curvature. The radiologist reported: "Findings consistent with an extensive pyloric carcinoma." A test meal showed complete achlorhydria with a low total acidity. Occult blood, negative; blood urea, 50 mg. per 100 ml.

Tracing of radiograph of Case 2. X=filling defect.

At operation the pyloric end of the stomach was found to be thickened and the transverse mesocolon was adherent to the stomach, the adhesions involving the middle colic artery. A partial gastrectomy with a posterior anastomosis was performed with some difficulty. The patient made an uninterrupted recovery.

The following is a report on the pathological findings, naked eye and microscopical, by Dr. Stanley F. Marshall: "There is marked hypertrophy of the outer muscular coat, which is visible macroscopically on the slide. Microscopically, large bundles of smooth muscle fibres are seen—presumably the longitudinal coat beneath the serous coat and occupying about two-thirds of the thickness of the wall, which is about

1/2 in. (1.25 cm.) thick at its widest. Lymphocytic aggregations are scattered among and superficial to these hypertrophied muscle fibres. Numerous granulation and inflammatory cells are seen in the submucous coat. Three lymph glands in the vicinity show moderate inflammatory reticulosis only. No evidence of malignancy was seen." Naked-eye examination showed typical palisading of the muscular coat, which when first removed from the patient was nearly 3/4 in. (1.9 cm.) thick.

Summary

Two cases of hypertrophic pyloric stenosis in the adult are reported. Both show an absence of the usual lifelong history of gastric discomfort. One had a remarkably thick muscular coat and presented a palpable mass before operation.

The view is expressed that mild degrees of the condition may be relatively common, and the suggestion made that if the difficulties of accurate diagnosis can be overcome some less drastic treatment than partial gastrectomy may be possible.

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Under the new national insurance scheme, which comes into full operation on July 5, 1948, a single contribution card will be issued for each insured person. The contribution will be paid by affixing a single stamp to this card. The standard card, which will be current for 52 weeks, will consist of two leaves, but some of the cards issued at the outset of the new scheme will cover a period of 74 weeks and will consist of three leaves.

CONGENITAL HYPERTROPHIC PYLORIC STENOSIS

REPORT OF FOUR CASES IN BROTHERS

BY

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Several authors have reported two or three siblings with congenital hypertrophic pyloric stenosis, but in search of the literature I have been able to find only one instance

Clinical Features of the Cases

Clinical Features	Peter D III/6	John D III/7	Brendon D III/8	Patrick D III/9
Date of birth	29/3/39	9/6/41	30/7/43	6/2/47
Gestation, labour, delivery	Normal	Normal	Normal	Normal
Sex	Male	Male	Male	Male
Position in family	3rd	4th	5th	6th
Birth weight	9 lb. 8 oz. (4.3 kg.)	6 lb. 10 oz. (3 kg.)	9 lb. (4.08 kg.)	(4.53 kg.)
Foetal abnormalities	None	None	None	Hypospadias
Feeding prior to symptoms	Breast	Breast	Breast	Breast
Age at onset of symptoms	59 days	7 days	15 days	10 days
Projectile vomiting	Yes	Yes	Yes	Yes
Visible peristalsis	Yes	Yes	No note	Yes
Pyloric tumour palpable	Doubtful	Doubtful	No note	No
Bowel action	Constipated	Constipated	Normal	Constipated
Age on admission	78 days	18 days	27 days	37 days
Dehydration before operation	Yes	No	Yes	No
Age at operation	80 days	19 days	28 days	38 days
Age on discharge	85 days	21 days	31 days	42 days

of this condition being discovered in four members of the same family—a family reported by Finkelstein, quoted by Sauer (1924). Each of the four cases here reported shows

the classical clinical picture. They were the children of the father's second marriage, and were preceded by two step-brothers, one stepsister, and two brothers, all of whom were normal. The clinical features are outlined in the table.

In each of these cases Rammstedt's operation was successfully performed and convalescence was uneventful. The three older boys have "never looked behind them," and have developed into normal healthy boys. The baby (Patrick), more than two months after his operation, is thriving and putting on weight regularly.

An attempt was made to gain enough information to prepare a family tree, but the parents (Mr. and Mrs. C.) were unable to remember any details before their own generation, and as the grandparents are dead and the rest of the family scattered it was impossible to build up a complete picture of the family. However, the accompanying genealogical table shows the details that were obtained of the two generations. The symbols used are those recommended by the Eugenics Society.

In the generation D II there are three interesting members. D II/3 and D II/7 were sisters of Mr. C. and Mrs. C. respectively, and both died at the age of 2 years, the cause of death and the nature of the illness being unknown. D II/6, a brother of Mr. C., was reported to

have been ill from shortly after birth with severe "gushing" and persistent vomiting, so that both breast-feeding and bottle-feeding were impossible, and he was able to keep anything down only by receiving very small feeds from a spoon. After a very stormy illness, during which there were times when his life was despaired of, he started to make a recovery about the age of 1 year and is now reported to be a very healthy man in Canada. This boy's illness was considered by his mother, I/2, to have been exactly the same as that of her grandson, Peter D III/6, the first case of this report. In view of this story I have ventured to record him as a suspected case of congenital hypertrophic pyloric stenosis, and have represented him as a shaded square.

While there is still disagreement on the aetiology of congenital hypertrophic pyloric stenosis, most authorities seem to agree that the condition is congenital, that the hypertrophy is primary, and that the spasm, to which the clinical picture is probably due, is secondary to the hypertrophy. In this family the condition appears to have been transmitted as a Mendelian recessive character.

I am grateful to Dr. F. M. B. Allen, under whose care they were, and to Mr. H. P. Hall and Mr. J. S. Loughridge, who performed the operations, for permission to publish notes of these cases.

REFERENCE

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Medical Memoranda

A Case of Epidermolysis Bullosa

The following case is considered to be an example of epidermolysis bullosa and to belong to a rare variety which develops in adult life. It is stated in the literature that some cases resolve spontaneously; it is therefore notable that in the present case relapse occurred two years after spontaneous recovery from the disease.

CASE HISTORY

A naval telegraphist aged 19 was sent to hospital complaining of blisters forming on his hands. It appeared that for about two years he had been liable to lose large areas of skin if he slipped and bruised himself. The skin "slid off." Confirmation of this was supplied by the numerous discoloured areas in places where trauma was readily sustained, but there was no scarring anywhere. About eighteen months previously he had a similar attack involving the hands; this cleared up quite quickly, and recently he had been under treatment with impetigo of the face, which was also of a vesicular nature and which cleared with penicillin cream. There was no other relevant previous history or any relevant family history.

On examination many flaccid and unilocular blisters varying in size from 3 by 2 in. (7.5 by 5 cm.) to minute vesicles were seen arising off normal skin and unattended by itching, soreness, or malaise (see photograph). The skin enclosing the blisters was noticeably tough. Burst blisters dried up and did not form crusts, nor did the blister contents tend to become purulent. The bullae were at the time confined to the hands, but there were discoloured marks of old lesions on the elbows and a few on the shins and knees. His nails and teeth were normal. Examination of other systems revealed no abnormalities. The fundi were normal, and there was no hyperhidrosis. A blood count showed: R.B.C., 4,960,000 per c.mm.; haemoglobin, 96% (Sahli); colour index, 0.97; W.B.C. 9,600 per c.mm. (polymorphs, 37%; lymphocytes, 57%; monocytes, 3%; eosinophils, 3%). A further count seven days later gave a similar result. The Paul-Bunnell reaction was positive to 1 in 16 only. A radiograph of the chest revealed nothing abnormal. The urine was normal; there were no bromides or iodine, and no darkening on standing. The Kahn test was negative. The blister fluid was sterile on culture; cytology: 3% polymorphs, 96% lymphocytes, and 1% eosinophils.

A small area of skin on the back of the hand was rubbed firmly and a blister formed in 18 hours.

COMMENT

Differential Diagnosis.—Apart from many easily excluded bullous diseases, there are a few which can give trouble in differentiation. These, with the main points of difference, are: (1) *Pemphigus*:—The health deteriorates, and the patient with well-developed pemphigus is usually an ill person; widespread and not confined to traumatic areas. (2) *Impetigo bullosum*:—Typical lesions elsewhere and presence of infection. (3) *Iodism* and *bromism*:—Test urine. (4) *Syphilis*:—History and positive

The patient's hand on admission. (Photograph by courtesy of the Fleet Photographic Officer, Malta.)

Kahn reaction. (5) *Syringomyelia*:—No other confirmatory signs. (6) *Dermatitis herpetiformis*:—Polymorphism and itching.

Treatment.—Arsenic in various forms is recommended, but it has had no effect in this case. Ultra-violet light is also said to be of use, but, in the main, treatment must be symptomatic until the cause of this disorder is discovered. It is perhaps notable that the first attack in this case subsided after six weeks without any other than protective treatment.

I am indebted to Surgeon Rear-Admiral Brownfield for permission to publish this case.

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Speaking at the annual general meeting of the Industrial Welfare Society on Nov. 25, 1947, Lord Trent said that there had been a considerable increase in membership. Requests for information about personnel policy poured into headquarters all the year round, and more than 2,500 such inquiries had been dealt with. During the year some 715 firms had been visited. Specialist advice was given on such subjects as education and training schemes, canteen planning, joint consultative machinery, the organization of personnel departments, and many others.