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LOW AND STANDARD DOSES OF SYNTHETIC ACTH IN THE ASSESSMENT OF ADRENAL FUNCTION OF CHILDREN WITH SEPTIC SHOCK

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Background and method: ACTH stimulation test is used for the diagnosis of adrenal insufficiency in sepsis, but the optimal dosage of ACTH is still debatable. We, therefore, compared the efficacy of low ($1\mu\text{g}/1.73\text{m}^2$) and standard ($250\mu\text{g}/1.73\text{m}^2$) dosages of ACTH in identifying adrenal insufficiency in children with septic shock.

Method: We evaluated 25 children admitted to PICU with catecholamine-dependent septic shock. Upon recruitment, a blood sample was collected for baseline cortisol determination. After an intravenous administration of low dose ACTH another blood sample was collected in 30 minutes for determination of cortisol response. Four hours after, a second intravenous ACTH stimulation test was performed, now using standard dose. Children were followed until PICU discharge.

Results: The mean baseline cortisol was $773\pm 421\text{nmol/L}$. Baseline cortisol was not different between survivors and non-survivors (724 ± 443 vs 795 ± 241 , $p=0.16$). Mean peak cortisol after low dose ACTH stimulation was $1157\pm 451\text{nmol/L}$, with mean change from baseline of 458nmol/L . Both mean peak cortisol ($1160\pm 445\text{nmol/L}$) and mean change from baseline ($746\pm 458\text{nmol/L}$) were higher after standard dose ACTH stimulation ($p=0.045$ and $p<0.01$, respectively). There was a good correlation between peak cortisol after low and standard dose ACTH stimulation tests ($r^2=0.58$). Out of the 25 children in the study, 7(28%) had AI. All of these children could be identified using the low dose ACTH stimulation test, but only 3(43%) could be identified using the standard dose ACTH stimulation test ($p=0.01$) alone.

Conclusion: Low dose ACTH for adrenal stimulation identifies more children with AI when compared with the standard dose test.

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UTILITY OF THE WHO TEN QUESTIONS SCREEN FOR DISABILITY DETECTION IN A RURAL COMMUNITY—THE NORTH INDIAN EXPERIENCE

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The utility of the WHO **Ten Questions** Screen (TQS) was studied in a rural community of North India. The study was done in three villages, in two phases. In phase 1, the TQS was administered to parents of children aged between 2 and 9 years, during a house-to-house survey. In phase 2, all children screened positive and a random sample of 110 screened negative were clinically evaluated in detail. The total population of the three villages was 5830 with 1763 children aged between 2 and 9 years. Seventy-six children were positive on the TQS, of these, 38 were found to have significant disability, 18 had protein energy malnutrition and 19 were found normal on clinical evaluation. All the 110 screen-negative children were normal. Significantly larger numbers of boys were positive on TQS as compared to girls [Odd Ratio (OR) 1.5]. The sensitivity of the TQS for significant disability was 100%; the positive predictive value was 50% and was higher for boys than for girls. Of the 50% children classified as false positive 23% had mild delays due to malnutrition. The estimated prevalence of disability was 16/1000. The TQS was found to be a sensitive tool for detection of significant disabilities among children 2-9 years of age. The low-positive predictive value would lead to over referrals but a large number of these children would benefit from medical attention.

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COGNITIVE ABILITIES, QUALITY OF LIFE AND PSYCHOSOCIAL BURDEN IN LIVER-TRANSPLANTED CHILDREN AND THEIR FAMILIES. THE PROJECT LIVE!^R

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Background and aims: Liver-transplanted children have an increased risk to develop