

Selected Abstracts

(FROM SURGERY GYNECOLOGY AND OBSTETRICS)

Presentation, Management, Complications and Outcome of Acute Renal Failure in Childhood; Five Years' Experience. R. Counahan, J.S. Cameron, C.S. Ogg and others. *Br. Med. J.*, 1977, 1:599.

During the period from 1971 through 1975, 72 children were treated for acute renal failure. Ages ranged from two to 16 years with more than one-half of the children being less than six years of age. The most common cause of acute renal failure was renal hypoperfusion which occurred in 31 patients. Other contributing conditions included hemolytic-uremic syndrome, glomerulonephritis, septicemia or urinary tract infection, congenital abnormalities, acute exacerbation of chronic disease and poison.

Twenty-eight patients were given conservative treatment, which included attending to fluid balance, maintaining urine flow with diuretics and treating infection. Peritoneal dialysis was performed on 31 patients, eight of whom were subsequently transferred to hemodialysis. Thirteen had hemodialysis alone. Full recovery of renal function occurred in 37 patients. Ten patients had chronically impaired renal function, two of these died several months after admission. Seventeen patients died during the acute illness and six others died after entering dialysis and transplantation programs. Three patients treated conservatively died, and of the 44 who underwent dialysis, 15 died.

Martin I. Renick

Clinical Features and Treatment of Urinary Calculi in Childhood. W. Vahlensieck and H.P. Bastian. *Eur. Urol.*, 1976, 2:129.

During the period from 1926 to 1975, 94 children with urinary calculi were evaluated. The series included 55 boys and 30 girls. One-half of the patients were diagnosed before five years of age. The upper urinary tract was principally affected in about 80 per cent.

Thirty-six children had congenital abnormalities of the urinary tract, the most common of which were stenosis of the neck, of the bladder, obstruction of the ureterpelvic junction and megaureter. Definable metabolic disorders were diagnosed in six patients and included cystinuria, myxedema, hyperparathyroidism and renal tubular acidosis. Other predisposing factors included prolonged immobilization and neurogenic disorders. Forty-four patients had idiopathic disease.

Symptoms were varied but included renal,

bladder and abdominal pain, dysuria, vomiting, anorexia, growth disturbance, fever and hematuria. Several patients had asymptomatic disease. Diagnostic studies included intravenous urography and a variety of metabolic studies to define the metabolic cause of the disease.

Approximately 25 per cent of patients had spontaneous passage of the stone and the remaining 75 per cent required some form of operative intervention. Pyelolithotomy and ureterolithotomy were the commonly performed procedures. Nephrectomy was necessary in only 3.2 per cent of the patients studied. Chemical analyses of the stones revealed calcium oxalate to be the most common type, followed by phosphatic mixed stones and cystine stone.

Prophylactic measures aimed at reducing stone formation in those patients forming calcium oxalate stones consisted of regular nourishment with a normal fixed diet, adequate fluid intake and dietary restrictions of dairy products, spinach, asparagus and rhubarb. Nonspecific pharmacologic agents used included folic acid, magnesium compounds, vitamin B6 and allopurinol. Children with uric acid stones were treated with dietary restriction of mineral waters, liver, kidneys, certain fish, legumes and allopurinol administration. Those with phosphatic stones were also advised to restrict dairy products, and antibiotics were used as indicated.

Martin I. Resnick

Vascular Reconstruction in Buerger's Disease. Shigehiko Shionoya, Ichiro Ban, Yukifumi Nakata and others. *Br. J. Surg.*, 1976, 63:841.

Twenty-three of 148 patients with Buerger's disease had 27 arterial reconstructive procedures, 22 bypasses and five thromboendarterectomies. In a follow-up period of ten months to eight years, the over-all patency rate was 26 per cent. The long term patency rate of bypass grafting was good in obstruction of main vessels but unsatisfactory with multiple occlusions. Bypass grafting was preferred to thromboendarterectomy, as only one of five endarterectomies remained patent. Sympathectomy was done in all but one patient. To obtain long term patency of revascularized segments, complete abstinence from tobacco is absolutely essential.

Malcolm R. Lewis

Gangrene of Toes with Normal Peripheral Pulses. Raphael Walden, Raphael Adar and Mark Mozes. *Ann. Surg.*, 1977, 185:269.

Ten patients were evaluated who presented with gangrene of the toes in the presence of normal peripheral pulses. Ordinarily, this is

uncommon in the absence of diabetes mellitus. There was no common etiologic denominator. Four demonstrated nonocclusive large vessel disease, three had thrombocytosis, one demonstrated polycythemia vera, one allowed monoclonal gamopathy and one had had recent exposure to cold. None were regular smokers.

There were no associated trophic changes nor proximal progression of the gangrenous process. Vasodilators and low molecular weight dextran were of no help. Lumbar sympathectomy was ineffective in the three patients in whom it was attempted.

Conservative toe amputations and correction of any hemotologic disorders are recommended. The outcome with this regimen has been good.

William R. Hamaker

Outcome of Pregnancy Among Women in Anaesthetic Practice. P.O.D. Pharoah, E. Alberman, P. Doyle and G. Chamberlain. *Lancet*, 1977, 1:34.

A questionnaire was sent to all women on the Medical Register for England and Wales for 1975 who had first registered in 1950 or later. The year of birth, details of menstrual history and a record of all pregnancies were sought. For each pregnancy, information was sought on the date of birth or miscarriage, medical appointment, the outcome of pregnancy, birth weight, gestational age and the presence of any congenital malformations. Medical appointments as anesthetists were separated and compared to the other groups. Five thousand seven hundred responses were obtained, for a response rate of 72 per cent.

There was no significant difference in the spontaneous abortion rate of 13.8 in the two groups. The stillbirth rate was twice as high among anesthetists but the difference was not statistically significant. Infants born to anesthetists had a lower mean birth weight and a higher proportion of infants weighed, 2,500 gm or less. This effect persisted even when the birth weight of infants born to smokers and nonsmokers was examined separately. Malformations of the heart and great vessels were significantly, $p < 0.05$, higher among anesthetists' children, but no significant differences were found for other malformations.

H. Steele Holley