pylorus; these, however, I do not consider suitable cases for operation, and should be left to the physician. I now never do a gastro-enterostomy unless an ulcer or the cicatrix of an ulcer can be found in the stomach or in the duodenum, and if I undertake an operation under a mistaken diagnosis of ulcer and I fail to find an ulcer or any disease in the neighbouring organs, especially the gall bladder, I close the abdomen.

The most brilliantly successful cases undoubtedly are operations for cicatricial contraction of the pylorus, but in my opinion it is not wise to allow patients to wait for operation till well marked stenosis has occurred, with its accompanying dangers of extreme dilatation and food decomposition. Such delay may reduce the patient's strength so greatly before operation that the prospect of recovery is lessened. This was the case in 3 cases which ended fatally, and in 2 others which died within a few months of their return home.

A certain number of cases of gastric ulcer have other morbid conditions associated with the ulcer. The most frequent associated disease in my cases has been floating kidney, which existed in 6 cases: in 1 case the operation of nephrorrhaphy was done at the same time as the gastro-enterostomy, and in 3 cases it was performed on subsequent occasions; in 2 cases no operation has been done for the floating kidney. Gall stones were present in 1 case, and cholecystectomy was performed. Lastly, appendix adhesions existed in 3 cases, and in 2 cases the appendix has been removed at a subsequent operation.

With regard to the indications for the operation of gastro-enterostomy, I consider that it should be performed in every case of chronic gastric ulcer which has resisted medical treatment, or which has recurred after it. In forming the diagnosis of a gastric ulcer with a view to operation, I consider the following points are the most valuable: The existence of a tender spot at a fixed point in the epigastrium, pain after food with or without vomiting, the history of hæmatemesis or melaena, especially when this is repeated constantly; the presence of free hydrochloric acid in the stomach contents; and, lastly, evidence of some dilatation of the stomach. I make a rule of passing a stomach tube in every case and withdrawing some of the stomach contents for chemical examination; after this I distend the stomach with air through the tube. Excluding cases of gastropnoia, I consider that a stomach which extends one or two inches below the umbilicus is dilated.

The presence of dilatation is an absolute indication for gastro-enterostomy.

The operation is also indicated in every case of duodenal ulcer as soon as it can be diagnosed, as practically no case of duodenal ulcer is permanently cured by medical means, and a temporary improvement under medical treatment may be followed by fatal hæmorrhage or by perforation. The difficulty here is to make an accurate diagnosis of a duodenal ulcer. The most valuable signs are the presence of a tender spot just above and to the right of the umbilicus, sometimes accompanied by rigidity of the right rectus muscle; the existence of "hunger pain," which sometimes necessitates the patient always carrying food with him; pain following some hours after food; the presence of melaena and of unexplained anaemia.

In acute gastric ulcer the indications for operation are repeated severe hæmorrhages, which are threatening the patient's life; and, secondly, symptoms of acute pain and shock, suggesting that the ulcer is spreading deeply towards the visceral peritoneum, and that perforation is imminent.

I believe that an ulcer in any part of stomach or duodenum can be cured by gastro-enterostomy; but if the pylorus is not stenosed it must be occluded at the same time, otherwise the results are not likely to be permanent.

In estimating the value of gastro-enterostomy in gastric and duodenal ulcer, we ought to compare the results with those obtained by medical treatment. Most surgical writers are rather scornful of the results of medical treatment, and recently it has been stated that barely 25 per cent. of cases of gastric ulcer are cured by medical treatment. I think that such statements are grossly unjust and misleading, since they are compiled from records of hospital in-patients, and therefore deal only with the most severe cases of ulcer; moreover, they

include deaths from hæmorrhage and from perforation. Now the greater number of cases of gastric ulcer are treated as out-patients, and their mortality cannot be large, but there are certainly a number of relapses. I suppose that even the most sanguine physician would expect relapses in at least half his cases of gastric or duodenal ulcer, and so would not expect one-half of his cases to be permanently cured; I think that even my statistics show a great improvement over medical treatment, since 56 per cent. were absolutely cured and another 26 per cent. were in almost perfect health.

The knowledge that the greater number of patients on whom the operation has been done are delighted with their present condition and have practically been restored to complete health after years of suffering consoles one for the few cases which appear to derive little benefit, and enables a surgeon to honestly advise a patient with marked symptoms of chronic gastric or duodenal ulcer to submit to a gastro-enterostomy when medical treatment has failed to effect a cure.

A Clinical Lecture

ON

THE TREATMENT OF ACUTE APPENDICITIS.

DELIVERED TO THE 1908 POST-GRADUATE CLASS AT
ST. BARTHOLOMEW'S HOSPITAL.

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I AM constantly being asked, "Do you believe in operating during the acute stage of appendicitis?" and I propose to attempt to answer this question.

I have chosen this subject partly because I shall be able to show you cases in the wards at the present time which illustrate many of the points we shall have to consider, and partly because the idea seems to have gained ground that it is old-fashioned to wait, and that the newest and most up-to-date practice in connexion with the surgery of appendicitis is to treat the case as if it were, say, a strangulated hernia, and to operate always when and where an opportunity first presents—an idea which I can only regard as most mischievous. Appendicitis seems to have become more common and more fatal of recent years, and this rightly suggests all sorts of questions as to our altered manner of life, our increased luxuriousness, the quality and quantity of our food and drink, our possibly diminished resistance to the onslaught of micro-organisms, or the increased virulence of these. It also suggests the question, Can our better diagnostic powers have anything to do with the one fact, and our methods of treatment with the other?

One of the chief difficulties in connexion with appendicitis arises from the number of different conditions included under the term. Thus not only do inflammation and ulceration find a place under this head, but also perforation, gangrene from infection or thrombosis, impaction of foreign bodies, the formation of concretions, stricture, etc.; and it need hardly be pointed out what confusion would arise if in other parts of the intestine the term "enteritis" was used to cover all these.

I can only mention this source of error but cannot suggest a remedy at present, for the appendix is such a comparatively unimportant structure physiologically, that interference with its functions in these ways gives rise to few distinctive symptoms, and its importance, from a surgical point of view, depends almost entirely upon the results it is able to produce in connexion with the surrounding peritoneum. It may be that further experience and the more accurate tabulation of symptoms will one day render it possible to diagnose more certainly the state of the appendix upon which the resulting peritonitis depends, and so enable a more exact prognosis to be given, and thus render easier the question of treatment; but at the present time the beginning of the attack affords little or no indication as to what will be its end.

Now, if the appendix be damaged the infection may remain confined to the interior of the organ and its walls,

or may spread to the surrounding peritoneum. In the latter case the results depend chiefly upon the virulence of the infecting agent, the resisting power of the peritoneum, the amount of infective matter with which it has to deal, and the area of its surface infected. Thus there may arise:

- (a) A plastic peritonitis.
- (b) A spreading suppurative peritonitis.
- (c) A general suppurative peritonitis.
- (d) A localized suppurative peritonitis—that is, an abscess.

(a) Although it is a question whether such a thing as catarrhal appendicitis is possible—and it has been stated that the onset of symptoms of appendicitis always denotes that peritonitis has occurred—I have no doubt that on the one hand the trouble may be practically confined to the interior of the appendix and its walls, and on the other that the few adhesions which sometimes remain after an attack has cleared up are no indication either of the intensity or area of the infection at the time.

(b) This condition is often very difficult to diagnose, and it is in connexion with it, I believe, that mistakes in treatment are most likely to occur. In its typical form it complicates gangrene of the appendix or slow perforation, and spreads either as a lymphangitis or by extension throughout the peritoneal cavity, the purulent fluid not being shut off by adhesions, or, owing to the virulence of the infection, if adhesions do form, they are of the flimsiest character, and form only to melt away again.

The inflammation will radiate from the appendix, and so its starting point will depend upon the position of that structure; and it is no uncommon occurrence, when this is in the pelvis, to find that cavity full of a thin purulent fluid, scarcely shut off from the abdominal cavity by floating intestines, loosely held together by a sticky lymph, not sufficiently dense to constitute the wall of an abscess; and yet it is obvious that the abdominal peritoneum is not taking part in a suppurative inflammation, though possibly congested and containing a quantity of serous fluid.

The difficulty in diagnosing this condition lies in the fact that, though a localized suppuration, it is not sufficiently shut off to form a definite abscess, and though general often as far as the pelvis is concerned, it is not sufficiently widespread to give rise to the symptoms of a general peritonitis.

(c) General suppurative peritonitis comes on at different stages of the illness according to its cause.

If due to perforation or rupture of a free-lying appendix, with immediate wide extravasation of its contents, it is an early complication, showing signs of its presence in the first few hours after a longer or shorter interval of collapse, just as with perforations of the stomach or intestines.

In other cases a spreading peritonitis, as described above, may end by becoming universal; in which case the onset of general symptoms is more insidious and later, from the second to the third or fourth day.

It may sometimes, though rarely, be due to the bursting of an abscess, in which case it practically never occurs before the tenth day.

(d) Although, as mentioned above, a collection of pus may be localized in a portion of the peritoneum, a cavity with walls sufficiently dense to merit the name of an abscess can hardly occur before the fifth or sixth day. If any object to this distinction, I can only say that I regard it as most essential to differentiate, in some way or other, between the early collection of pus which will spread, and the later-formed one which will not.

Now the treatment of a case of acute appendicitis has for its object the prevention or alleviation of one or other of the above complications, and I cannot express the opinion too strongly that the treatment necessary must depend upon the stage the illness has reached, upon the time at which the patient is first seen; and that it is wrong to lay down a general rule that all such cases should or should not be operated on at once.

There are cases, of course, in which premonitory symptoms may warn a careful observer of what is taking place inside the appendix, and in these the organ may well be removed as a truly preventive measure; just as, for instance, the presence of gall stones within the gall bladder

may be diagnosed before an actual attack of colic has occurred.

With such, or with those in which there has been a previous attack, I am not at present concerned, but with those in which the patient is struck down without previous warning, and with all the suddenness of a bolt from the blue.

Let us assume, and I admit it is a big assumption, and your own experience will confirm me when I say it is seldom indeed that such a combination of circumstances will exist—let us assume that you have been called to see a patient directly after he has been attacked, that the case is undoubtedly one of appendicitis, and all other causes of abdominal pain and stomach-ache can at once be definitely excluded; that the patient is in a good state to take an anaesthetic; that surgeon, anaesthetist, and nurses are all at hand, and that the arrangements for an immediate operation can be carried out; then I believe that such a course is a wise one.

If in any given case one could be sure that a plastic peritonitis only would result, I imagine there is no one who would not counsel postponing operation until after the inflammation had subsided; but it is because one cannot tell whether or not one of the more severe complications will arise that an immediate operation becomes advisable.

At this time in every kind of case save one the mischief will still be confined to the appendix, and so the local conditions will be favourable for operation; and in the one class of case where the trouble will have spread already to the peritoneum (the so-called fulminating cases due to perforation or rupture of the appendix) no better time for surgical interference could be chosen.

My own experience of such events is limited to a few cases in hospital, where alone the combination of circumstances we have assumed is likely to occur; and I would lay it down as a rule that it is justifiable, and may be wise, to advise operation in all cases at the beginning of an attack of acute appendicitis, if—and there's the rub—if it can be done.

This early period having been missed, as in the great majority of cases it will be missed, operations should only be undertaken because one of the severe peritoneal complications has arisen. Of course, I don't mean to say that a series of successful operations may not be performed at a later stage than I have indicated, but every hour that is allowed to elapse renders surgical interference less and less advisable. For as the inflammation spreads the parts become most vascular and oedematous, adhesions which ooze blood at the slightest touch rapidly form, the engorged intestines bulge with stagnant flatus, micro-organisms swarm in the swollen and turgid tissues, and altogether at about the end of the first twenty-four hours it is impossible to imagine a local condition more unfavourable for an operation. This state of affairs seen by the limited view which alone is possible through an incision in the right iliac region may mislead even the honest statistician, when compiling his mortality tables, by giving the false impression that a general peritonitis already existed. And, worse still, the necessary manipulations which an operation entails may set up the very trouble which it had been undertaken to prevent, by diffusing the septic material so that a general peritonitis results, when probably if left alone the inflammation would have localized and at the worst an abscess have formed, but not necessarily even that. I admit that the dangers have been exaggerated, but nevertheless I know that they exist; and even where no fatal result ensues and the case is scored as a surgical success, such success may only be gained at the expense of a drainage tube, a suppurating wound with a weak abdominal wall, a hernia, and a second operation for its cure. A success indeed if death were the only alternative. But it must ever be borne in mind that the great majority of cases recover spontaneously, temporarily, at any rate, and therefore can be operated on more favourably at a later period; and that operation at this stage can only be advised to benefit the unknown minority in whom fatal peritoneal complications will ensue. The rights of this minority must depend upon its size, and I feel sure that the surgeon who recommends preventive operations at this stage exaggerates its proportions; and the more he operates the more he will be inclined so to do. There is no surgeon of any degree of

experience who will not be able to recall not one but many instances in which, when performing appendicectomy during the quiescent stage, he has found evidence of the gravest former trouble. Adhesions so universal that only a general peritonitis could account for; a truncated appendix whose condition nothing but sloughing or gangrene could have produced; inspissated secretion which showed clearly where a former abscess had been absorbed.

Though no one would trust for a moment to the *vis medicatrix Naturae* rather than to the surgeon's knife when actually confronted with any one of these, still cases of spontaneous recovery from the worst conditions occur in sufficient numbers to make us pause when estimating the risks of an operation undertaken to prevent their onset, especially when the odds are against that taking place.

I hold strongly, therefore, that at the time at which most cases of appendicitis will be seen it will be wrong to recommend an operation as a preventive measure. Complications will require to be met after they have arisen, and at this period it will only be necessary to exclude perforation or rupture of the appendix before deciding to rely upon medical measures.

Perforation of the appendix gives rise to the characteristic train of symptoms with which you are familiar in connexion with a similar accident to other parts of the intestinal tract.

The sudden severe onset of violent cramp-like pain, chiefly over the lower abdomen and in the region of the umbilicus, and intense localized tenderness with collapse (shown by the cold extremities, the subnormal temperature, the frequent, small, tensionless pulse, and cold perspirations), accompanied by extreme local rigidity, probably of the lower part of the right rectus muscle, with general hardness, immobility and retraction of the abdomen, will at once indicate that perforation of some viscus has occurred, and the position of the tenderness and rigidity will point to the appendix. If you see the patient at this stage you will have no doubt as to the proper course to pursue.

I would have you note that at this period the symptoms are those of abdominal shock, and though, of course, a certain amount of inflammation is early set up, general peritonitis with its equally impressive picture has not yet had time to supervene. When it has, the pain and tenderness become general, though still greater probably in the right iliac fossa; the temperature rises; the pulse, still frequent and small, acquires a degree of tension above the normal; the immobility of the abdomen remains, the local rigidity is marked by the general hardness, and retraction gives place to distension. Vomiting, which may or may not have occurred in the beginning, now is almost constantly present, and of a diagnostic character, namely, the frequent regurgitation without effort of small quantities from the stomach and upper part of the small intestine. Gaseous eructations frequently occur, but, owing to paralysis of the intestinal musculature, no flatus is passed per anum. The tongue becomes dry, and the face assumes its characteristic sunken, drawn, anxious expression. Again, if called to see the patient at this stage, you will not be in doubt. There is, however, a time when the collapse is passing off, and the symptoms of general peritonitis have not yet acquired their characteristic features, when the diagnosis may present difficulties; but even now the look of profound illness which the patient wears will indicate the urgency of the mischief; and though all other signs may be equivocal, the contracted abdominal muscles are never completely relaxed, and the frequency of the pulse will still remain. A slow pulse with a temperature about the normal, in my experience, is not met with in the early stages of general suppurative peritonitis, but when it occurs is an indication of the approaching end, the patient being so poisoned with toxic products that his tissues no longer react. A mistake in diagnosis may be made now, but as the case is practically hopeless by this time, its importance is not so great.

Having now decided that the time for a preventive operation has gone by, and that the patient is not suffering from a perforation, you may dismiss the question of operation from your mind, for the present.

The patient should be placed in bed on his right side with the shoulders raised in order that gravity may assist in preventing the diffusion of any fluid which may collect. Hot fomentations relieve pain, and are further useful in

bringing about an active local hyperaemia. Salt solution per rectum relieves thirst, and also acts beneficially by setting up an increased leucocytosis. Food by the mouth should be withheld, although I am convinced that most of the evils attributed to its administration in liquid form arise from the mistaken notion that milk is not a solid diet. It is an unnecessary cruelty to forbid all liquid, because in small, frequent doses it does no harm, in that it is absorbed long before it reaches the intestine in the neighbourhood of the inflamed part. And though the introduction of liquid into the rectum is a fairly efficient substitute, if this route be chosen on peristaltic grounds, it should be borne in mind that, granted peristalsis is harmful, it is as likely, and perhaps more likely in the case of the larger intestine, to be excited by the introduction of fluid by the anus as by the mouth. But is peristalsis harmful? I think not, but just the reverse.

If the peristaltic wave produced a violent commotion among the intestines, dashing them about, or even more gently transferring them from one place to another, then, of course, it would have to be avoided at all costs. But a regular peristaltic wave being but a gentle ripple on the surface, incapable of moving the bowel as a whole, but only able to produce an onward movement of the intestinal contents, and incidentally to favour the circulation of the blood and lymph in the intestinal vessels, can only be beneficial, and must produce less disturbance than the distension of the bowel by accumulated gas, etc., which necessarily results if peristalsis is absent; and I am so struck with the favourable termination of most cases which begin with diarrhoea that I do not hesitate to order a laxative at this stage if required, preferring small doses of calomel to anything else. Purgatives should be avoided, not on account of the peristalsis which they set up, but on account of the contraction of the abdominal muscles which is likely to attend their action. If peristalsis were, indeed, harmful, then not only should nothing be done to increase it, but it should be prevented altogether, and thus the long discredited treatment by opium be reintroduced.

Under the treatment outlined above the majority of cases will show signs of improvement, but this will be gradual, and from the second to the fourth day, even in those cases which eventually recover without suppuration, the patient may still show signs of a severe local peritonitis.

It is at this stage that the operating surgeon is so frequently called in with a view to opening the abdomen, and I must repeat, even at the risk of wearying you, that the time for a preventive appendicectomy has passed; that the harmless little exploratory incision in the right iliac region, when the offending organ may be down in the pelvis or up under the liver, is a delusion and a snare; that probably the peritoneum has fought its fight, and has won the battle, if the surrounded hosts of dying micro-organisms are not carried into fresh fields, and supplied with fresh food and vitality by the escape of blood which an operation will cause. That even under these circumstances victory will still generally rest with the peritoneum is nothing to the credit of the operation; but should victory be turned into defeat, operative interference (and the word possesses a sinister significance) cannot escape the blame.

No! at this stage, if the peritonitis is localizing, operation can do nothing but harm, and it is only if a spreading peritonitis is in evidence that the immediate opening of the abdomen becomes necessary. The onset of this is insidious and its detection not without difficulties. But it is so important to recognize what is taking place at an early period that I feel I must go a little more into detail with regard to the symptoms which enable a diagnosis to be made.

The temperature and pulse are misleading in so many instances that I have come to ignore them, but if the frequency of the latter keeps persistently over 100 with increased tension it should excite suspicion.

Persistent vomiting of small quantities without effort is almost diagnostic of a widespread affection of the peritoneum, and is of special import if it comes on again after the vomiting which ushered in the attack has subsided, or if it comes on for the first time after the disease has been in progress for some hours.

General contraction of the abdominal muscles is an important sign; but here I would warn you that you

must not expect the rigidity of a general peritonitis. In fact, palpation is an insufficient and unreliable means of detecting the condition. More information will be gained by inspection. Immobility of the abdomen and a consequent costal type of respiration will be seen, but, above all, attention should be directed to the contour of the muscles. I have known the visibility of the digitations of the external oblique afford an indication of the tonic spasm of the whole muscle, when this was insufficient to produce a hardness readily detectable by touch.

Constipation with flatulent distension is common enough in appendicitis, and means little; but when, perhaps in spite of laxatives and enemata, nothing, not even flatus, is passed, and the symptoms resemble those of intestinal obstruction, it may be inferred that an extensive peritonitis exists, giving rise to paralysis of a considerable length of intestine.

Sweating, often profuse, is another valuable sign that a large quantity of septic matter is being absorbed. It never occurs in uncomplicated cases of appendicitis, and at this period may always be taken to indicate a suppurative peritonitis.

The condition of the tongue may afford valuable help. True, it may remain moist and fairly clean throughout; but a dry, furred, foul state will suggest a grave condition.

Pain and tenderness in all cases, to start with, are generally referred to the whole of the lower part of the front abdominal wall, especially to the umbilical region; and then later only to the right iliac fossa. If, after this localization, the tender and painful area increases in extent, a spreading peritonitis is probable. But when, as is so often the case, the pelvic peritoneum is the part affected, no help can be derived from this sign. Extreme tenderness on rectal examination will be present, and the feeling with the finger of a bulging collection of fluid will at once reveal the nature of the case.

If cases of spreading peritonitis are diagnosed early, as they should be by proper attention to the above symptoms, and great care be taken to prevent diffusion of the fluid by careful packing after the abdomen has been opened; and if the disturbance of the parts be strictly limited to that which is necessary for the simple introduction of a drainage tube, the prognosis after operation is good—a fact again to be borne in mind when estimating the risks of a preventive operation.

We have now got to about the end of the fourth day, and with it nearly to the end of the dangerous period, for though late cases of spreading peritonitis may still occur, they are rare after this time.

And now the familiar, well-defined lump in the right iliac fossa can be readily felt instead of the indefinite hardness. This is a welcome sign, as it indicates a matting together of the intestines by strong adhesions, and a definite circumscription of the trouble.

Flatulent distension is still often a distressing symptom, and it is at this period again that laxatives are of great service. I would here repeat what I have previously said about the supposed dangers of exciting peristalsis.

A moderate dose of castor oil, combined with the use, if necessary, of the rectal tube and enemata of turpentine and asafœtida, will often bring about, with the evacuation of the intestinal contents, such a marked change in the iliac swelling that what appeared to be an inevitable abscess rapidly disappears, accompanied by a fall in the temperature and a subsidence of other unfavourable symptoms little short of surprising.

From this point convalescence may date or an abscess may form. In the latter event the symptoms follow two courses. In the one the temperature and pulse come down, and the local symptoms somewhat subside; but after an interval, ranging from a few hours to a day, the temperature gradually rises again and the pulse increases in frequency, until both may stand as high as or higher than before. The local signs again become more marked; the lump increases in size and distinctness, pain is worse and of a throbbing character, tenderness even on slight pressure again becomes acute, vomiting and sweating may occur, and the tongue becomes dry and furred. In the other the inflammation runs on to abscess formation without any intermission. In such a persistence of acute symptoms on the fifth day practically always means that suppuration has occurred.

The subject of an increased leucocytosis in connexion

with the diagnosis of suppuration is much too large for me to enter into here, but I would say, in passing, that too much importance must not be attached to it. One total count, though high, is of little significance unless confirmed by subsequent readings. A differential count may afford more valuable information.

When localized suppuration has taken place an operation will probably be necessary. But here again it is a mistake to think that in all cases it must be done at once; in fact, I would go further and say in the majority of cases it is best to wait for a time. If the patient be kept quiet, bursting of an abscess is practically unknown at this period; and remote sequelae, such as portal pyæmia, rarely complicate abscess formation, and at any rate their onset is not favoured by reasonable delay. Against these theoretical disadvantages may be set the solid gains—that the abscess will become firmly shut off, its walls well defined and possibly adherent to the abdominal wall, so that the evacuation of its contents is greatly simplified; that the pus will decrease in virulence, or even become sterile; and that in some few cases operation will not be required, owing to the escape of pus into the bowel or its absorption. A certain amount of discrimination is of course necessary, but generally it may be said that those cases in which the symptoms have persisted acutely from the beginning will require an earlier operation than those in which an intermission has taken place.

And now let me add just a word or two about the removal of the appendix. If general peritonitis is present this should always be done, provided it does not add greatly to the length of the operation; if the peritonitis is local, never, unless the organ presents on opening the abdomen. In the case of a spreading peritonitis, even a limited search for it may break through the flimsy adhesions which are checking the spread of a virulent infection, and which will prove sufficient for the task once the pus has been given a free exit.

In the case of a definite abscess the risk is less. The greater density of the adhesions and the diminished virulence of the micro-organisms will generally allow the organ to be removed with impunity, but even so the immediate risk of the operation is increased. And in my experience the number of cases in which symptoms again supervene after once an abscess has formed and been evacuated is very small, less, considerably, than the 15 per cent. generally given. But, even taking these figures as correct, I am not prepared to submit 85 patients to an additional unnecessary risk, even if it were as slight as has been claimed, in order to benefit 15, especially as the benefit these latter derive is problematical, seeing that they might lose their appendices at a subsequent date with scarcely any risk at all.

In this connexion it is necessary to point out that the removal of an appendix after an abscess has healed is not necessarily a difficult operation. The adhesions left will disappear to a greater or less extent, so that the appendix may ultimately be freer even than when suppuration has not occurred, but the peritonitis has been of a plastic nature from the start.

Finally, if you have steered your patient through his first attack without operation, what course should you advise? Personally, I always recommend a patient not to run the risk of a second, but think it only fair to state at the same time that this may never occur, and that if it does it is likely to be no worse than the first, seeing that the majority of serious complications occur with a first attack.

If appendicectomy be decided upon, it is wise to allow an interval of at least three weeks to elapse from the cessation of acute symptoms in order that the local conditions may have time to clear up.

It is true that an aseptic operation may be done before this in most cases. But, having on more than one occasion met with an unsuspected abscess, which was obviously being absorbed, when tempted to operate at an earlier date, I have now fixed upon this period as a minimum.

THE thirteenth Flemish Congress of Natural and Medical Science will meet at Brussels this year on September 18th, 19th, and 20th. One day will be devoted to the discussion of the diagnosis and treatment of syphilis. The discussion will be opened by Drs. Bayet and Behagel.