Medical Memorandum

Remote Prognosis in Tuberculous Peritonitis

When extensive calcification is found in soft tissues there is a tendency to regard this as a permanent change. The following case is therefore of interest.

CASE REPORT

A male child had been in good health until the age of 19 months, when he developed bronchopneumonia, after which he had failed to pick up. There had been loss of appetite and weight, vomiting, abdominal distension, and severe constipation. Admission to hospital at this time had revealed the presence of ascites. His Mantoux reaction was positive and he was treated with streptomycin for three

FIG. 1.—Radiograph taken in June, 1950, showing numerous calcified masses.

FIG. 2.—Radiograph taken in October, 1956, showing great reduction in size of calcified masses.

months. On discharge his constipation had improved, his vomiting had ceased, but in other respects his general condition remained much the same as on admission. Excessive thirst and polyuria were noted at this time.

He was admitted to the Royal Manchester Children's Hospital at the age of 2 years 2 months with anorexia and constipation. He weighed 22½ lb. (10.2 kg.), and presented with an asymmetrically distended abdomen, "ladder-patterning" of the gut in the epigastrium, and several large firm masses in the right flank and right hypochondrium. His temperature was normal, the E.S.R. 38 mm., and chest x-ray picture normal. An abdominal x-ray film showed numerous calcified masses (Fig. 1). Bowel actions were infrequent and he required enemata from time to time. His fluid intake varied from 20 to 40 fl. oz. (0.6 to 1.2 l.) a day. During the four months prior to admission he had been receiving syrup "minadex," 3 fl. dr. (10.6 ml.) daily and "glucodin," 1 lb. (0.5 kg.) a week, giving a total daily intake of 1,600 I.U. of vitamin D from these sources. Serum calcium was 14.8 mg./100 ml., phosphorus 4.7 mg./100 ml., and blood urea 72 mg./100 ml. There was a moderate albuminuria. Despite these findings, operation was decided upon because of the suspicion that there might be calcification in a neuroblastoma, and the clinical picture was consistent with that view.

At laparotomy the peritoneal cavity was characteristic of healed plastic tuberculous peritonitis—that is, fibrous thickening, masses of calcified material, and matting together of coils of small intestine, some of which were distended. A peritoneal biopsy was carried out to confirm the diagnosis. The prognosis was thought to be poor, because intestinal obstruction seemed almost inevitable sooner or later. A five-months course of streptomycin was given, to which para-aminosalicylic acid was added later. The blood urea fell slowly, but after three months the serum calcium was still high (13.3 mg./100 ml.). The E.S.R. became normal after five months. After seven months in hospital the child was discharged, having gained 4½ lb. (2 kg.) in weight, with regular bowel actions, and somewhat improved in general condition. The abdominal distension was unchanged.

By October, 1956, six years later, the improvement was most striking and unexpected. He was of normal height and weight for his age, the abdomen was of normal contour, and no masses were palpable. Radiologically the calcified masses were greatly reduced (Fig. 2). He was entirely free from symptoms.

COMMENT

The prognosis of tuberculous peritonitis has been greatly improved since the introduction of streptomycin (Ravina *et al.*, 1948; Grant *et al.*, 1951; Salmon, 1951), and the disappearance of ascitic fluid on treatment is usually rapid (Diwany and Gabr, 1952). Striking resolution of intra-abdominal masses may occur (Barron, 1948; Wichelhausen and Brown, 1950; Diwany and Gabr, 1952), but I have been unable to find a comparable case report where large calcified masses have practically disappeared. The introduction of isoniazid has led to much further improvement in results of treatment, but this drug was not available at the time. It is interesting to speculate on the possibility that similar resolution might occur in calcified tissues in other situations—for example, in the pleura, lung, subcutaneous tissues, kidney, and muscle—once the causative factors have ceased to operate.

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