five years. Three further cases are presented; one is the first reported case of coma in juvenile myxoedema, another the second case reported to have survived. This patient is still alive nine months after starting treatment.

The treatment is reviewed and discussed. It is suggested that hypothermia in itself is an indication for immediate treatment, that the application of external warmth is unwarranted, and that thyroid hormone be given in a dosage related to the degree of hypothermia.

I wish to express my appreciation of the valuable assistance given by Dr. Peter Harvey, consultant pathologist, who carried out the post-mortem examinations and microhistology. I am indebted to Dr. P. R. Duncan and Dr. I. McD. G. Stewart, consultant physicians, and to Mr. J. K. Wright, consultant orthopaedic surgeon, for permission to report the cases under their care.

Note.—Since this paper was accepted for publication a further case of myxoedema coma has been reported by S. J. Surtees and S. Ginsberg, *Postgrad. med. J.*, 1958, **36**, 443. Their patient was resuscitated but died of cardiac failure a month later.

REFERENCES

- Anderson, A., and Haussmann, W. (1956). *Lancet*, **2**, 999.
 Dyson, A., and Wood, M. W. (1956). *Ibid.*, **2**, 757.
 Goolden, A. W. G., and Burrell, C. D. (1957). *Brit. med. J.*, **2**, 1028.
 Karhausen, L., and Zylberszac, S. (1955). *Ibid.*, **2**, 766.
Lancet, 1956, **2**, 768.
 Le Marquand, H. S., Hausmann, W., and Hemsted, E. H. (1953). *Brit. med. J.*, **1**, 704.
 — (1955). *Ibid.*, **2**, 773.
 Malden, M. (1955). *Ibid.*, **2**, 764.
 Marshall, R. J., and McCaughey, W. T. E. (1956). *Lancet*, **2**, 754.
 Reid, A. W. (1955). *Brit. med. J.*, **2**, 967.
 Sheehan, H. L. (1956). *Current Therapy*. Saunders, Philadelphia.
 — and Summers, V. K. (1952). *Brit. med. J.*, **1**, 1214.
 Summers, V. K. (1953). *Ibid.*, **2**, 366.

Medical Memorandum

Bilateral Polycystic Disease of Kidney Complicated by Intestinal Obstruction

The following case of bilateral polycystic disease of the kidney developed acute large-gut obstruction two days after admission to hospital. The case is reported because of the development of this unusual complication.

CASE REPORT

A Sea Dyak woman aged 38 was admitted to a small out-station hospital in Sarawak, British Borneo, on July 1, 1957, 17 days after delivery of a stillborn child. She complained of cough with white sputum since delivery and frequency of micturition for two days, urine being voided a countless number of times day and night. For the 24 hours prior to admission she complained of a dull aching pain in the left lower chest, left hypochondrium, and left loin, worse on coughing, and a colicky pain in the left loin. She had haematuria for 24 hours, blood occurring throughout the stream.

On admission she was very ill and toxic, with a temperature of 103° F. (39.4° C.), and pulse 112. There was a hard fixed tender mass with an irregular surface in the left loin extending downwards below the level of the umbilicus. The right kidney was palpable, with a soft smooth mass about the size of an orange comprising the lower pole. Air entry was reduced at the left lung base, and there were fine inspiratory and expiratory rales. Blood: Hb, 45% (Sahli); red cells, 2,600,000; white cells, 8,800 (polymorphs 70%; lymphocytes 28%; eosinophils 1%, large monocytes 1%); E.S.R., 137, Westergren. Urine: acid, albumin ++, over 100 red cells per high-power field. Blood urea was 70 mg. per 100 ml.

A clinical diagnosis of bilateral polycystic kidneys with infection of the left kidney was made. Unfortunately further investigation could not be carried out in a small out-station hospital with limited laboratory and no x-ray facilities.

Procaine penicillin, 500,000 units twice daily, and streptomycin, 0.5 g. twice daily, brought little change in her general condition. Two days after admission she complained of generalized colicky abdominal pain. She had passed a very small stool that morning and no flatus all day.

There was moderate distension of the lower abdomen, most pronounced in the right iliac fossa, with marked visible peristalsis. An enema gave a very poor result.

Operation.—The abdomen was explored through a McBurney incision. The lower ileum, caecum, and ascending and transverse colon were greatly distended. The descending and pelvic colon were collapsed. Through the upper part of the wound the lower pole of the right kidney was seen to be covered with cysts up to 1 in. (2.5 cm.) in diameter, varying from blue to brown in colour. The whole right kidney was felt to be involved. The left kidney was greatly enlarged. Details were obliterated by pericapsular oedema. A caecostomy was performed and a Paul tube inserted.

Post-operatively the patient was put on daily washouts through the caecostomy and was given sulphaguanidine to prepare her for any further operative intervention required.

After operation the pains in her left lower chest, left hypochondrium, and left loin started to subside, and had disappeared by July 6, the third post-operative day. The left kidney was correspondingly smaller, softer, and no longer tender. From admission to operation her temperature had shown daily variations between 103 and 99° F. (39.4 and 37.2° C.). It fell rapidly after operation, and she was apyrexial on July 7. On July 8 the Paul tube fell out and she opened her bowels. She continued to have a normal daily motion until discharge from hospital.

On July 12 the caecostomy was separated from the abdominal parietes and closed. Appendicectomy was carried out to avoid future confusion. The abdomen was closed in layers.

She was discharged from hospital on August 2 feeling very well, having refused further investigation and treatment at a larger hospital. Four months after operation she remained well and symptom-free.

COMMENT

Cleland (1951) reported that Dr. W. A. Giles removed a polycystic kidney (side not stated) causing intestinal obstruction in 1905. No other reference to this complication was found in the literature.

The development of acute intestinal obstruction in this patient gave rise to some diagnostic confusion, occurring as it did in a small out-station hospital where diagnosis mainly rests on history and physical examination. It caused a primary inflammatory lesion of the large bowel to be considered as an alternative diagnosis. In view of the limited surgical facilities available, the formation of a caecostomy was decided upon as the simplest way of relieving the obstruction. The decision was not regretted in view of the beneficial effect it had on the course of the illness.

A possible explanation of the clinical picture described is that ulceration of the splenic flexure occurred secondary to infection of the adjacent polycystic kidney. The passage of faeces over the ulcer perpetuated the renal infection and the colon became obstructed by inflammatory oedema. The renal infection and ulceration of the colon resolved rapidly when the colon was defunctioned by caecostomy.

The case reported does not bear out the statement of Duff (1948) that infection of a polycystic kidney affects the prognosis adversely, at any rate so far as the immediate prognosis is concerned. It is possible that the prognosis in this case may be favourably affected by a diet mainly consisting of rice with little added protein.

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REFERENCES

- Cleland, J. B. (1951). *Med. J. Aust.*, **2**, 109.
 Duff, F. A. (1948). *Irish J. med. Sci.*, p. 223.