vomiting, pyrexia, pain across the back, oliguria, headaches, anorexia, hiccup, and insomnia. Jaundice appeared four days before admission.

On examination she appeared very ill; she was deeply jaundiced, with a normal temperature. The blood pressure was 170/100; chest normal. Petechiae were present over the arms and under the left breast. The spleen was not palpable. A hard lump was present in the left breast, and a provisional diagnosis of carcinoma of the breast, with secondaries in the liver, was made.

Investigations.—L. icterohaemorrhagiae agglutination was positive 1 in 300 on January 24. On January 30 the titre rose to 1 in 3,000, and *L. canicola* was positive 1 in 100. The latter fell to 1 in 10 on March 8, while *L. icterohaemorrhagiae* agglutination still remained 1 in 3,000. The blood count (January 24) showed: red cells, 3,900,000; Hb, 80%; white cells, 19.800 (85% polymorphs). The sedimentation rate was 46 mm. in one hour (Wintrobe). Liver-function tests on January 21 showed a direct positive van den Bergh, serum bilirubin 11 mg. per 100 ml.; thymol turbidity 7 units; alkaline phosphatase, 4 units. On February 12 the bleeding time was 1 minute, coagulation time 5 minutes, prothrombin index 86% normal. The blood urea dropped from 264 mg. per 100 ml. on January 21 to 40 mg. on January 27. Urine (January 21) showed: albumin ++, bile pigments +++, bile salts +, chlorides practically absent, hyaline casts ++, granular casts +, culture *Bact. coli*, urea 1.43 mg. per 100 ml. On February 11 (after penicillin was stopped) a centrifuged deposit of urine showed no leptospires. Guinea-pig inoculation showed no lesions or leptospires in the liver and kidney. The serum of the husband and that of their dog were examined on February 6, and were negative for *L. icterohaemorrhagiae* and *L. canicola*.

The patient was put on intravenous normal saline, a low protein diet, vitamin K, and alkalis. Four-hourly penicillin was begun on January 26 and stopped on February 10, 19,000,000 units having been given. The patient was discharged on March 26, symptom-free. (It is of interest to note that the lump in the breast, operated on later by Mr. Basil Hume, turned out to be a chronic non-malignant cyst.)

COMMENT

The usual occupation of a sufferer from Weil's disease is one which brings the person in contact with water polluted by rats—for example, miners, farmers, sewer workers, butchers, and those employed in the fish industry.

In Case 1 the patient had recently been chopping wood in a damp cellar, and, as Eagle (1948) points out, the organisms of *L. icterohaemorrhagiae* may remain viable in water for 22 days and in moist soil for three months. In Case 3 the surroundings of the public-house where the patient was working were damp and infested with rats, and she had been in the habit of daily preparing the chicken-run with straw. It is not known how the infection was contracted in Case 2.

My thanks are due to Dr. James Maxwell for the diagnosis and guidance in Case 3, to Dr. C. J. C. Britton for the pathological investigations, and to Dr. J. C. Broom for the agglutination and guinea-pig inoculation in this case. Cases 1 and 2 are published by kind permission of Dr. A. I. Suchett-Kaye.

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Alopecia Congenita: Report of Two Families

The number of families suffering from alopecia congenita reported in the literature is very small, and it is worth while to put on record two families which we came across at the Miller General Hospital as the result of certification for wigs under the National Health Service Act.

Various forms of the disease have been reported. Alopecia may be complete or partial; it may be associated with other defects, such as abnormalities of teeth and nails, cataracts and strabismus, and syndactylism. Cockayne (1933) believes that there are more than one recessive and more than one dominant type of inheritance of this condition. Consanguinity has been observed in a number of families. In our families there was alopecia only, without associated defects.

FAMILY A

A brother and sister, of normal parents and both completely bald, married a brother and sister who were their first cousins, also of normal parents, only the brother being bald. The issue of the marriage of the two bald people was five children, all of whom were bald. One of these is married to a normal person and has two normal children.

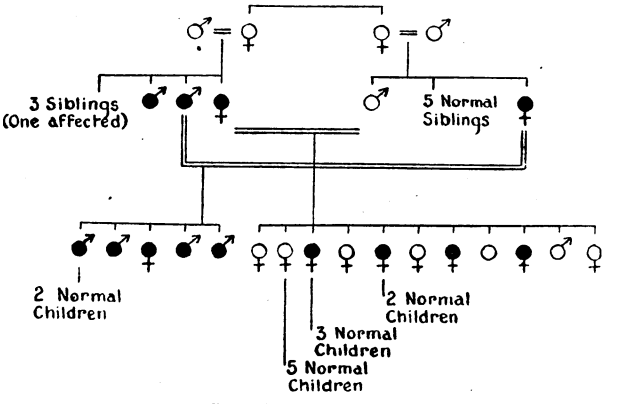

FIG. 1.—Family A.

The other marriage resulted in eleven children, of whom four were bald. One of the normal children is married and has five normal offspring. Two of the children suffering from alopecia are married to normal people and have normal children. One member of the first generation and five of the second generation were examined. All were completely bald. Eyebrows were absent, there were only a few eyelashes, and pubic and axillary hair was scanty.

FAMILY B

A girl was seen suffering from total alopecia, which had been present since birth. She had six brothers and sisters,

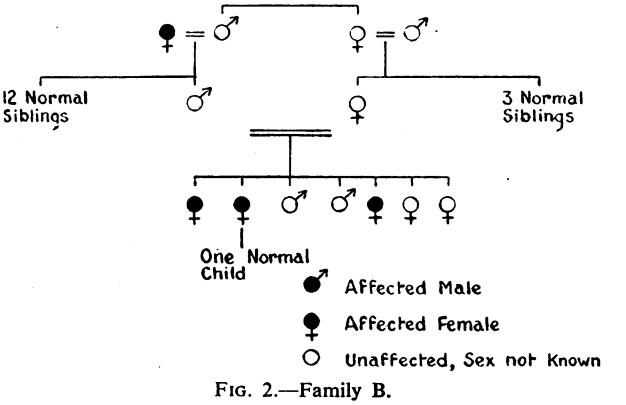

FIG. 2.—Family B.

two of whom were twins. Her parents were first cousins. Her paternal grandmother, who was also seen, had lost her hair at the age of 13, for an unknown reason, but on examination sparse growth of normal hair was present.

I am indebted to Dr. C. V. Henriques for drawing my attention to these cases and to Dr. I. Magnus for his interest and help.

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