minus or plus glasses to it. Supposing your final glass is plus 0.25 cylinder axis vertical combined with plus 0.25 sphere, if a plus 0.12 cylinder axis *horizontal* added improves, your correction then becomes plus 0.12 cylinder axis vertical with plus 0.37 sphere, or if a - 0.12 axis horizontal added improves, you want plus 0.37 cylinder axis vertical with plus 0.12 sphere, and so on, and then check on putting up the new glasses again with crossed cylinders to verify your work.

In selecting the axis of low cylinders the astigmatic fan will help you to determine the best position.

Impress on young people that the reward for wearing glasses is a tendency for the condition to improve, and if the error is low the glasses may be given up in a year or two, or sooner.

Anisometropia or Odd Vision.—Each eye must be separately tested, but before prescribing the glass a binocular test is most essential in *all* but children (and even in children if the difference is very great). If the difference is great you may have to lessen this difference by taking off from one glass or adding to another or both, or weakening the stronger glass. You must find what is most comfortable for the patient. Remember that these remarks apply to the *spheres* only, never alter the cylinders.

Muscle Balance.—Always take the muscle balance with the Maddox test. When *exophoria* is present, if it is low in amount the wearing of the accurate correction will probably cure it. Never give prisms to young people unless the *exophoria* is very high, and then only correct half the amount.

Esophoria of slight amount is very prevalent in our civilized life, when we are constantly looking at near objects, and is of *no* moment; if large in amount, prisms may be required for distant vision.

Patients sent to you by a doctor because of some symptom pointing to eyestrain may assert that they do not want glasses as they see all right. Explain to them that the

glasses are *not* given to improve vision, but to do work which they can do and are doing all their waking hours, which work is harmful. A patient leading an out-door life may be able to afford to dispense with glasses if the error is small, but anyone with an easily unbalanced nervous system and spending most time at close work will profit enormously by acting on your advice and *living in the glasses*.

Finally, all patients, say under 35 years of age, should be seen once a year. As you have the record of the cycloplegic testing at the first visit, this may not be necessary for two or three years. Older patients should be seen every two or three years. In some patients the refraction is constantly changing, and of course they must be seen oftener as it is important to make the change when it occurs.

DIAGNOSIS OF DISEASES OF THE RECTUM AND COLON.

By J. P. LOCKHART-MUMMERY,

F.R.C.S.

Senior Surgeon to St. Mark's Hospital for Diseases of the Rectum, &c.

I DO not propose to bore you with a long description of all the different symptoms of disease of the large bowel, or by an elaborate description of the means at our disposal of diagnosing disease in these parts, but rather by relating to you some of the more spectacular mistakes in diagnosis that I have met with in the course of my practice, to try and illustrate some of the traps that lie in store for the unwary in this branch of medicine. Now I have always found that in medical practice one learns more by studying the mistakes that are made than by merely studying the successful cases. The reason for this is probably that there is a tendency

for the mistakes we see to impress themselves more upon our minds. Our own failures or mistakes teach us most of all, but next to these we learn most from a study of the mistakes of others. Unfortunately it is the custom to publish and relate successful cases, while the failures are seldom said much about. How much we should learn if every doctor were to publish his failures! But such a proceeding is, I am afraid, quite Utopian. The failures are always most instructive, and by investigating them carefully we can see where the mistake began and to what it was due. One would naturally imagine that most of the mistakes are due to lack of knowledge, but in my experience I have not found this to be the case, and the vast majority of mistakes in diagnosis are, I am sure, due to carelessness.

One of the commonest causes of error in the diagnosis of rectal disease is neglect to make an examination of the bowel. It is as absurd to expect to be able to diagnose disease in the rectum without examining this part of the bowel as it would be to expect a letter to reach its destination if no address were put on the envelope. I still occasionally see cases of patients who have been under treatment for piles for a number of months without any kind of an examination having been made, who are found upon examination to be suffering from a growth in the rectum which is already quite inoperable. Such mistakes are, of course, inexcusable, and fortunately are now becoming very rare. As an instance of a mistake which arose from neglect to make an examination, the following is a good instance :—

Some few years ago a solicitor consulted me with the following history. For ten days he had been experiencing very acute pain whenever his bowels acted. He had consulted three other doctors before coming to me, but none of them had made an examination of the bowel. They told him he was suffering from an acute fissure, and prescribed ointments which gave him no relief. On examination, I found a large

fish-bone across the anal canal with its ends embedded in the bowel wall. It took about half a minute to remove it, and I remember that he was rather indignant at my charging him the customary consulting fee, as he thought I had earned it too easily!

Mistakes in the diagnosis of rectal disease would be far less common if doctors always made it a practice to make a digital examination of the rectum in every case where a patient complains of rectal symptoms or of irregularity in the action of the bowels. It is true that a great many lesions in the rectum cannot be detected by the mere passage of the finger, but on the other hand a great many can be. The following case is a good example of the mistakes which can be made from neglect to make a local examination :—

The patient was a lady, aged 55, who while staying at her place in the country was troubled with discomfort in the rectum and frequent desire to go to stool, accompanied by slight diarrhoea. As this did not get better with simple remedies she sent for her local doctor. He diagnosed slight piles, and prescribed some ointment and a bismuth mixture to control the diarrhoea, but he did not make a local examination. His treatment was continued for three or four weeks, the patient being no better and suffering from a good deal of discomfort. She then came up to her house in town and sent for her London doctor, who at once made a local examination, and finding something in the bowel asked me to see her. I found a faecal concretion about the size of an orange, and of the consistency of concrete. It took me three quarters of an hour with a chisel and hammer to remove this under an anaesthetic.

One of the commonest mistakes in diagnosis is between malignant disease of the rectum and some simple lesion like piles or fissure. There are no symptoms of malignant disease of the rectum which are absolutely characteristic. There is one, however, which is very seldom absent, namely,

spurious diarrhoea. This is one of the very earliest and most characteristic symptoms of malignant disease of the rectum, and a frequent desire to evacuate the bowel should always be looked upon with the gravest suspicion, and never treated until the rectum has been properly examined. In the absence of this symptom, that is to say, if the bowels are acting perfectly regularly, malignant disease is an exceedingly unlikely diagnosis.

Let me here say something about the word "piles." To those of you here this word means small varicose swellings in the anal canal or swellings at the anal margin, but let me assure you that it does not necessarily mean anything of the sort to your patients. Patients call anything piles which causes symptoms of any kind in the neighbourhood of the rectum. It is well always to remember this, as it has often caused serious trouble. It is wise, when consulted by a patient, to assume that the word "piles" merely refers to some trouble in the rectal region, and quite without bias proceed to find out what is the matter. Patients often make most curious diagnoses of their own complaints, and I remember one man in the out-patient department of the hospital who, when asked what his trouble was, said that "he had piles on his mother's side." It seemed an unusual place for piles!

Of course in general practice it is not possible to examine all patients with rectal or bowel symptoms with a sigmoidoscope, but a rectal examination with the finger, especially a bimanual examination, with the left hand on the abdomen, is quite easily done and will enable a great many mistakes to be avoided. When such an examination fails to reveal anything and the symptoms are suspicious, further examination should be advised. At St. Mark's Hospital it is the practice to sigmoidoscope every patient that is admitted, and the advantage of doing so is well illustrated by the following case:—

A woman was admitted recently to St. Mark's Hospital suffering from prolapse of

the rectum, and my house surgeon found that she had a large prolapse which readily came down, and she also had a completely patulous sphincter. He, however, stuck to the usual custom and passed a sigmoidoscope to investigate the condition of the colon, and then he saw what he thought was a growth high up. He informed me of this, and I was able to confirm the fact that she had a cancerous growth high up in the sigmoid and that it was resectable. I operated upon her and was able to remove the segment of the colon and join the ends up again. She made a good recovery and the prolapse was dealt with later. You see how a routine examination saved a very serious error.

Some years ago I was asked to see a lady who was suffering from severe pain in the anal region, and who for a week had been having electrical treatment for coccygeal neuralgia, "so-called." Her doctor had not examined her, but sent her along to an institution for electrical treatment. As she had got worse under the treatment, I was asked to see her. I found a large ischio-rectal abscess which, when opened, contained nearly a pint of pus.

I remember some years ago being asked by the late Sir Victor Horsley to go and see a case with him in an hotel in the West End. When I met him he told me that the patient was a lady, aged 35, who was on her way from Scotland to the Riviera. She was being taken out to the South of France by her husband to die, as she was supposed to be suffering from inoperable cancer of the rectum. The husband had communicated with Sir Victor, who insisted that she should be examined again to confirm the diagnosis before she went. On examining the lady we found no growth, and it was obvious that the normal uterus, which was somewhat displaced and enlarged, had been mistaken for a growth.

Some of the most difficult cases, from a diagnostic point of view are cases of early tabes with rectal symptoms. Rectal crises

sometimes occur as an early symptom of tabes, and the pain in the rectum may be very acute and is brought on by an action of the bowels. Unless the true nature of the case is suspected and an examination made of the patient's reflexes, the diagnosis will be missed. I saw an interesting case of this nature recently. The patient, a healthy-looking man, aged 42, complained of faecal incontinence which had begun suddenly about three months previously. He found that he had involuntary stools at unexpected times, and this had happened on several occasions. No other symptoms at all were complained of. On examining him, I could not find anything wrong at all. His bowel was normal and his sphincter contracted well. I then started to examine his sensations, and found that he could not feel a needle prick at the anal orifice, or the heated end of a probe. There was an area of complete anæsthesia for about an inch round the anus, and further examination showed one or two similar areas on his fore-arms, and definite Argyll-Robertson pupils. His knee-jerks were sluggish. There was a history of syphilis twenty years previously.

Cases of loss of control often give rise to difficulty. Some time ago I was consulted by a young officer who had come from India on purpose to see me. His history was that he had had two operations for fissure while in India, and ever since had suffered from slight loss of control over the sphincter. I examined him very carefully, but was quite unable to find any cause at all for the slight leakage he complained of. The scar of the operation was quite sound and his sphincter closed well. I was at first completely at a loss to account for the slight leakage, but fortunately I had a brain wave. I asked him if he was taking petroleum, and he said yes, he had taken it every day since he had the fissure two years before. I concluded that the leakage was simply the result of taking an excess of petroleum, and this proved to be correct. The patient was not too pleased to think that he had come all

the way from India to find out that petroleum was his only trouble.

Mistakes not infrequently occur in connection with bleeding from the bowel. By far the commonest cause of rectal hæmorrhage is, of course, internal piles, but it is never safe to conclude that piles are the cause of bleeding unless the piles themselves have been seen and other causes have been excluded. Bright blood passed by the bowel must come from some cause within a comparatively short distance above the anus, for if the source of bleeding is in the colon, at any rate high up in the colon, considerable modification due to retention and digestion will of necessity take place, which will make the blood almost unrecognizable as such. It is always well to bear this in mind. A digital examination is not sufficient, as internal piles cannot, as a rule, be felt with the finger, and some form of rectal speculum or proctoscope must be employed.

There are several conditions which may result in a wrong diagnosis. In elderly people with thickened or sclerosed blood-vessels accompanied by high blood-pressure, quite profuse hæmorrhage may occur from the bowel without apparent cause. Doubtless some small blood-vessel has given way, but it is usually quite impossible to discover the point from which the blood is coming. Bleeding under such conditions does no great harm, and treatment should be designed to reduce the blood-pressure rather than to attempt to stop the bleeding by more direct means.

Another condition, which not infrequently gives rise to difficulties, is ulcerative proctitis or colitis. In this case the bleeding may be quite profuse and continue for a long time. Such bleeding is often mistakenly put down to piles, and I have even known patients operated upon for piles without the true cause having been detected. An examination with a proctoscope or sigmoidoscope will enable a correct diagnosis to be made. There is a curious disease, named by me "hæmorrhagic colitis," which occurs

in young women and causes the most profuse hæmorrhage, and I have often had such cases sent to me as piles. The sigmoidoscope of course at once clears up the diagnosis. Treatment of these cases is, however, difficult, as the bleeding, though easily stopped, is very liable to recur at some later time.

AN ABSTRACT OF
REMARKS ON CASES SEEN
 AT THE EAST SUSSEX HOSPITAL, HASTINGS,
 ON OCTOBER 18, 1927, AND
**A LECTURE ON SPLENO-
 MEGALY.**

*(Delivered under the Auspices of The Fellowship
 of Medicine),*

By BERNARD MYERS,
 C.M.G., M.D.

THREE cases were seen, the first being one of congenital hypertrophic stenosis, which had just been successfully operated upon; the second, a child suffering from enuresis, and the third a moderate case of hemichorea.

The points relating to diagnosis, prognosis and treatment were gone into, and in the case of hypertrophic stenosis, the after-treatment, and of enuresis, the causations were dealt with in detail; the latter case occurred in a neurotic child, and called for the treatment of a child of that type.

Questions were asked about the feeding of infants. The chemistry of human milk, the food requirements of the child, the physiology of digestion and caloric values were elaborated upon.

The following lecture was then delivered :—

THE SIGNIFICANCE OF ENLARGEMENT OF THE SPLEEN IN CHILDREN.

We all meet with cases of enlargement of the spleen from time to time, and it is

necessary to assess its significance in each individual case. For this purpose we must have a definite procedure to help the elucidation of the case in order that diagnosis may be established as soon as possible, and suitable treatment commenced. However, in order to do this we require a working knowledge of the anatomy, physiology and pathology of the spleen with a sufficiency of information concerning the clinical conditions in which the spleen is enlarged.

[After a preliminary account of the anatomy and physiology of the spleen the lecturer proceeded as follows :—]

FREQUENCY OF ENLARGEMENT OF THE SPLEEN.

Carpenter,¹ who analysed 348 cases of enlarged spleens in children, found that there were 48 during the first three months of life, 46 during the second, 21 during the third, and 48 between nine and twelve months, which makes 163 cases during the first year. There were 117 cases during the second year, 19 during the first half of the third year, and 16 during the second half. The number of cases then diminished greatly up to the age of 12 years, and only equalled 27 from 5 to 12 years. Some occurring in rickets may only have been palpable owing to deformity of the ribs, and did not necessarily denote enlargement of the spleen; probably, therefore, a number of the above cases came under that category.

During the first six months of life enlargement of the spleen is probably chiefly due to syphilis and tuberculosis. Up to two years rickets is not infrequent, and von Jaksch's anæmia may occur. Then there are the ordinary fevers of childhood—measles, whooping-cough, &c. Later, essential thrombocytopenic purpura, hæmorrhagica, lymphadenoma and Banti's disease, &c., have to be kept in mind. Acholuria, jaundice, septicæmia, malaria, and kala-aza-

¹ *British Medical Journal*, 1903, ii, p. 463.