good illustration of the truth of the, if somewhat cynical, yet excellent, advice: "Whenever you have to do with a particularly obscure case, think of syphilis as a possible cause." Here was a married lady of unimpeachable antecedents and without the least history of syphilis, who at a mature age suddenly developed the serious symptoms described. It is the absence of the syphilitic history to which I would particularly draw your attention, and from which I would again deduce the lesson, which I have been endeavouring to enforce on more than one previous occasion—namely, to trust to the evidence of your own eyes rather than to the absence of a characteristic history. From what has come under my own notice on a good many occasions, I think it is desirable that this necessity should periodically be emphasized. At the same time, I would take the opportunity of urging the need of the utmost caution, when dealing with such cases, to guard against any imprudent expression of opinion as to the nature of the case you have to deal with. In no class of cases are tact and diplomacy more required than when dealing with syphilis in married people, and the attendant should always remember that a single incautious remark of his may for ever destroy the happiness of a family. When remembering the incidents of the case now under consideration, the necessity of such a warning is very deeply impressed upon me. Quite apart from these points, the case is also remarkable for the fact that one not very common localization of tertiary syphilis—namely, gummatous infiltration of the trachea—was followed within a very short time by an even rarer one—namely, the formation of a gumma in the naso-pharyngeal cavity.

In the third case two points deserve special attention—namely, first, the occurrence of extensive infiltration of the larynx shortly after infection, and at a time when the ordinary phenomena of the second stage, namely, roseola on the skin and mucous patches in the pharynx, were still present; and, secondly, the terrible syphilophobia to which the patient became a victim after repeated recurrences of the disease. With regard to the first point, I would say that in my own opinion this was a case in which secondary and tertiary symptoms intermixed—an occurrence the possibility of which ought always to be kept in mind. Ordinarily, in secondary syphilis of the larynx the phenomena are simply those of erythema; more rarely do we meet with formation of condylomata and with actual superficial ulceration. I have never previously seen so extensive an infiltration of the larynx take place in genuine secondary syphilis, nor am I aware that such has ever been described. Another reason why I am inclined to look upon the laryngeal phenomena observed in this case as belonging to the tertiary period is the failure of mercury to prevent recurrence of the symptoms, whilst the disease, as long as the patient was under observation, was kept under control by iodine preparations. I am sorry I cannot say what ultimately became of the patient, my endeavours to trace him having failed. Whilst one could not help sympathizing greatly with the poor man in his recurring tribulations, the syphilophobia which he developed ultimately became almost as trying to his medical advisers as to himself. In such cases the medical attendant must not merely be an adviser of the body, but also of the soul. Some unfortunate syphilophobes fall into a condition of melancholy, others become quite frenzied, and not merely threaten but are actually apt to commit suicide. Under such circumstances it is the duty and the privilege of the medical adviser to maintain courage, to cheer up, and to always hold out the hope of ultimate and lasting recovery. A despondent attitude on the part of the medical attendant is the surest way to drive the patient into utter despair.

The last case is, without exception, the most unusual instance of syphilis in the upper air passages which I have ever met. I have made it a point to look through literature with a view of discovering whether ever a similar case had been described, but have not found one. Whatever the causes were which repeatedly produced new growths—which almost completely filled the patient's larynx, then made them disappear, leaving the organ but little disfigured, and then again and again produced fresh crops, to be followed by similar disappearance—I am quite unable to say. Nor can I explain, in view of the long interval before the patient's last visit, in precisely what manner the present condition of his larynx has come about.

In conclusion, gentlemen, let me say that the simple narrative I have given illustrates, I think, better than any elaborate commentaries how little one single form of antisyphilitic treatment can claim to be universally successful in all cases. In the great majority of my own cases of syphilis of the upper air passages methodical inunction treatment has been most successful, and I trust this more than any other method. Yet you have heard that in 2 out of these 4 cases it failed. The therapeutic lesson to be derived from the experiences gained in these 4 cases, it seems to me, is that as in diagnosis so in the treatment of syphilis, it must be our aim to individualize when the ordinary canons show themselves insufficient to cope with the particular case, and not to insist on preconceived notions of any kind.

REFERENCE.

1 On Some Rare Manifestations of Syphilis in the Larynx and Trachea, *Lancet*, 1882.

THE REALITY OF ENTEROSPASM AND ITS MIMICRY OF APPENDICITIS.

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I BELIEVE it must be allowed that the appendix is sometimes excised unnecessarily, or, to put it in terms of absolute truth, there are certainly patients whose symptoms are the same after as before this operation. It is now a common practice to excise the appendix, almost as a precautionary measure, with greater freedom and on more slender evidence of disease than was the case a few years ago. The evidence which is considered sufficient to justify excision often amounts to nothing more than pain and perhaps tenderness in the right iliac fossa. The absence of evidence of any peritoneal infection and the fact that no definite febrile attack has ever been observed are not considered of sufficient importance to justify delay. In the main I believe this practice is right. But it must be confessed that in many instances of this kind the diagnosis is guesswork, and I think there can be no doubt that in some cases the excised appendix is innocent. There must be risk of mistake when a diagnosis must needs be based not on physical signs but on such variable features as the character and locality of pain. Putting on one side the rare cases where there has been patent error and confusion with biliary or renal colic, movable kidney, or disease of the uterine appendages, we are left with a more numerous class of patient, in whom, though none of these other troubles are present, the symptoms for which the appendix has been excised continue unaltered after that operation. If these disappointed patients are studied, it is difficult to come to any other conclusion than that their disorder is functional and has no basis of structural change in intestine or elsewhere. It would save trouble if they could be recognized before rather than after excision of the appendix, and an attempt to define them may so find an excuse.

Functional disorders of the stomach receive some slight attention in our textbooks, but similar conditions of the intestine are as a rule unnoticed. The student completes his fifth year with the impression that the intestine is a lowly tube of mean function, and that consequently it is hardy and uninfluenced by defective states of other organs. He couples it up mentally with pictures of gross matters such as hernia, obstruction, and carcinoma. If he subsequently holds a resident appointment, he may become aware that there is a nervous side to intestinal disease. But intestinal neuroses diminish in frequency as we descend the social scale, and he may pass six months in a hospital and meet with no example of the kind. As a rule, he learns in years of private practice that there is much abdominal pain which has no name and does not kill.

The known functions of the intestine are motor, sensory, secretory, and absorptive. If a functional disorder is defined as being a quantitative or qualitative alteration in one or more of those functions, not dependent on any

gross or microscopical change in the intestine, a large group is tentatively formed. Among many minor ailments the group comprises the common form of constipation, nervous diarrhoea, enteralgia, enterospasm, and mucous colic (formerly termed colitis). Without going into their speculative side, and rather prejudging the matter, it may be said that pathological facts are few, but I believe that the purely nervous theory of their origin (Ewald) has the whole weight of the evidence behind it. The last three forms—enteralgia, enterospasm, and mucous colic—may be regarded as the three chief intestinal neuroses—sensory, motor, and motor-secretory respectively. They are closely related, and individual cases may be difficult to classify. The motor and motor-secretory forms often appear in the same patient.

These three neuroses, local manifestations of an imperfect nervous constitution, are especially interesting at the present time. They are of common occurrence. One is tempted to believe that they are increasing in frequency. They are at this moment particularly worthy of study, owing to the advance of abdominal surgery, not because they are amenable to surgical treatment, but rather because they need protection.

Though they are comparatively small matters in themselves, they derive importance from the fact that they are all attended with abdominal pain. It is not always easy to distinguish them from more serious conditions which require an operation. Especially with appendix-disease are they likely to be confounded. In their nature and origin they have no single point in common with appendicitis, but superficially they may bear a close resemblance to it. If the symptoms lie on the left side, carcinoma of the sigmoid flexure may certainly be suspected. Though this is a less common error, explorations have been performed with this idea, which perhaps might have been avoided.

If we consider these three neuroses only from the point of view of their resemblance to more serious disease, enteralgia and mucous colic can be briefly dismissed. There should be little likelihood of mistake. Enterospasm, however, I believe is a more common source of error.

ENTERALGIA.

The occurrence of a pure intestinal neuralgia is probable, but it cannot be proved. It is certainly rare. It is comparable with tic douloureux. It is as completely independent of any intestinal change as are the abdominal crises of tabes. The pain is generally central. It occurs in short, sharp attacks, quite as severe as a biliary or renal colic, and it is equally attended with sweating and some collapse. It may simulate the onset of peritonitis or of acute intestinal obstruction. But vomiting is not a marked feature; the abdomen is retracted rather than distended, and there is little, if any, interference with the action of the bowels. While one may have firm belief in the occurrence of such an enteralgia, it must be confessed that it is hardly possible to distinguish it from enterospasm, except by actual inspection through an abdominal opening. The ability to separate the one form from the other is less useful, however, than the power of distinguishing both of them from more serious abdominal disease requiring surgical treatment.

The following case is an instance of such an abdominal pain. It is difficult to imagine that these attacks spread over so many years could be otherwise than functional in origin.

Case 1. Paroxysms of Abdominal Pain for Sixteen Years in a Man of Otherwise Good Health.

A man aged 33, a clerk, stated that he had been liable to attacks of severe abdominal pain for sixteen years, some three or four attacks having occurred every year. Each attack lasted from 2 to 7 days, but the attack itself was made up of several separate paroxysms lasting a few hours. He described the pain as being always situated in a 2 in. circle just above but including the umbilicus. It varied in severity, occasionally permitting him to continue his work, but commonly keeping him at home. It had been so severe that he had cried aloud. He felt as if he was "tied up in a knot." He found the greatest comfort from sitting up and leaning forward. Once only was there vomiting, and then he was sick repeatedly for a whole day. There was never any shivering, and probably no rise of temperature, but he had occasionally broken out into a sweat. The attacks came on suddenly with no discoverable cause and no warning. Many began at night. They had no relation to meals. Between the attacks his bowels acted regularly. He was a strongly-built man of 13 st., of healthy appearance leading a healthy life—a notable oarsman in his district. His mother died insane. He had had no serious illness apart from these attacks. He came into St. Thomas's Hospital for observation and electrical treatment. No sign or suspicion of gross disease was discovered, and it was clear from what we saw that his account of his attacks was correct and unvarnished. Nothing was ever felt along the line of the colon. It is curious that one attack observed in hospital was accompanied by a general erythema, and, after this disappeared, it was found that *tâche cérébrale* could be obtained in perfection on chest and abdomen, so that one could write upon his skin with the finger-nail. High-frequency currents seemed as if they were going to effect a cure, but I believe his attacks recurred on leaving hospital.

MUCOUS COLIC.

The motor-secretory form is common, sharply defined, and easily recognized. The symptoms require no description. A mistake need not occur if the patient can be kept under observation for a time. But if a diagnosis is to be made merely from the account of attacks of pain as given by the patient, it is easy to fall into error. On the nervous theory mucous colic is an enterospasm combined with secretory perversion. It has a close analogy (perhaps even a relationship) with asthma. In both neuroses there is a spastic element combined with the secretion of an abnormal mucinoid material, there is the same capriciousness of onset, and the same mysterious dependence on trifling external conditions and on the mental state. The two neuroses may alternate in the same patient, as in three cases that I have watched. In one case they occurred simultaneously, a sort of combined bronchial-intestinal asthma. In the family history of patients suffering from mucous colic a tendency to asthma can sometimes be traced.

In the usual type of case, where the trouble is confined to the lower part of the descending colon, the diagnosis is assured. But if the pain is in the right side, and the stools have not been examined by patient or physician, the appendix must inevitably come under suspicion. Only in one of many instances that I have seen has the removal of the appendix had any apparent influence on the subsequent course of the mucous colic, which continued unchecked.

ENTEROSPASM.

It is generally allowed that without any change in the intestinal wall one or more sections of the intestine may exhibit a purposeless tetanic contraction. It is thereby converted into a hard, nearly solid, cord, pale and bloodless. This spastic state is apparently capricious in its coming and going, but its dependence on the mental state is not to be doubted, and must be utilized in its treatment. The spasm may be short, acute and intensely painful, producing a train of symptoms which cannot (without actual inspection of the bowel) be distinguished from those of an enteralgia. Or with less violence it may be of much greater duration and may result in a steady ache or discomfort which will last off and on for weeks or months at a time. The colon is more commonly affected than the small intestine. Of the colon any part may enter upon the spastic state, but the first and last parts are particularly prone to be so affected. It follows that the resulting symptoms appear in the anatomical regions which are associated with the appendix and the sigmoid flexure respectively. There is good reason to believe that this spasm is often accompanied by a simultaneous inhibition at other points of the bowel, so that normal peristalsis is completely perverted.

The following case may be taken as an example of severe enterospasm, coupled with, and in part responsible for, attacks of obstinate constipation.

Case 2. Attacks of Enterospasm spread over Forty Years. Abdominal Exploration.

A man aged 54, insurance agent, was admitted into St. Thomas's Hospital in November, 1900. He presented

an extraordinary history of intermittent constipation. He remembered that when he was a lad he was laid up with an attack of constipation, vomiting, abdominal pain and distension. After this there was a period of fourteen years during which the bowels acted regularly, or, at any rate, any constipation was slight and easily managed. At the age of 27 he had a similar attack, and spent some weeks in a hospital under treatment. Every three or four years since then he had had an attack of the same kind, each one lasting two or three months. All manner of purgatives would fail, the abdomen became distended, and enemata alone could produce any effect. In one of these the question of exploratory operation was put to him and declined. Between the attacks constipation had been slight or absent.

He came into hospital on account of one of these attacks, which was already of longer duration than any that he had had before. It began in July. The onset was gradual. He began to fail to get a daily action of the bowels, and had recourse, as usual, to purgatives. By their means he obtained at first watery stools, but enemata soon became necessary. The abdomen became distended from time to time, and pain was felt. Latterly the distension had persisted. He declared that he was seldom free from pain, which was aggravated by taking food and by defaecation. He seldom passed a day without vomiting. He had been confined to bed for some two months, living mainly on beef-tea and fish, and was of opinion that he had lost 2 st. in weight.

His work seemed to entail much worry, and resulted in a rather precarious livelihood. He was clearly a nervous man, easily worried and depressed, and inclined to prefer the gloomy side of all things, including his own ailments; but it was a sober, hard-working life that he led.

On examination he was seen to be ill-nourished, but not pale or cachectic. His weight was 8 st. 12 lb.; it should have been 11 st. He was depressed and careworn. The abdomen was uniformly distended, measuring 31 in. at the umbilicus. No intestinal coils or peristaltic movements were visible, and very little peristalsis could be heard with the stethoscope. It was uniformly resistant everywhere to the touch. It seemed slightly tender in all parts, but he invariably winced when deep pressure was made over the left iliac fossa. Normal resonance was obtained everywhere. The rectum was thrown into folds, not capacious, and empty but for a few small scybala. The tongue was large, flabby, and coated with dirty white fur. There was no sign of disease elsewhere.

Between November 23rd and December 22nd there was little change to record. The bowels could just be induced to act by enemata, but the result was seldom satisfactory. Castor oil would fail sometimes: sometimes it would produce several small stools, in which pellets of mucus were seen. He was very unwilling to take it, owing to the pain which resulted. He was frequently sick, and a milk diet seemed to suit him best, as he had no appetite. The abdomen became more distended, reaching 33½ in. in circumference, and it was singularly hard, though normally resonant in all parts. The tenderness over the descending colon never varied. He slept badly, complained much of headache, and was always gloomy and morose. It is noteworthy that the pain was not of the paroxysmal character which occurs in mechanical obstruction of the bowels. It seemed rather to be a nearly continuous sense of discomfort or tightness, temporarily made worse by the taking of food and by defaecation.

The problem, then, was to determine the cause of such a constipation with great abdominal distension, which could occur thus in definite attacks spread over forty years with intervening periods of comparative comfort. My surgical colleague, Mr. Makins, opened the abdomen below the umbilicus in the middle line. The small bowel was found to be distended and hyperaemic, but neither the distension nor the redness approached to the conditions generally found in cases of actual obstruction. There was no sign of peritonitis, past or present, no adhesions, and no new growth or twisting. The clue to the understanding of the symptoms was found in the state (1) of 4 in. of the bowel at the junction of descending colon and sigmoid flexure, and (2) of about 7 in. of the small intestine. This portion of the colon was of a pale-grey colour, bloodless, strongly contracted and narrowed down to the size of a man's forefinger. The narrowed part passed abruptly into the normal parts above and below. The affected section of the small intestine presented the same appearance. It was pale, contracted, and narrowed, when flattened out being about ⅝ in. in breadth. The line of demarcation of this contracted part from the distended and reddened bowel above and below was sharply defined, but there was no such strangulation line as would indicate previous incarceration or twisting, and in fact this part of the bowel was discovered lying free in a central position in the abdomen. During manipulation of the contracted bowel gas was forced into it from the distended part, with the result that it gradually resumed under our eyes its normal size and normal colour. But before the abdomen was closed a small part of the previously-affected section began again to become narrowed and bloodless.

He remained in the hospital for six weeks after this, and, on the whole, his condition improved. He gained some weight, the vomiting ceased, and he got back to an ordinary diet. But the bowels remained a source of trouble, enemata and castor oil being necessary from time to time, and he never owned to being free from abdominal discomfort, although the distension subsided. He was treated with valerianate of zinc, electricity, and massage. He continued to improve slowly after leaving the hospital, but he has had subsequent similar attacks.

One can hardly doubt that the trouble in this patient arose from enterospasm, occurring here and there in large and small intestine, probably combined with simultaneous inhibition at other points, and it seems improbable, considering his long history and his good health in other respects, that there was any structural change in the bowel or elsewhere.

If this explanation of his case is admitted it may be possible to see a similar origin in such a case as is detailed below. But we must then allow that a functional enterospasm may be a sharp and violent process after the fashion of lead colic or a tabetic crisis.

Case 3. Attacks of Acute Enterospasm with some Resemblance to Peritonitis. Abdominal Exploration.

A girl aged 12 was admitted into St. Thomas's Hospital in July, 1905, on the third day of her illness. On July 4th she came away from school in the morning feeling uneasy in the abdomen. In the afternoon she returned to school, but she vomited, and was sent home again. From this time up to admission she was repeatedly sick, and suffered severe pain in the abdomen, so that she frequently screamed at the height of the paroxysms. The bowels were open on the day before the illness, but not afterwards.

It was found that she had had seven or eight similar attacks in the last two years, each one beginning suddenly without discoverable cause and lasting from three to seven days. In each attack the pain had been intense, colicky, not continuous, but in long paroxysms rising and falling. With this there occurred severe vomiting, headache and absolute constipation. Between the attacks as a rule the bowels acted fairly regularly.

On admission on July 7th she looked extremely ill with sunken eyes. The pulse was 100 of low tension, the tongue dry but slightly furred, the lips dry and covered with sordes, the temperature 99.8°, respiration 20, mostly thoracic. The abdomen was uniformly tender and rather rigid, but perhaps there was less rigidity than is common in general peritonitis; the upper half had slight respiratory movement, the lower half was motionless; resonance was normal; some gurgling was heard with the stethoscope, but no persistalsis was seen; it was certainly not distended but rather hollowed as in meningitis.

In spite of the history and the rather odd abdomen, it was thought wise to explore. No sign of disease was found. But the small intestine showed extreme local irritability. The mere handling of it or tapping it with a scalpel was sufficient to excite active contractions. She recovered quickly, but a month later she was back again in hospital with a slighter attack of the same kind.

I have seen three other cases which could be accurately described in the same words. In two of these immediate operation was under discussion, but was fortunately negatived. Recovery was complete in a few days.

If the spastic nature of these cases is admitted, it may

be legitimate to ascribe a similar origin to a more common form of abdominal pain of less violence but greater duration. I have the notes of 35 patients, whose sole trouble (large enough in their estimation) was some degree of abdominal pain or discomfort, long continued or occurring in short attacks. Whether the spastic origin of these cases is credited or not, they certainly seem to form a definite clinical picture which can be recognized. I believe that in all of them the seat of the pain was some part of the colon, though there is no absolute proof of this. I have excluded from the list all certain cases of mucous colic, though doubtless some of them were mucus-passers at times.

Of these 35, 6 had had the appendix removed before I saw them, without thereby gaining any relief from their symptoms. Five others had their appendix removed on my recommendation as a precautionary measure. Being wise after the event, I believe that the appendix was innocent, and the colon at fault in all these 11 cases. One man had previously had an exploration of the sigmoid flexure before I saw him, when nothing abnormal was found. In another case I advised against an exploratory operation, but I believe it was subsequently performed with a negative result.

Eighteen were males and 17 were females. Of the latter it is noteworthy that only 3 were married. Of the males all except 2 worked with the head. Among them were 2 bank-managers, 3 clerks, an ironfounder, an accountant, a medical student, and a land agent. Of the females only 1—a music teacher—could be said to have any occupation; the rest had abundance of leisure. The age is curiously constant, and corresponds to the period of life when the inherited temperament is first tested under pressure, and its strength or weakness is revealed. The age of the males ranged from 20 to 46, and that of the females from 21 to 48, but most of the older patients had a history dating back for many years.

Speaking generally, such patients may be intelligent and industrious, but they are none the less emotional. They are neurasthenic in the sense that the nervous power is rapidly exhausted by exertion of body or mind, and is but slowly restored. Secondary depression is a common outcome, and hypochondriasis is often within sight. Eight of these patients were noted as being obviously nervous and depressed. Two were practically hypochondriacs. Some certainly took their trouble calmly, and made the best of it. A few—all women—betrayed some pride in it, and used superlatives in describing their symptoms.

As regards their past history, it is curious that two men had had temporary loss of power in one limb, presumably functional. One of these said that at the age of 24 he "broke down altogether," and was obliged to take a long rest. One man, who had at one time apparently recovered, relapsed at once on the sudden death of a brother-in-law. Two men were liable to real migraine. One female, I believe, had become addicted to morphine. All of them had a long history of constipation, either continuous for years or in attacks. Some seemed to live by enemata alone, and were never parted from the necessary apparatus. With one exception the constipation was most obstinate when the pain or discomfort was at its worst. The exception was a female, who during the attacks of pain passed several (up to five a day) small pencil-shaped stools, narrowed and shaped by anal spasm.

None of them presented any obvious sign of disease apart from the abdominal trouble, though I think that a few of the women had some general visceroptosis. Two were stout, five were of normal weight, and the rest were spare or ill nourished. Most of them had lost weight recently. One man had lost as much as 2 st. in four months, an anxious creature perpetually fearing the worst. Loss of weight in an individual attack is common, and it should not by itself give rise to suspicion of new growth or serious disease.

"Pain" is the word used by these patients. I expect "discomfort" would describe it more accurately. It seems to be commonly a dull ache, easily borne for a time, but as one can well understand becoming less tolerable after a spell of some weeks or months. Two patients used the word "cramp" to describe it. One called it a "stitch." One spoke of "wind that would never pass," and another of a "weight in the left side." Sometimes, however, it is more acute, approaching nearer to the condition described in Case 3. One woman said that she "had walked about moaning." Two or three acute attacks of pain in the right iliac fossa, although they may be unaccompanied by fever or any real illness, must always arouse a suspicion of appendicitis. The women seemed to suffer most because of their lack of occupation. Some men could forget it in work or play. As a rule exercise does not aggravate it, but is often beneficial by engaging the attention. One man forgot it when he was riding. Another was worried by it in the early morning, but he played golf comfortably through the rest of the day. But if it is severe and is of long duration, a man may give up exercise through lack of energy and inclination. One man of sedentary occupation was most uncomfortable (discomfort in the right iliac fossa) when he was sitting at a desk leaning forward. Several said that they could not lie at night on the affected side. It is perfectly clear—some intelligent patients had noticed it—that an attack may be precipitated by shock, anxiety, worry, or even a run of work under pressure. I could find no other exciting cause, though one woman said she always expected an attack when the wind was in the east.

As regards the duration of the trouble, the extremes read thus: One man had had bouts of what he called pain in the left iliac fossa, lasting for two or three months at a time, on three or four occasions in the last ten years. When I saw him in this condition, all that part of the left colon that can be grasped was felt as a hard narrow cord. At the other end of the scale comes a young man who had had some three or four attacks of pain in the right iliac fossa in a year, each lasting a few days, apparently not attended with fever, and certainly not with any real feeling of illness. For this his appendix had been excised. When I saw him, some months after the operation, he had just had another attack, at which he expressed some surprise. Often the patient's history of abdominal pain runs into years. The longest individual continuous attack had lasted for eight months, during which the patient (clearly truthful) said he had hardly passed a day without being conscious of some discomfort in the right iliac fossa. Whether the attack is long or short, dull ache or sharp pain, right-sided or left-sided, the whole group seems to hang together as owning one cause.

In 12 cases the pain or ache was always confined to the left iliac fossa or left flank. In 13 it was similarly placed on the right side. In 4 cases it was central. In 2 cases it was located about the umbilicus at the beginning of an attack, and subsequently shifted to the left flank. One patient said that it always "travelled" in this path. In 4 cases it was sometimes on the right side, and sometimes on the left.

As a rule, the discomfort is distinctly relieved by a satisfactory action of the bowels, but such an action is difficult to get, and strong, irritating purgatives aggravate it. Sometimes defaecation is said to be painful; but whether this is so or not, it entails much straining and muscular effort. The stools are commonly narrowed into pencils or ribbons—the effect, I believe, more of anal than of colonic spasm. Pressure, or at any rate massage, will sometimes give relief in the slighter cases, and a hot bath may have a great effect. It is not uncommon for a patient to be aroused early in the morning by the left-sided discomfort. The normal act of defaecation is essentially a reflex movement, which, though it is controlled by the will, is started by the entrance of faecal matter into the rectum. During an attack this class of patient experiences no such rectal stimulus. He has no natural desire whatever to go to stool. The place of the normal rectal sensation is taken by a feeling of discomfort and tightness in the left iliac fossa, and the rectum is empty and thrown into folds, often with spasm of the sphincter. A very common complaint is the want of any of the natural sense of relief that should follow an action of the bowels. Even if a fair result is obtained, the patient is left with the feeling that the process is not over, and subsequent futile attempts at evacuation are made. In the worst cases nausea is felt occasionally, but there is seldom any vomiting.

In offering evidence that the trouble in these patients is indeed due to spasm of the bowel, it must be confessed that there is no proof of such an origin; but the findings in Case 11 make it probable. Further, in nearly all of these cases some part of the colon can be felt as a hard cord about the size of a man's forefinger. This is more common in the left iliac fossa than elsewhere. It is a

most striking physical sign when it is met with above the umbilicus, the affected part being presumably the transverse colon, but I have found this only on one occasion. It occurs also in the right flank in association with right-sided pain, and when this is the case the caecum is often greatly distended, doughy, or squashy, so that its complete outline can be traced under the palm of the hand. Here as elsewhere the affected part is tender on pressure, but if it is situated on the right side there is not the definite wincing on deep pressure such as occurs at McBurney's point in disease of the appendix. When it is on the left side, the spastic part of the colon is very easily felt. It may end abruptly above and below, or its two extremities may pass beyond reach into the flank and pelvis respectively. It can be rolled from side to side. It is usually tender. It varies in hardness and distinctness from day to day. It may persist for days together unaltered, or may disappear suddenly. I have never felt the contracted part to undergo any such alteration in size or hardness under examination, as is common in intussusception and not uncommon in the portion of bowel just above a growth.

In a few cases, which there is no reason to separate from the others, no contracted bowel could be felt. But if a patient is kept under observation contraction can be felt on one day and not on another.

The bowel above the spastic part does not apparently become dilated. There is reason to believe that its action is inhibited. The contracted colon should be regarded only as a palpable evidence of disordered peristalsis and not as a mechanical cause of obstruction. Spasm will produce tumour, pain, loss of weight, and ill-health, but not the whole train of symptoms associated with intestinal obstruction. No peristalsis is seen or felt, and the abdomen is seldom distended. These points may be of use, because it is possible to confound a spastic left colon with a growth of the sigmoid flexure. One of my cases had been explored before I saw him, presumably with this idea. I had arranged for an exploration in a similar case in St. Thomas's Hospital, never doubting that there was a growth, but in the interval the tumour disappeared. Another case is worth mentioning, though it cannot be regarded as a purely functional spasm, inasmuch as there was an ulcer in the rectum.

Case 4. Spastic Colon. Abdominal Exploration.

A woman, aged 53, was admitted into St. Thomas's Hospital in December, 1903. In August of that year she began to experience pain in the left iliac fossa. She described it as feeling at first like a stitch. It was aggravated by walking and relieved by rest, so that she spent October and November mostly in bed. The pain increased in severity and it was not diminished by a pessimistic doctor who told her that she had cancer. Constipation was troublesome throughout the illness. There was no pain on defaecation, but relief was experienced. She was occasionally sick. She was a grey-haired, careworn woman, and she had lost 9 lb. of weight in four months. The abdomen was flaccid and easy to examine. In the left iliac fossa was a hard bar about 3 in. in length by 1 in. in breadth, always tender and nearly always present and well defined. The most free evacuation we could procure with castor oil and enemata produced no alteration in it. It seemed clear to me that the tumour was a spastic colon. But after a stay in hospital of a month, the condition was unchanged, the loss of weight continued, and the pain increased in severity, reaching occasionally such a degree that she cried aloud with it and morphine became necessary. Mr. Wallace, therefore, at my request, explored the left iliac fossa, with a negative result. But a small ulcer was found in the rectum 1½ in. above the anus, which may have played a part in producing the spasm, and this was excised. She improved slowly, and by May, 1904, was apparently well.

SUMMARY.

Whether the spastic nature of these cases is allowed or not, I think the following summary may be maintained as true:

1. That it is not uncommon for men and women in equal proportions to begin in early adult life to suffer from abdominal pain.
2. That from the absence of all evidence of organic disease and the long duration of many of the cases, it is unlikely that there is any structural change in the intestine or elsewhere.
3. That such patients are neurotic or neurasthenic, and that the abdominal trouble varies directly with the mental state.
4. That the pain may occur in short, sharp attacks; or may last for months at a time as an ache or discomfort.
5. That, whether it is short and sharp, or long and wearing, the pain is usually seated in the right or left iliac fossa or the immediate neighbourhood.
6. That in both situations the pain may lead to the idea that more serious disease is present, as affecting chiefly the appendix, and to a less extent the sigmoid flexure.

Dealing only with this spasm-pain when it occurs on the right side and its distinction from appendicitis, we have little concern with a real attack of local appendicular peritonitis with fever. The distinction here is easily made. Doubt only arises when the patient presents himself for an opinion as to the advisability of ridding himself of his appendix, and in coming to a decision we have to rely entirely on his own story, no verified details of the attack being available.

The chief difficulty lies in distinguishing between the spastic pain and those attacks of pain or uneasy sensations in the right iliac fossa which undoubtedly occur in connexion with a diseased appendix, before ever the peritoneum has become affected. Even in these cases a few words from a doctor who has observed an attack and knows its characters are worth more than an hour's talk with the patient. It is in these cases that the appendix is sometimes removed, and thereafter the symptoms have been found to continue unaltered. It would be a gain if only it were generally allowed that not all pain in the right side is due to disease of the appendix, but may have such a comparatively harmless nature as is here suggested. That position being reached, I believe a correct diagnosis would be arrived at more uniformly than is now the case if the past history as well as the story of a recent attack were minutely investigated. The true nature might be realized from such points as the long duration of the pain or discomfort, the circumstances of its coming and going, the complete absence of fever, a similar trouble on the left side at some earlier date, the observation of mucus passing, and the tangible evidence of colon spasm.

Though excision of the appendix is sometimes performed unnecessarily, as is shown by the subsequent recurrence of pain, it does not follow that in all such cases the wrong course has been pursued. One may feel fairly confident that a right-sided pain is of spastic origin and not due to disease, yet it may be wise to remove the appendix. All the circumstances must be considered. If the patient is so placed as to be able to lead a healthy life under observation, it may be perfectly safe to wait. Further observation will certainly make the case clear, though passive waiting while a doctor makes up his mind is seldom appreciated by the patient. If, on the other hand, he lives out of the reach of reasonably skilled attention, it may be wiser to be on the safe side and remove the appendix. The work and occupation of the patient must likewise be considered. Also, there is no disguising the fact that patients exist whose intelligence is of such an order that if suspicion has once been cast upon the state of their appendix they will not rest satisfied until it is excised. Finally, in cases in which the pain is probably of the functional kind, and yet the possibility of appendix disease cannot be excluded, it is certainly helpful to the physician if the appendix has already been removed. In carrying out his course of treatment he can then act more freely than if a doubtful appendix were still present.

THE Board of Education have had under consideration the questions connected with the attendance at public elementary schools of children under 5 years of age. In view of the many difficulties which the matter presents, it has been decided to reconsider the advisability of laying before Parliament the Minute which had been proposed for modifying the system of grants in respect both of children under 5 and of the other scholars in public elementary schools. This decision involves a reconsideration by the Board of the manner in which some measure of relief can best be afforded to those areas where the burden of the education rate is especially heavy.