TREATMENT IN GENERAL PRACTICE

This article is one of a series on the management of some diseases of the digestive system met with in general practice.

TREATMENT OF ACUTE AND CHRONIC GASTRITIS

BY

S. W. PATTERSON, M.D., D.Sc., F.R.C.P.

Acute Gastritis

Acute gastritis may be, first, *toxic*, from taking poisons, such as caustic alkalis, corrosive acids, lysol, phosphorus, mercury, or arsenic. The treatment of these forms of gastritis will not be dealt with here. Secondly, gastritis may be *irritative*, following dietetic indiscretions, over-eating, ingestion of bad or insufficiently masticated food, or excess of alcohol. Or, finally, it may be *secondary* to various febrile and infectious diseases. In this last group it is necessary to treat the cause, and also to give attention to dieting and medical measures for the relief of digestive symptoms.

IRRITATIVE GASTRITIS

A case of irritative gastritis following rich food or excess of alcohol is treated by putting the patient to bed in a quiet room. Nature usually helps in the elimination of the irritating material by vomiting, which is to be encouraged by prescribing one drachm of sodium bicarbonate to a pint of warm water, in quantities of two or three tablespoonfuls at a time. It is useful sometimes to give twelve or fifteen ounces, which are brought up again and relieve the patient's sick feelings. To start the vomiting in a strong and obstreperous alcoholic patient 1/5 to 1/10 of a grain of apomorphine may be injected subcutaneously; after vomiting profusely he will become calm, and often sleep for several hours.

The patient is better without any food for twelve hours, but he may be allowed to quench his thirst with the juice of an orange in a tumbler of water or soda-water. Then whey, junket, and thin barley water may be taken; later, weak tea with a dash of milk, fruit juice, or albumin water, three or four tablespoonfuls of the fluids being given every two hours. In a favourable case, on the third or fourth day add rusks, toast with a little butter, a lightly boiled egg, and steamed fish; thus, gradually, an ordinary diet may be resumed. For a time it is better to omit rich or fatty dishes and cream, and a diet suitable for chronic gastritis (*vide infra*) may be prescribed with advantage.

SECONDARY GASTRITIS

Gastritis which is secondary to the infectious fevers often causes troublesome symptoms. In acute febrile illness it may be thought that food is of less importance than fluids, and it may be enough to keep the patient going, or allow him to live, on his own tissues, with the addition of glucose in solution to prevent acidosis. In more prolonged fever gastric symptoms need much care, and a patient with typhoid fever who vomits is a source of great anxiety. A liquid diet of clear meat or vegetable soup, milk diluted with water, barley or rice water, soda-water or a junket, in amounts of one to five ounces every two hours, is best. Tincture of iodine or dilute hydrocyanic acid, in single-drop doses in water before the drink,

often soothes the stomach, or small pieces of ice may be sucked. An ice-bag applied to the stomach often helps.

Chronic Gastritis

In a series of cases of chronic gastritis observed at Ruthin Castle, the diagnosis being made on the symptoms and from x-ray examination, nearly 30 per cent. were found to be due to exogenous causes—for example, faulty mastication, defective teeth, ingestion of alcohol, excess of tobacco or of drugs such as aspirin. In nearly 50 per cent. an endogenous toxin was responsible: either from swallowed muco-purulent material from the nasopharynx, accessory sinuses, or from infected teeth, or from an infected gall-bladder, appendix, or colon; or from more general infections, such as those due to the tubercle bacillus, the streptococcus, or the *B. coli*; or in uraemia. Of the rest about 12 per cent. were associated with inherent nervous states and microcytic anaemia, and 12 per cent. occurred in the decreascent period of life, accompanying atheroma, arteriosclerosis, and osteoarthritis.

TREATMENT OF THE CAUSE

In treatment it is of primary importance to deal with the cause. Faulty table habits, therefore, must be corrected and enough time be given to meals, which should be served in pleasant surroundings and taken in a leisurely manner. The family physician has opportunities of seeing things for himself and for making the dining-room conditions more suitable for the patient. Relishes, chutneys, and sauces are often taken, not to stimulate a jaded appetite, but to cover badly cooked or untastefully served food. All defective teeth should be dealt with, and, if necessary, dentures fitted and adjusted. The condition of the nasopharynx, throat, and tonsils may require treatment to prevent pus from being swallowed. The patient's habits in regard to alcohol and tobacco may need correction does not therefore come much into consideration. The stomach should be forbidden.

DIET

In severe cases it may be advisable to begin treatment by putting the patient to bed on a fluid diet, consisting of a cupful of water, weak tea, barley water, rice water, arrowroot made with water, or soda-water, every two or three hours. The cereals may be sweetened with glucose, and fluids flavoured with the juice of an orange. On the second or third day some diluted milk may be added, with a rusk, plain biscuit, cornflour, or one of the proprietary invalid cereal foods; or meat or chicken jelly may be given. When the diet is increased protein foods are added, but fats are not as a rule well tolerated. The next step is to add at intervals steamed or boiled fish, with boiled potato, tender or minced meat or chicken, and lightly boiled egg with toast or bread and a little butter. Thus a "skeleton" diet is being given to which gradual additions are made to bring it up to the diet described below. The principle of the diet recommended is to reduce the demands on the stomach as much as possible, avoiding especially over-distension; the acidity of the gastric juice and the general character of the gastric secretion. Smoking before meals and alcohol on an empty stomach should be small and rather dry, a little fluid being

taken during or at the end of the meal. Fluid to quench thirst is drunk half an hour before meals, and on rising and at bedtime.

The diet for a case of moderate severity, when convalescent, may be arranged as follows:

Breakfast.—Well-cooked porridge or cereal with cream. Dried bread, toast, or rusks; butter; weak tea; milk. Eggs or fish.

10.30 a.m.—Milk (1/2 pint) and rusk.

Lunch.—Dried bread or toast, butter. Chicken, boiled mutton, minced beef, tongue, or tripe. Potato, green vegetables (sieved).

Tea.—Dried bread, toast, plain biscuits, or light sponge-cake. Butter, jelly, weak tea with milk.

Dinner.—Bread or toast, butter. Fish or egg dish. Macaroni or vermicelli. Custard, junket, or milk pudding. Fruit jelly or purée.

Bedtime.—Milk (1/2 pint) and rusk if desired.

LOCAL TREATMENT

This is carried out by using water, or various simple solutions, to remove stagnant or fermenting food retained in the stomach and to wash the lining walls. The usual method adopted is to have the patient seated in a chair and leaning slightly forward. The physician, standing on the patient's right, passes firmly but gently a Jacques' oesophageal tube (No. 23) into the patient's stomach, the tube having been lubricated with a little glycerin and filled with the solution to be employed. To the free end of the tube a glass or enamel conical funnel of six or eight inches diameter is attached by a connecting rubber tube. The solution used, which is preferably water at body temperature, is run into the stomach at a pressure of not more than two feet above the mouth, and then siphoned out into a bucket. Six or eight quarts may be run in and out, in quantities of two or three funnels at a time, without the least discomfort to the patient; distension is to be avoided. This is continued until the return is clear. The patient is instructed to breathe quietly, deeply, and steadily; this prevents retching. If the stomach becomes over-distended with fluid he may vomit the tube and stomach contents. If much mucus is present 1 per cent. bicarbonate of soda helps to dissolve it; and, in the presence of much fermentation, hydrogen peroxide, one or two drachms to the pint. Blood in the return fluid is an indication to withdraw the tube and cease this method of treatment.

For less severe cases and for treatment at home gastric lavage is easily carried out by the patient in the following way. He or she drinks twelve to eighteen ounces of a solution of bicarbonate of soda, one drachm to a pint of warm water, and lies on the left side for half an hour, then turns on the right side for fifteen or twenty minutes. This may be done during an hour's rest before the evening meal, or even twice a day before the two principal meals. Warm applications to the abdomen, such as hot-water bottles or linseed poultices, relieve pain and discomfort in patients with any form of gastritis.

MEDICINES

In mild cases it is useful to prescribe alkalis with a bitter; to this mild antiseptics such as sulphocarbolate or salicylate of soda may be added, as in the following prescription:

R̄	Sod. bicarb.	...	...	...	gr. x
	Sod. sulphocarbol.	...	...	...	gr. xx
	Spt. ammon. aromat.	...	...	...	℥ xx
	Spt. chlorof.	...	...	...	℥ x
	Inf. gent. co.	...	...	...	ad 3 j

3 j, t.i.d., p.c.

Constipation may be troublesome, and is best treated by a dessertspoonful or two of liquid paraffin, taken night and morning, or one or two teaspoonfuls of cremor. magnes.

(B.P.C.) once or twice a day. In some cases of achylia the bowels may be too loose; here treatment with bismuth or kaolin may be helpful, as is an acid mixture, for the stomach.

R̄	Bismuth oxychloride	...	...	...	1 part
	Kaylene	...	...	...	2 parts

3 j, t.i.d., p.c.

In mild cases with subacidity it may be enough to give the following mixture fifteen minutes before meals. This is especially useful for elderly patients with poor appetites.

R̄	Acid. hydrochlor. dil.	...	...	...	℥ x
	Tinct. nucis vom.	...	...	...	℥ v
	Glycerin	...	...	...	℥ xxx
	Inf. gent. co.	...	...	...	ad 3 j

3 j, t.i.d., a.c.

In more severe cases with marked deficiency of acid a drink is given containing fifty to sixty drops of dilute hydrochloric acid in half a pint of water; this may be flavoured with the juice of an orange and a teaspoonful of sugar. Most of the drink is sipped between mouthfuls of food, and the rest is taken at the end of the meal.

ANALGESICS SUITABLE FOR ADMINISTRATION BY MIDWIVES

INVESTIGATION BY THE BRITISH COLLEGE OF OBSTETRICIANS AND GYNAECOLOGISTS

At the request of the National Birthday Trust Fund the British College of Obstetricians and Gynaecologists has carried out an investigation to ascertain if there is any form of analgesia (relief from pain) which can be used with safety and success by a midwife in the absence of a medical practitioner.

The trial has been made in institutions because adequate medical supervision and facilities for the necessary observation and accurate recording of results are more readily available in such places. Thirty-six hospitals, for the most part maternity hospitals or departments attached to medical schools, accepted the invitation to take part in the investigation. Five methods were adopted for investigation—that is, chloroform capsules, the Christie Brown chloroform inhaler, the Mennell chloroform inhaler, the Minnitt gas and air apparatus, and the administration of paraldehyde per rectum.

The records of nearly 10,000 cases have been studied and classified into three main groups—namely: (1) nitrous oxide and air, (2) chloroform, (3) paraldehyde.

1. Nitrous Oxide and Air

Nitrous oxide and air was administered with the Minnitt apparatus to 3,865 cases, and in 627 of them an additional anaesthetic was given, mainly on account of some obstetric difficulty. Nitrous oxide and air was thus administered to 3,238 cases without any supplementary anaesthetic or analgesic. In this series there were three maternal deaths, which were in no way due to the analgesia. Among the 627 cases in which an additional anaesthetic was given there were six maternal deaths. In every case the death was the result of serious obstetric difficulty and in no case was it attributable to the administration of the gas and air.

The stillbirth rate when the Minnitt apparatus alone was used was 2 per cent. When administered by a sister, staff nurse, or pupil-midwife it was 1.2 per cent. The higher stillbirth rate in cases undertaken by a medical practitioner is accounted for by the fact that he would be more likely to be called upon in difficult cases, in which a relatively high stillbirth rate is to be expected. When a full anaesthetic was given (frequently on account of some obstetric abnormality) the stillbirth rate was 4.3 per cent. The stillbirth rate for the whole series, however, shows that the method does not involve any