SELECTED ABSTRACTS FROM NATIONAL MEDICAL JOURNALS

Pages with reference to book, From 78 To 79

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ABDOMINAL TRAUMA IN D.H.Q. HOSPITAL, RAWALPINDI. Zafar, A., Cheema, K., Ahmad, F., Maqbool, Z., Ahmad, R. R.M.J., 1989; 17 : 79-81.

Sixty seven cases of abdominal trauma who underwent exploratory laparotomy from January 1987 to September 1988 have been evaluated to determine the modes of injury, viscera involved, complications and causes of mortality. 58 patients were males between 11 and 50 years of age. 31 cases were injured by fire arms and 28 by stab wounds. The small gut was involved in 36 patients and the colon in 23. 9 cases gave a negative result at laparotomy. The overall complication rate was 20.8%. 11 patients died of which one expired during surgery due to haemorrhage and the others had multiple viscera involvement. Due to the high rate of negative laparotomy (13.4%) in the series it was concluded that all gun shot wound cases should be explored. Stab wound cases should be carefully assessed and monitored for signs of blood loss and peritonism when laparotomy could be carried out. Closed abdominal injuries should be re- examined later when a quieter abdomen is found. Intra peritoneal bleeding is a decisive factor for laparotomy.

HEART RATE AND QUALITY OF GARMENTS. Seyal, R.A., Awan, H.M. Pakistan J. Med., Res., 1988; 27: 252-257.

The relationship of heart rate with the type of garments was evaluated in 399 young school going children, 135 wearing cotton, 138 mixed and 126 wearing synthetics. The increased risk of coronary events in patients with sinus tachycardia is well documented. Psychosomatic factors along with environmental and physiological conditions can cause production of heat and sweat on the body surface. If the sweat is not freely evaporated an extra load on the circulation is incurred. All the children in the three groups were made to use bed linen of the same blend as the garments. They were made comfortable and heart rate was recorded from 9 to 12 A.M. with a minicard monitor. The mean heart rate at the end of the study on day35 was 80.63,83.53 and 90.38 per minute with cotton, mixed and synthetics. The percentage of respondents with a heart rate of 100 or above with cotton garments dropped by 15% and rose by 7% with synthetic garments. Height did not have any effect on heart rate and adjustments for weight were made. From the study it was concluded that the mean heart rate was 8.08 to 11.42 per minute higher with synthetic garments as compared to cotton clothing. Synthetic clothing because of poor ventilation, prevents free evaporation of sweat and produces thermal and electrolytic changes in the body surface which produces an electromotive force under the skin which is potentiated by the static charge of synthetic clothing. This persistent sensory input stimulates the hypothalamus and the autonomic nervous system which in turn demand cardio-vascular adjustments as increased heart rate and raised systolic blood pressure. It was concluded from the study that the mean heart rate was 8.08 to 11.42 per minute higher with synthetic garments as compared to cotton.

A CASE OF HOMOCYSTINURIA. Khan, R.N., Maqbool, S., Khan, S.N., Mohydin, M.A.Z. Pakistan J. Med. Res., 1988; 27:306-308.

An eight year old boy was brought in to the Centre of Inborn Errors of Metabolism, Shaikh Zayed Postgraduate Medical Institute, Lahore, with the chief complaints of developing cataract at 18 months age. The child was the product of an uncomplicated pregnancy and normal vaginal delivery. He was mentally retarded with a flat effect. His parents were first cousins and he had 3 normal siblings. On examination the child was found to be mentally retarded with inappropriate behaviour. There was generalised hypotonia of the legs and the systemic examination revealed no abnormality. Laboratory tests showed a positive cyanidenitroprusside test and homocystine in urine detected by thin layer

chromatography and an elevated plasma methionine level diagnosed by one dimensional T.L.C. A diagnosis was made of homocystinuria based on all these findings. Homocystinuria, an inborn error of methionine metabolism is transmitted in an autosomal recessive manner. The metabolic defect lies in the enzyme cystathionine synthase which catalyzes the formation of cystathionine from homocysteine and serine. The affected infants appear normal at birth but later development slows. They may develop ectopia lentis or cataracts by 18 months of age. Cerebro-vascular accidents are common and mental retardation follows. Restriction of methionine intake lowers its plasma level. Pyridoxine supplementation may lower homocystine excretion in the responsive patients.

THREE YEARS STUDY OF CULTURE POSITIVE/NEGATIVE PULMONARY AND EXTRA-PULMONARY TUBERCULOSIS. Raja, S.M., Bhatti, A.H., Mirza, M.N., lqbal, R. Pakistan J. Med. Res., 1988; 27:294-296.

12,238 patients with a clinical suspicion of Tbberculosis, in the outpatients department of the Institute of Tuberculosis and Chest Diseases, Mayo Hospital, Lahore were included in a study conducted from January 1985 to August 1987. The study was conducted to evaluate the usefulness of culture studies in the diagnosis of both pulmonary and extra-pulmonary tuberculosis. 11, 952 patients had pulmonary symptoms whereas 1,186 cases were referred from other departments of the hospital. The age group varied from 4 to 70 years. A detailed history was obtained and a Mantoux Test, ESR, Sputum for AFB, microscopy, culture on L.J. Medium and X-ray chest were carried out. In extra-pulmonary Thberculosis a histopathological examination was also done. Sputum smear and microscopy gave positive results in 13.9% cases whereas culture was positive in 23.69% cases. In extra- pulmonary cases the smear was positive in 2.78%. This study indicated the importance of smear and culture examination in the diagnosis of Tuberculosis. The method of culture is time consuming but an ideal and sensitive way of identifying Mycobacterium tuberculosis. A good history, clinical examination, Mantoux test and X-ray are useful aids.