of fish liver has also been used in the treatment of six cases of pernicious anaemia by Connery,⁸ and although the results were not so striking as those of our own series, a satisfactory response was produced in every case. It may be safely concluded, therefore, that fish liver contains the same active blood-regenerating substance as is present in mammalian liver.

It need scarcely be added that the economic possibilities of this new remedy are of great importance, both to the patient suffering from pernicious anaemia and to the fish industry. At present the extract is being made from whiting, haddock, and cod livers, while a preparation of monk-fish liver is ready for trial. It will be possible to obtain fresh fish liver at a fraction of the cost of mammalian liver, and since the expense entailed in the manufacture of the extract should be similar to that of mammalian liver extract, the cost to the patient should be much reduced. A valuable by-product—fish oil—will help to reduce the cost still further. The fish industry will benefit by having an outlet for the sale of fish livers, much of which at present is scarcely marketable.

SUMMARY

An extract of fish liver has been prepared which has been shown to be of remarkable potency, as judged by the haematological and clinical improvement which occurred in nine cases of pernicious anaemia.

The economic importance of this preparation to the patient, the manufacturer, and the fishing industry is discussed.

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PYLORIC AND DUODENAL STENOSIS IN MONGOLIAN CHILDREN

BY

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Experience shows how rarely pyloric stenosis and mongolism are combined, and there is no known reason why they should be. With two large out-patient departments and a special interest in both conditions, it was fifteen years before I found the combination, and then I saw two cases of pyloric stenosis and one of duodenal stenosis in mongols in one year—1924. I have since seen only one other case, and this was a mongol with pyloric contractions which were definite, but not severe enough for operation.

In my opinion both pyloric stenosis and mongolism have slowly increased in frequency during the last twenty years, even after making allowances for wider knowledge and better diagnosis. Pyloric stenosis may occur in two children of a family, in parent and infant, in twins, or in one twin only.³ It tends to occur in males, and to a certain extent in first-born children. Mongolism rarely occurs in two children of a family, but it may do so,¹ and

may even occur in both twins or in one twin only. It tends to occur in the last-born children with no special sex incidence. The following are the case reports in brief.

CASE RECORDS

A. C. H., St. Mary's Hospitals, aged 6 weeks, male, second child. Baby born fairly healthy; breast-fed for three weeks, when vomiting commenced; was given milk and water, Glaxo, Nestlé's food. Baby now suffers from projectile and cumulative vomiting, is losing weight, is very constipated, is small and thin, weighing 5 lb. 10 oz., and is a typical mongol. Stomach lavage was used. The vomit was tested and showed absence of free hydrochloric acid. The starch granules were very imperfectly digested. Lactic acid was present and much mucus. On account of the symptoms of pyloric stenosis, Rammstedt's operation was performed by Mr. Morley. A typical pyloric tumour was found. The child improved, and the result was good until nine months later, when it contracted pneumonia and died.

M. S., Royal Manchester Children's Hospital, aged 7 weeks, female, third child. Admitted on January 22nd, 1924. Breast-fed at first. History of jaundice at 9 days; has never been well; forcible and very large vomits; steady loss of weight. Child very small; weighed 5 lb. 10 oz. Typical mongol. Expulsive vomits and definite gastric peristalsis. Rammstedt's operation performed by Mr. A. H. Southam. Child did well after the operation, gaining weight for the first ten days. She did not continue to improve so satisfactorily, and went home some ten days later. Death occurred on April 15th, 1924 (five weeks afterwards) with bronchitis and dyspeptic symptoms.

The third case in 1924 was one of duodenal obstruction, which has been fully reported elsewhere.²

G. M., male, St. Mary's Hospitals. The history was that he appeared physically healthy at birth. Though breast-fed, he began vomiting on the fifth day. Vomiting occurred after every feed; it was coffee-ground in colour and projectile in character, coming down the nose. The mother stated that she had observed peristalsis. The stools were sometimes greenish in colour, and sometimes constipated. The child was a typical mongol. The abdomen was protuberant, but peristalsis was not observed. There was a noticeable swelling stretching across the abdomen from the left hypochondrium, passing below the umbilicus and ending on the right side. It was not very resonant, fairly superficial, comparatively soft, and did not seem to pit. The question of operation was considered, but rejected as the infant was very frail. Death took place six days later. Post mortem there was no gastric or pyloric abnormality, but the duodenum was much dilated owing to a constriction, which was due to a band in the mesentery passing across the distal end of the duodenum, anchoring it firmly to the posterior abdominal wall. On section and microscopical examination this band was shown to consist of connective tissue carrying minute branches of the superior mesenteric vessels, and also containing lymphoid tissue. The band continued downwards in the mesentery, apparently as a vessel to supply the lower part of the ileum about two and a half inches from the ileo-caecal junction.

H. C., St. Mary's Hospitals, aged 4 months. Seventh child; mild degree of mongolism. Vomited from 6 weeks of age, vomiting often projectile; 9½ lb. at birth, now, at 4 months, only 9 lb.; breast-fed, with supplementary feeds of milk and water. Vomits after every feed; sometimes projectile; may vomit immediately, or sometimes not for half an hour. The baby is often very uncomfortable after a feed, and squirms with pain; very hungry, taking food greedily. No tumour was felt, but the appearance of the stomach indicated pyloric spasm, and the x-ray examination on February 4th, 1932, indicated "moderate delay at the pylorus, spasmodic type." The child is now overcoming his pyloric spasm after treatment with belladonna and careful feeding, but is showing the developmental drawbacks of a mild degree of mongolism.

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