( $p < 0.01$ ) between child-Pugh class A and C, also between Child-Pugh class A and B, but no significant difference ( $p > 0.05$ ) between Child-Pugh class B and C.

**Conclusion** TGF- $\beta$ -1 cytokine increases in the plasma of children with chronic liver diseases of various etiology and may be correlated to the chronicity of the liver disease and the extent of the hepatic injury.

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#### ELEVATED VALUES OF SERUM TRANSAMINASES IN CHILDREN-ONE YEAR EPIDEMIOLOGY AND ETIOLOGY STUDY

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Aminotransferases are used worldwide for the screening of liver and muscular diseases.

**Purpose** To indicate the prevalence of elevated serum aminotransferases at the time of child's admission, the epidemiologic aspects of these abnormal values.

**Materials and Methods** We performed an observational, retrospective study (January–December 2008) in which we studied demographic data (age, sex distribution), biological findings, correlation between age and level of enzymes or etiology. The analysis was performed using Microsoft Excel 2007 and SPSS Statistics 17.0.

**Results** We studied 925 children aged 1month-18 years (8% of 11797 admission in a pediatric hospital) with abnormal serum aminotransferases. The highest frequency was noticed in male (54.4%,  $p < 0.008$ ). In the majority of cases hepatocytolysis was minor. Correlating the aminotransferases values with age we discovered that lower values are more prevalent with smaller ages, while higher values were encountered in children above 14 years. As etiology the majority of cases is represented by cytolysis with no obvious cause (87%) and, out of this population, by non-specific infectious diseases.

**Conclusions** Elevated serum aminotransferases are frequently encountered in hospitalized children. The lower values prevail in the context of non-specific infectious diseases. Small children are more susceptible to hepato-muscular injury by non-specific infectious diseases. Therefore we highlight the necessity for further prospective studies in order to investigate if incidentally discovered abnormal serum aminotransferases children.

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#### FACTORS INFLUENCING EARLY NEONATAL MORTALITY IN RETRIEVED EXTREME PRETERM NEONATES

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**Background and Aims** Neonatal care is increasingly delivered within regionalised networks, often necessitating transfer of vulnerable preterm babies from local neonatal units to neonatal intensive care units (NICU). Extreme preterm infants (gestation  $< 28$  weeks) born in hospitals without a NICU have a relatively higher mortality rate than those inborn in hospitals with NICU. In this study we aim to investigate the factors that impact on early (7-day) neonatal mortality in retrieved extreme preterm infants.

**Methods** Inclusion criteria ( $< 28$  weeks gestation, transfer  $< 24$  hours of birth, complete data entry) were applied to all entries in a regional transfer service database between January 2005 and December 2011 ( $n=7669$ ) leaving 621. Early mortality was analysed against gestational age, birth weight, lowest pH, temperatures on NTS arrival at referring unit (T1), departure from referring unit (T2) and arrival at the receiving unit (T3). Statistical analysis was carried out using SPSS v18.

**Results** 7-day mortality was 88 (14.17%). Mean (Range) for gestational age was 25.35 weeks (22.0–27.86), birth weight 794g (440–1650) and lowest pH (prior to transfer) was 7.28 (6.90–7.53). Only gestational age ( $< 0.001$ ), birth weight ( $p < 0.001$ ) and lowest pH affected mortality individually ( $p < 0.001$ ). Mortality was not significantly affected by T1 ( $p=0.152$ ), T2 ( $p=0.265$ ) and T3 ( $p=0.065$ ). To control for confounding, we performed logistic regression, after which gestational age ( $p < 0.001$ ) and lowest pH ( $p=0.001$ ) remained significant.

**Conclusion** Gestational age and lowest pH significantly influence 7-day mortality within retrieved extreme preterm infants.

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#### ETIOLOGY AND OUTCOME OF HYDROPS FETALIS: A SINGLE CENTER EXPERIENCE IN TURKEY

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