

every field packed with what the pathologist reported as a streptothrix. Examination of urine showed—reaction acid; specific gravity 1.010; albumen strong, positive; sugar nil; eposit pus cells and various types of epithelial cells, a few casts. The patient died on 7th October.

Treatment at first was by rectal injections of potassium permanganate, gr.  $\frac{1}{2}$  in 1 pint water every three hours. This treatment was continued for a week, but, as no improvement took place, potass. iodid. in 15-grain doses was given three times daily, and other symptoms treated as they arose. Neither the potass. permanganate nor the potass. iodid. produced any good result.

*Pathological Report on Sputum.*—Ziehl Neelsen stain: No tubercle bacilli found. Gram's stain: A few streptococci and staphylococci. Abundant gram-positive slender filamentous forms present throughout films, and in parts massed together. These forms, which are not acid-fast, show apparent branching. Aerobic cultures failed to grow. Facilities for suitable anaerobic cultures were not available. It is a streptothrix infection.

## APPENDIX E.

### A CASE OF CHYLURIA IN A SAMOAN.

(Reported by Dr. A. F. MACKAY.)

S—, a Samoan male, age thirty-five years, was admitted to Aleipata Hospital, Samoa, on the 6th January, 1927, suffering from a small elephantoid scrotum, complicated by an apparent double inguinal hernia of ten years' duration.

On examination: The scrotum was about the size of a small coconut. The skin was flabby and definitely elephantoid over the anterior aspect. On the sides of the scrotum were a few small vesicles, which on being punctured exuded a drop or two of milky fluid. The testicles were enlarged to the size of a small hen's egg and considerably indurated. The presence of a hydrocele sac was very doubtful. On the left side a large inguinal hernia extended to the bottom of the scrotum on coughing and was easily reducible. On the right side there was a tumour at the external inguinal ring the size of a bantam's egg. It was easily reducible, but reappeared with a distinct impulse on coughing. It was diagnosed as another inguinal hernia.

10th January: Operation. Radical cure of the left inguinal hernia was performed under Novocaine-adrenalin  $\frac{1}{2}$  per cent. The sac was separated from the cord in the usual way. Round the neck of the sac was what appeared to be a small amount of fatty tissue, but on separating it from the sac milky fluid began to spurt from what was really a collection of Chylous vessels. These were ligatured and excised, together with the sac. More Chylous vessels were injured on inserting sutures through Poupart's ligament, and had to be ligatured.

Inquiry now elicited the fact that the patient had suffered from chyluria for seven years. Inflammatory *mumu* attacks commenced in the scrotum and testicles about the same time, resulting in the elephantiasis of the scrotum and the induration of the testicles. He had never felt the slightest ill effects from the chyluria, and had always enjoyed good health. Some days his urine would be practically clear, and other days, especially after hard work, it would be very milky and perhaps tinged with blood.

The evening after the operation the patient began to experience considerable pain over the region of the bladder. As he was unable to pass urine, a rubber catheter was passed and 18 oz. of milky blood-stained urine was drawn off, not without difficulty, owing to the blocking of the catheter with blood-clot and epithelial debris.

12th January: Patient passed urine naturally.

16th January: Patient again unable to pass urine. Rubber catheter could not be passed, but a silver one was passed with ease. Only after considerable straining on the part of the patient, however, could 11 oz. of urine be obtained. It had the consistency of thick clotted milk, and was mixed with blood and epithelial debris. Half an hour later a rigor occurred, the temperature reaching 104°. The rigor lasted twenty minutes, and at the end of this time the patient passed naturally a considerable amount more Chylous clot, and had no more trouble.

17th January: Urine passed naturally, almost free from Chyle.

4th February: Operation for right inguinal hernia (Novocaine-adren.  $\frac{1}{2}$  per cent.). On incising the aponeurosis of the external oblique muscle the cord and what appeared to be the sac of the hernia and its contents bulged forward. This apparent sac was easily separated from the cord, and was then found to be a mass of tortuous Chylous vessels which spurted Chyle freely when injured. These vessels could be emptied by pressure, but immediately refilled from the abdomen. No true hernial sac could be found. The spurting points were ligatured and the inguinal canal repaired after pushing the mass upwards out of the way.

No difficulty was experienced in passing urine after this operation, or after the next, when the scrotum was amputated on 11th February.

Convalescence was uneventful; some days the urine would be Chylous and other days only slightly turbid. No microfilariae could be found in the blood.

This case is reported on account of the rarity of this filarial condition in the Pacific, and on account of the mass of Chylous vessels present in the right inguinal canal, simulating a hernia.

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