

iritis is always preceded or accompanied by articular pains. I am convinced that this is not correct; there is little reason why it should be when we consider that only about 2 per cent. of all cases of gonorrhoea develop this complication.

Tuberculous iritis can usually be diagnosed from gonorrhoeal without difficulty by its occurrence in younger subjects, the presence of tubercles on the iris, the very considerable damage done to the eye, the absence of true recurrences, and the diagnostic tuberculin tests.

The so-called septic iritis due to an endogenous septic infection may closely simulate the gonorrhoeal variety. Recurrences are frequent and the condition of the iris may give no clue as to the cause. The damage to the eye is greater than in the gonorrhoeal variety and rheumatism may occur. It must not be forgotten that thorough investigation is necessary in these cases, and that the gonococcus may be at the root of the matter.

Although a venereal history and a careful and accurate inspection of the eye will give us valuable assistance, yet it is to the genito-urinary organs that we must turn for a definite diagnosis, and it must be remembered that the absence of a urethral discharge cannot be relied upon to exclude gonorrhoeal infection, nor does the absence of threads in the urine preclude this disease. With the absence of discharge and a clear urine many of us have in the past given the patient a clean bill of health so far as gonorrhoea is concerned. But we now know that it is to the prostate and seminal vesicles and the fluid contained therein that our attention should be chiefly directed, for I believe that gonorrhoeal iritis rarely if ever occurs apart from an infection of these organs, and I do not consider that a case has been properly investigated until the prostate has been expressed and the fluid carefully examined microscopically. It is, of course, an objectionable procedure, but there is no doubt that it is most essential if we are to deal adequately with the type of iritis under discussion.

The microscopical examination in many cases shows either the gonococcus or an involution form, but even where the actual organism is not present and only a few pus cells found the case should be treated as gonorrhoeal. Very little need be said of the ophthalmic treatment of gonorrhoeal iritis, which should be conducted on the usual lines; for the intense pain which occurs in so many of these cases salicylates internally are of great use. The venereal treatment, which is so often omitted, should be handed over to one thoroughly versed in it, for attention must be directed to the posterior urethra, prostate, and seminal vesicles; and unless the treatment is adequate we cannot expect a cure of the iritis, and by a cure I mean the absolute prevention of recurrent iritis—a term of which I hope we shall hear little in the future as we learn more and more to direct our attention to the actual cause.

I have been able to follow up five cases of recurrent iritis for nearly five years. In all the gonococcus was definitely found in the fluid expressed from the prostate and seminal vesicles. The Wassermann reactions were negative. The last attack of gonorrhoea had occurred 4, 5, 9, 10, and 13 years ago; the number of attacks of iritis were 2, 2, 1, 5, and 3 respectively, not including the attack for which the patient was seeking advice. None of these patients had received adequate venereal treatment at the time of the original attack of gonorrhoea and all stated that they had had a gleet for some time after the attack; during the previous attacks of iritis no investigations had been made into the state of the genito-urinary tract, although the iritis had by itself received correct treatment. Two of these patients had had many teeth removed, probably on the assumption that the iritis was septic in origin.

All these patients, after the presence of the gonococcus was confirmed, received appropriate venereal treatment, with the result that no recurrent attack of iritis has taken place during the past four and a half years.

I hope in the future recurrent iritis will not be looked upon as a purely local affection, as in the past, but that an attempt will be made to discover the actual cause, and that in our investigations a chronic gonorrhoeal infection of the prostate and the seminal vesicles will not be overlooked.

## A METHOD OF INTUBATING THE OESOPHAGUS FOR MALIGNANT STRICTURE.

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CARCINOMA of the oesophagus is by no means uncommon, and few conditions are more distressing. If left to himself the patient has nothing to look forward to but death by slow starvation, unless a perforation into the mediastinum, the pleura, a bronchus, or perhaps a large blood vessel, cuts matters short. For practical purposes he need have no fear of extension of the growth or of secondary deposits, for these occur late and develop very slowly. The problem of his relief is the purely mechanical one of relieving his obstruction.

The truth of this statement and the urgent nature of these cases have been brought home to me by a series of patients who have recently passed through my hands. Most of them were elderly, some were acutely ill, in none could an extensive operation be contemplated, and in many it was obvious that the simplest surgical procedures involved a grave element of risk. It is characteristic of the condition that after perhaps a long period of dysphagia total obstruction should suddenly occur; and so often does this happen that I have come to regard all cases of dysphagia as urgent, and take every precaution that they do not linger on a waiting list. In spite of this I have several times had to deal with patients who had swallowed absolutely nothing for three or four days, and an elderly man who has been deprived of fluid for four days is in a very dangerous condition.

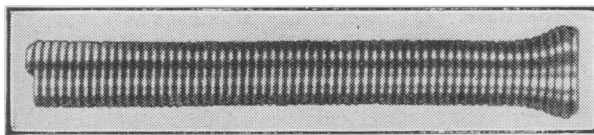
Theoretically gastrostomy affords a rapid and complete method of relief, but it presents serious drawbacks. In the first place, the mortality is far higher than is generally supposed, owing to the bad condition of these patients, especially where complete obstruction has supervened. In the second place, feeding by a tube is a miserable substitute for eating, and in the case of hospital patients it is rarely practicable for them to obtain and prepare food in the necessary form, whilst the management of the tube is often quite beyond them. And finally, not only can they not chew their food, but they cannot swallow their saliva.

Treatment of oesophageal conditions has been revolutionized by the oesophagoscope. It is now possible to see carcinomatous strictures by direct vision and to dilate them with a reasonable degree of safety. A passage having been formed, it is possible to maintain it by passing bougies at regular intervals, but this is troublesome and somewhat risky. Progress has therefore been directed along the lines of maintaining the lumen so formed, and of the methods used none have been more successful than Symonds's tubes and Hill's probe.

The former is a gum-elastic tube with a conical upper end which prevents its sliding completely through the stricture, and it is customary to tether it with a silk thread brought out through the mouth and fastened round the ear. The object of this is the periodical removal of the tube, which tends to become very foul and to block if left in long without cleaning. Hill's probe is of silver wire covered by a fine rubber tube, brought out of the mouth in the same manner and acting as a permanent dilator alongside which food can pass through the stricture.

It occurred to me that it ought to be possible to devise a flexible metal tube which could be passed through the stricture and maintain the lumen, and that as such a tube ought not to become foul it need never be removed. After several experiments I have adopted a simple close spiral of German-silver wire, expanded at the upper end. It is extremely flexible, absolutely incompressible, is very light, and occupies very little room. Food does not tend to cling to it, and it therefore does not become foul. The metal turns black, but this can be prevented by gilding. It appears to be possible to leave these tubes in position indefinitely, and they do not show any tendency to ulcerate through the oesophageal wall. The tube simply canalizes

the mass of growth, and it probably never exerts pressure on the oesophageal mucosa. The tubes are made in three sizes: the large size is 3 inches long and 10 mm. in diameter; the smallest tube is  $2\frac{3}{8}$  inches long and 6 mm. in diameter. The general appearance is shown in the figure.



Flexible metal tube for intubating the oesophagus in cases of malignant stricture.

The insertion of the tube through the oesophagoscope is a simple matter. The stricture is slowly dilated as far as is considered safe, probably to a diameter of from 8 to 10 mm. A small bougie is passed right through, and along this, as a guide, a tube of appropriate size is passed into position. The tube is inspected, and if it appears satisfactory the oesophagoscope is withdrawn. The tubes are well retained, and appear to cause no inconvenience. Their position can always be verified by an x-ray examination. They may even be inserted through a cardiac stricture into the stomach, but in this case the tube must be slightly bent or it will be expelled by gastric contractions. The bent tube straightens on the bougie and is passed with facility, and its retention appears to present no difficulties.

The method is undoubtedly attractive, and, although I am very conscious that my present experience of its use is limited, it appears to me to offer the best solution so far obtained of a very difficult problem. The rapid recovery of the patients is remarkable, and it is very striking to see a man who was admitted almost *in extremis* going out forty-eight hours after intubation swallowing with facility and looking an entirely different person. We find that these patients can swallow anything which they can masticate properly, and so far no one has returned with a blocked tube. Occasionally it has become displaced, but it has been easily replaced, and a slight bend in the tube has retained it in position.

Of the existence of the tube the patients are quite unconscious, and one man only discovered it from an accidental remark on my part four months after it had been introduced. His case is, I think, sufficiently remarkable to be placed on record. It was as follows.

A man, aged 67, came to see me in May, 1922, complaining of increasing dysphagia. He could only swallow liquids and soft foods. An x-ray examination with barium emulsion showed a tortuous stricture in the mid-dorsal region. On oesophagoscopy a fungating mass of growth could be seen completely surrounding the oesophagus and obstructing its lumen. By means of bougies the stricture was easily dilated up to No. 14. Swallowing was now easier, and he returned every fortnight for the passage of a bougie. He suffered from severe chronic bronchitis and emphysema, and the passage of the bougies became more and more difficult, but a satisfactory lumen was maintained until May, 1923, when he came to hospital desperately ill, having swallowed absolutely nothing for four days.

On oesophagoscopy a tight stricture was found surrounded by a mass of fungating growth. Bougies were passed with great caution, and a tube spiral, 8 mm. in outside diameter, was inserted. Through this the patient has swallowed ever since, apparently without the slightest difficulty, except for a few days some weeks ago. He then found that although he could swallow soft foods without difficulty, liquids induced a violent attack of coughing. I strongly suspect that a communication with a bronchus had been formed, but it must have closed again, for the difficulty has disappeared. He is now 69, and the tube has remained in position without removal for ten months. He has put on weight and is in excellent health.

This method of intubation demands expertness in the use of the oesophagoscope, but, granted that essential condition, it presents no great difficulty. Only further experience can show whether it is applicable to cases of every kind, but so far as I have been able to employ it the results have far exceeded my expectations.

## Memoranda:

### MEDICAL, SURGICAL, OBSTETRICAL.

#### EXTRAUTERINE PREGNANCY ON TWO OCCASIONS.

THE following case may, I think, be of sufficient general interest for publication.

A married woman was operated upon by me on November 18th, 1923, for ruptured extrauterine pregnancy, the period of gestation being about three months. The tumour was situated in the right tube in close proximity to the cornua of the uterus. It had ruptured into the general peritoneal cavity, and the patient had lost a large quantity of blood. The tumour was excised; she made an uninterrupted recovery, and was discharged from hospital on December 16th.

On Sunday, February 24th, 1924, I was again called, and found her in a condition of some shock. She was pale and her expression anxious. The temperature was subnormal, pulse 80, but small and weak. She described her symptoms as being similar to those she had experienced before her previous operation. The lower part of the abdomen was slightly distended and tympanitic. Pain was referred to the umbilicus. Tenderness on palpation was general over the lower part of the abdomen, greater at first over the left iliac fossa, later over the right iliac fossa. Examination by the vagina gave a negative result. She stated that she had been quite well since her previous operation. The menstrual periods had begun again about December 27th, and she had a normal period about January 27th. She commenced to lose again on February 16th, and continued to lose a large quantity of blood until Saturday, February 23rd, passing numerous clots during the week. On the afternoon of February 23rd she fell into a brook, and in falling twisted herself severely. She was soaked through with water, but was able to take tea in a café and return home later unaided. She began to have pain in the lower part of the abdomen about 7 p.m. the same day, and as this gradually became worse I was called in to see her about 1.30 a.m. the following day. A provisional diagnosis of left-sided extrauterine pregnancy with threatened rupture was made, and the patient was given morphine  $\frac{1}{4}$  grain and left in the care of a trained nurse, who was instructed to make hourly records of the pulse and to take methods to combat the shock which was present.

I saw the patient again at 11 a.m. the same day. The pulse rate had remained steady at 80 until about 4.30 a.m., when it increased to 100. It then gradually increased to 120, which was the rate when I saw her; the general condition was then much the same. She was immediately removed to the Victoria Cottage Hospital, where she was seen by Mr. F. D. Saner of London, who diagnosed a ruptured extrauterine pregnancy and decided to operate at once.

On opening the abdomen a large quantity of blood welled up through the wound. An extrauterine pregnancy, about the size of a small pigeon's egg, was found in the left tube, in close proximity to the cornua of the uterus. The sac was excised and the abdomen closed, methods being taken at the same time to combat the shock. The patient improved considerably under the anaesthetic (ether) and after the operation. She made an uninterrupted recovery and was discharged from hospital on March 16th.

The patient, who was 26 years of age, had had two children—the first seven years ago, the second six years ago. The first is a normal healthy child; the second is deformed and imbecile. She had one abortion about four years ago, but otherwise no illness of note.

The points of interest in this case are: (1) The occurrence of ruptured right- and left-sided extrauterine pregnancies in the same person within so short a time. (2) The similarity in the positions of the ruptures on both sides. (3) The very early rupture of the left-sided extrauterine pregnancy.

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#### OLD-STANDING DISLOCATION OF THE RADIUS.

A SCHOOLMISTRESS, aged 24, was admitted to the Wakefield Hospital on January 15th, 1924, complaining of locking of the right elbow-joint. X-ray examination showed forward dislocation of the radius. She stated that when 7 years of age she had fallen and injured her right elbow-joint. The usual signs of forward dislocation of the radius were then present. The movements of the elbow-joint gradually improved, but at the age of 12 there was still some limitation of movement; eventually there was a return to the normal range and strength.

About a year before admission the joint began to lock when carrying out certain movements—drilling her pupils, riding a bicycle, attending to her hair, or taking food. Infrequent at first, the locking became intolerable from its frequency and the awkwardness of its incidence.