ABSTRACTS OF THE CURRENT LITERATURE

THE NEWBORN


A case is presented in which surgical treatment of true pyloric stenosis was delayed because a No. 14 catheter was passed through the pyloric sphincter.

A male child aged 4 weeks and weighing 8 lb. 4 oz. (birth weight 8 lb. 1 oz) was admitted to the St. Albans Naval Hospital on December 13, 1955. He had been vomiting all his feeds in a projectile manner. On examination the infant was mildly dehydrated. Visible peristaltic waves were present. A mass could be felt just below the liver edge, but this finding was not confirmed by all observers. A lipoidal meal examination of the stomach was attempted. As he vomited it out, a No. 14 catheter was passed to introduce the dye. It inadvertently passed beyond the pyloric sphincter. The conclusion drawn from X-ray examination was partial hindrance to the passage of the dye which might be functional. The diagnosis of pylorospasm was entertained. Atropine 1/1000 gr. and phenobarbitone 1/8 gr. every 6 hours subcutaneously and 10 ml. of glucose in water every 2 hours were given. The infant did not retain any food. Vomiting persisted even with thickened feeds. On December 17 exploratory laparotomy was done, a moderate pyloric hypertrophy was found and pyloromyotomy was performed. Post-operatively the infant vomited only once. He was discharged home in a good nutritional state weighing 8 lb. 12 oz. six days following operation.

The literature regarding causes of hypertrophy has been reviewed. There are different antagonistic theories. The authors question whether the anatomical decrease of the lumen is the main cause of vomiting in pyloric stenosis or whether there are other causes operating, which even with a relatively wide lumen, bring about vomiting and delayed emptying of the stomach. They think that an inflamed and oedematous mucosa causes vomiting even before effecting a marked decrease in the lumen of the pyloric canal hence the reason for being able to push through a large bore tube.

R. MISRA.


Pulmonary lesions are responsible for a high morbidity and mortality during the neonatal period—pulmonary hyaline membrane playing an important role in addition to other lesions. The initial results of a statistical analysis of the relation of various lesions in the lungs of newborn infants to each other, and to the age and sex of the babies are presented.

Histologic preparations of specimens of the lung from 125 infants dying at the age of seven days or less and necropsied consecutively in the Department of Pathology of the Children's Medical Center, Boston, during the years 1949 and 1950 were utilised. The pulmonary lesions studied included atelectasis, emphysema, interstitial emphysema, haemorrhage, acute pneumonia, oedema, aspiration of amniotic fluid containing squamous cells, hyaline membrane and immaturity.

All infants studied were referred to the Boston Children's Medical Centre from the place of delivery (this series differed from those of lying-in-hospitals). Mist-therapy was widely used for treating neonatal respiratory distress during the period when these infants were hospitalized. Referral of premature infants to the hospital was encouraged for their hospitalization.
Of the 45 possible relations analysed (by punch cards, chi-square method, and other statistical methods) fourteen gave results significantly different from those due to chance.

The early peak of the curve for hyaline membrane in contrast to the later peaks of acute pneumonia, pulmonary oedema, pulmonary haemorrhage and presence of squamous cells in the alveoli were of particular significance. The negative relation of hyaline membrane to acute pneumonia could be explained by the fact that infants dying with hyaline membranes tend to die before pneumonia can develop and hypothesis involving a preventive action of such membranes against pneumonia was not necessary. Of particular note, in view of the current opinion in the genesis of pulmonary hyaline membrane, was the failure to demonstrate a significant relation of pulmonary oedema to any of the other pulmonary lesions studied. Some other relevant and very pertinent conclusions have also been drawn. The discussion was illustrated with figures, graphs and tables. Relevant references have also been made.

R. Misra.

INTERNAL MEDICINE


The incidence of recurrences of rheumatic fever and streptococcal infections in 50 rheumatic subjects receiving a 200,000 units tablet of benzathine penicillin G daily within an average follow up of 11.3 months was compared with that of 56 rheumatic patients receiving 1,200,000 units of benzathine penicillin G intramuscularly every 4 weeks and an average follow up of 10 months.

Patients in both groups were instructed to return once a month. At each visit, throat cultures, blood for E.S.R and for antistreptolysin O (ASO) titre were examined. Fluoroscopic examination and E.C.G were obtained whenever indicated.

Three children in the oral penicillin group who did not take their medication regularly, developed recurrences of rheumatic fever. No recurrences occurred among the patients receiving parenteral penicillin. Four children receiving oral medication showed a definite rise in the ASO titre without developing recurrences of rheumatic fever. Three children of the intramuscular group also showed a rise in the ASO titre, but in each instance the rise in the ASO titre was of a lower magnitude than that observed in the group on oral medication. Group A streptococci were found in the throat in about the same number of patients in each group. Only one patient receiving oral penicillin developed an allergic reaction in contrast to four in the intramuscular group. In twelve additional patients in the latter group, medication was discontinued because of repeated local reactions. During the period of this study, in children followed in the outpatient clinic, a single daily dose of oral benzathine penicillin G, taken regularly, proved as effective in the prevention of rheumatic fever as monthly intramuscular injections of 1,200,000 units of benzathine penicillin G. The disadvantage of parenteral penicillin is the occurrence of reactions and emotional upset in the children.

R. Misra.


Meclizine dihydrochloride with pyridoxine hydrochloride known as Bonadoxin Drops effectively controlled infantile colic, pylorospasm, nausea and vomiting within 72 hours. The study was carried out on 27 patients (17 infants and newborn babies and 10 children) over a period of nine months in a nursery service at the Brooklyn Doctors’ Hospital and in a