

SPRUE

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Those of us who have nursed cases of sprue realise that it offers many interesting features. Sprue is a condition so seldom met with outside hospitals where one is solely concerned with the treatment of tropical disease that it may be of some interest to those who are going overseas.

Is sprue a tropical disease or is it not? Sprue-like conditions have been reported when the patient has not been out of England, and in other cases where the patient has been home for 15 or 20 years, but it is generally accepted that sprue is of tropical origin. It occurs chiefly in Bengal, Assam, China, Bombay Presidency and Madras Presidency, and there are a few cases in the East Indies and Australia. In spite of many years of research the cause is unknown. The natives are rarely affected.

Symptoms

The first symptoms are a feeling of tiredness, loss of weight, lack of energy, indigestion accompanied by flatulence and abdominal distension. This may go on for some time, or in some cases be followed almost immediately by morning diarrhoea. As the condition advances either the number of stools increases or one or two very large stools are passed, followed by a feeling of relief. The stools are loose, bulky, pale, frothy and very offensive. The pale colour is due to unabsorbed fats. Usually this condition is accompanied by hæmorrhoids, which may be a great source of discomfort.

The Sore Tongue

The next symptom of importance is soreness of the tongue. The patient complains of a burning sensation in tongue and throat on taking spicy foods, alcohol and particularly pineapple. In appearance the tongue resembles raw beef, the denudation of the epithelium leaving a flabby, red, glossy mass. The papillæ in the posterior part of the tongue are hypertrophied. This is usually accompanied by ulceration of the mucus membrane of the mouth and fissures of the tongue. The blood picture resembles that found in pernicious anæmia more and more as the condition advances. The red blood corpuscles may fall as low as one million per c.mm. The hæmoglobin may be only 25 per cent.

The temperament of these patients in a great number of cases appears to undergo a complete change. A person previously of normal temperament becomes introspective, deceitful, unstable and cantankerous, and may employ ingenious methods of procuring and secreting food outside their dietary limit. I have one particular case in mind of a man with a partiality for bananas. He devoured them stealthily by night, afterwards creeping round and depositing the tell-tale skins in other unsuspecting patients' waste paper baskets, without discovery for several days.

The appearance of the patient is typically 'sprue', with obvious emaciation and a dry, yellow, wrinkled skin predisposed to skin infections. The abdomen is distended, especially in the latter part of the day, with distended abdominal veins, lack of tone and a feeling of doughiness on palpation. Cramp and tetany are common symptoms, due to lack of calcium in the blood.

Treatment

The essential treatment of sprue is dietetic. A diet of almost raw minced beef gives the quickest results. Every trace of fat and gristle must

be removed, and a little Marmite may be added; five ounces three times daily forms the sole diet for the first few days. This is gradually increased and as the patient's condition improves rusks, calves-foot jelly, baked apples, glucose, cauliflower, chicken and sponge cakes are added, bringing the diet up to a normal one, but avoiding fats and carbohydrates. Orange juice is given from the beginning of the treatment, usually with small doses of hydrochloric acid, about 20 minims t.d.s., p.c. Achlorhydria is present.

Messrs. Cow and Gate have patented a dry milk of high protein content, fat-free, labelled 'Sprulac', which has been found to be very efficacious and convenient for most cases of sprue. Some patients cannot take the meat diet, and others find difficulty in preparing the meat when away from hospital. The 'Sprulac' diet is drawn out to extend over six weeks, during which time there is a weekly increase if the patient is making satisfactory progress. Orange juice is given daily with glucose. Rusks, calves-foot jelly and so on are added as in the meat diet.

The Intestinal Tract

Flatulence may be relieved by the application of turpentine stupes, sodamints, charcoal biscuits, kaolin or soda bicarbonate. The frequency of stools may be controlled by the administration of pulv. bataviae co. in doses of from 30 to 60 grains t.d.s. Anusol suppositories allay irritation of the rectum and anus.

Oral hygiene is of great importance, and mouth washes are given after every feed. There is a recent preparation known as Glauramine, which appears to be almost specific for this condition. It alleviates the discomfort after a few days of persistent treatment. Mouth symptoms disappear as the patient's condition improves.

The blood picture may be brought up to normal by the administration of liver. Exhepa may be given orally, but quicker results are obtained by intramuscular injections of liver extracts such as Campolon, Anahemin or Hepatex. Cramps and tetany are treated by the administration of calcium lactate, 30 to 40 grains t.d.s.

General Nursing Care

Patients must be kept warm, and these cases are ideally nursed in an even temperature, such as is produced by a centrally heated building where a temperature between 60 and 70 degrees can be maintained day and night. For the first month the patient is kept strictly in bed at complete rest, a blanket next to him. Massage of the extremities is useful if the patient will tolerate it. Weight and the blood count should be recorded weekly as a check upon the improvement of the patient. All stools are weighed and examined for fat content, consistency and colour.

As the condition improves resultant constipation often sets in. This can be controlled by an occasional dose of oleum ricini. A teaspoonful is usually sufficient. No purgative must be used, but a preparation of paraffin is sometimes given. On leaving hospital the patient is warned to lead a very careful life for at least six months, avoiding fatigue, chill and alcohol.

Although this is a curative treatment, relapses are frequent. They should be treated in the same way as the original attack. The mortality is low if the condition is treated in time, and in no other cases can more satisfactory results be obtained than in sprue.

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