ENTEROPTOSIS.¹

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Mrs. A. Was first seen in July, 1893. Was confined one year previous; labor difficult, forceps delivery. Has not been well since. Feels tired. Pain in iliac regions and in soles of feet. Backache. Appetite good, sleeps well, bowels fairly regular.

The cervix and perineum were found badly lacerated, and an operation for their repair was advised, with the expectation that the patient would be wholly relieved.

She was next seen two years later. The lacerations had been repaired, but the patient had gradually grown worse. Has much pain in right lumbar region, especially after standing or walking; the pain extends down the leg and up into shoulder. The backache has increased. Has lost some in weight. Gets tired easily. Is constipated and very nervous. Examination of the abdomen showed: epigastric region depressed, slight distention below umbilicus; stomach reaches one inch below umbilicus; whole of right kidney and two-thirds of left easily felt; lower border of liver one finger's breadth below ribs.

Miss B. First seen in 1892. Has always been delicate. Has much backache. Considerable flatulence and acidity of stomach; occasional nausea and vomiting, but vomits only small amount. Is inclined to be constipated. Menses regular, considerable dysmenorrhea.

Pelvic examination: Uterus retroposed. The displacement was corrected, but with no relief to the patient. The various digestive ferments, antiseptics and tonics, and, by the advice of a New York specialist, lavage of the stomach, were tried with equally bad results. The patient was seen again a year ago. Condition about the same.

Abdominal examination: Epigastric region depressed, slight distention below umbilicus, whole of right kidney easily felt, lower border of liver one inch below ribs, stomach reaches a little below umbilicus.

I have given a brief outline of these cases, not because there is anything striking or unusual about them, but rather because they are everyday cases with all of us, and also because they belong to a very large group of cases to which we formerly gave the names of dilated stomach, floating kidney, neurasthenia, chronic dyspepsia, nervous dyspepsia, or nervous something, but now are looking at them more and more as cases of enteroptosis.

The word enteroptosis, strictly speaking, means a falling of the intestine, but as used at present, it has a more general significance, being applied to a downward displacement of some or all of the abdominal organs. A displacement of portions of the intestine and of the other abdominal organs has long been recognized as an anatomical fact, but its importance as a pathological condition has only within the last ten or twelve years begun to be appreciated. It was in 1886, I think, that Glénard presented his paper on this subject before the Medical Society of Paris, and this marks the beginning of our present conception of this extremely common condition.

The organs most often affected are: first, the right kidney, then the stomach, transverse colon, liver, left kidney and spleen. The displacement may be congenital or acquired.

The causes of the acquired form are, first, those which produce a relaxed condition of the abdominal walls, and, second, those causing downward pressure on the abdomen. In the first group the most important are, child-bearing, diseases producing much general debility, for example, tuberculosis, typhoid fever, anemia and neurasthenia, and malnutrition from insufficient or improper food.

In many cases of anemia and neurasthenia, however, the enteroptosis is probably the cause rather than the effect.

In the second group are: lacing, letting the skirts drag down on the abdomen, overwork, lifting heavy weights, etc.

In considering cases of enteroptosis, we have to take into account the fact that nearly always there is associated with the displacement a myasthenic or atonic condition of the stomach and bowels, and often it is to this more than to the displacement that the subjective symptoms are due. It is also true that a considerable degree of enteroptosis may exist without producing any symptoms. Such cases, however, are exceptional.

In the diagnosis we have to consider the subjective symptoms, objective signs, and the course of the disease.

The most common symptoms are a feeling of fulness and pressure in the epigastrium, flatulence, cardialgia, variable appetite.

The stomach symptoms differ from those found in most other diseases of the stomach by being more irregular. They do not depend upon the kind of food taken nor upon the stage of digestion; that is, they are just as apt to occur after taking liquid as after solid food, or when the stomach is empty as when full, and *vice versa*. An almost constant symptom is habitual constipation, in some cases alternating with diarrhea. The constipation is due partly to the atony of the muscular coat of the intestine, and partly to the abnormal flexing or doubling up of the intestine by its prolapse, which interferes with the peristaltic motion.

In many cases the nervous symptoms are the most prominent. There is often headache; almost always more or less backache, frequently pain in the abdomen which wanders about from one place to another.

Patients with enteroptosis are, as a rule, thin, spare people, and, therefore, it is comparatively easy to make out the position of the different organs. The stomach is found reaching to or below the umbilicus. The whole or part of one or both kidneys is to be felt. The transverse colon is descended; also in many cases the liver and sometimes the spleen.

Examination of the stomach contents shows that digestion in the stomach is normal, or perhaps retarded. In the morning the stomach is empty or contains simply a small quantity of gastric juice, with perhaps some bile, but no food.

The disease runs a chronic course, with many remissions and exacerbations. In the more marked cases nutrition is much interfered with. The patient loses in flesh and strength. Is easily fatigued. Of some diagnostic value is the favorable effect of physical and mental rest, and the opposite. The patient feels fairly well if she does but little.

The only disease which I shall consider in the differential diagnosis is dilatation of the stomach, or more correctly termed, mechanical insufficiency. Until recently every stomach that reached to or below the umbilicus was considered dilated. Further careful

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study has proved that a great majority of these are simply descended, and that cases of mechanical insufficiency are comparatively rare.

A very characteristic symptom of mechanical insufficiency is the vomiting at intervals of large quantities of food and liquid, which, on standing, separates into three layers. The lowest consists of food, the middle of a grayish, turbid fluid, the upper of a brownish froth. The vomited material may contain food that was eaten two or three days before.

In enteroptosis the amount vomited is small and does not contain food eaten the previous day.

In mechanical insufficiency thirst is much increased, the amount of urine passed in twenty-four hours is lessened and the skin becomes dry—symptoms which are not usually present in enteroptosis. In mechanical insufficiency the emaciation is more marked, the stomach symptoms are more regular and their intensity is more dependent upon the kind of food taken.

In cases of doubt, very conclusive evidence can be gained by giving the patient a test supper, consisting of cold meat, bread and tea, and then the next morning examine the stomach contents.

If there is mechanical insufficiency a considerable quantity of food and liquid will be present, having a characteristic sour odor, and, on standing, separating into three layers. Under the microscope one finds yeast fungi and sarcinæ, whereas if it is a case of gastropsis the stomach is either empty or contains only a small amount of gastric juice. No food is present, and the yeast fungi and sarcinæ are wanting.

Prognosis: The disease carries with it no serious danger to life, but, in most cases, it does reduce one's power to do either physical or mental work, and often the patient is more or less of an invalid all her life.

Treatment: Remove as much pressure and weight from the abdomen as possible. Corsets should not be worn. The patient should wear few skirts and light ones, and these should be supported from the shoulders. Give a very nourishing diet,—one rich in carbohydrates and fats, plenty of good milk, cream and butter.

Tone up the muscles of the abdominal wall, stomach and bowels by cold bathing and rubbing, and, best of all, by abdominal massage and the Faradic current. In some cases an elastic abdominal binder gives much relief to the patient.

The medicinal part of the treatment is very secondary. Strychnia probably does good, and, where there is much flatulence, resorcin or beta-naphthol may be of service.

In regard to the misplaced kidneys, the question of nephrorrhaphy will often come up. In many, probably in most, of the cases, the symptoms are due more to the displacement of the other organs, so that until a way is found of stitching up all the abdominal organs the patient cannot be wholly relieved by surgical treatment. However, there are cases in which the chief suffering is due to the nephroptosis, and in these cases nephrorrhaphy is of benefit to the patient.

I wish to acknowledge my indebtedness to Professor Litten and Dr. Boas of Berlin, in whose clinics it was my privilege to study for a time, and to whom I owe the few thoughts which may be of interest in this paper.

TYPHOID fever is reported to be epidemic at Dawson City; several miners have died of the disease.

Reports of Societies.

BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.

JAMES G. MUMFORD, M.D., SECRETARY.

REGULAR Meeting, Monday April 26, 1897, Dr. A. L. MASON in the chair.

Dr. WILLIAM T. PORTER, by invitation, read a paper on

THE PHYSIOLOGY OF THE SYMPATHETIC NERVE.

Dr. F. B. LUND read a paper on

ENTEROPTOSIS AND MOVABLE KIDNEY.¹

Dr. THOMAS DWIGHT: The paper is a very interesting one in many respects, and opens many questions that I only wish I had felt properly prepared to discuss. The first point that naturally occurs is as to the general principle of the fixation of the abdominal viscera, and that is no single elementary principle. One of the most important factors beyond question is the strength and tonicity of the abdominal walls. Then we have to consider the support of the viscera by ligaments and otherwise. The liver is the organ apparently which moves the least, in spite of its weight. The ultimate cause of that is to be found in the fact that the liver and diaphragm develop as one; so much so, that some, though I cannot agree with them, hardly like to talk of a posterior surface of the liver, looking at it as practically one with the diaphragm. The union there is very firm by areolar tissue, much denser than that which usually connects other organs to the walls. Thus the intestines originally develop in a median loop, and after going through a number of twists and curves certain parts of them get stuck to the abdominal wall, and the peritoneum which covers the abdominal wall, and the loop which has come to lie against it is changed into areolar tissue. We do not find in this place the same strength of adhesion as between the posterior wall of the liver and the diaphragm.

In the intestine there are one or two tolerably fixed points: one, of course, is the beginning of the stomach where the esophagus goes through the diaphragm. That is held up in a variety of ways. We may assume that that is practically fixed. Again, there is the first part of the duodenum, not its very beginning, where it is caught up against the liver, and near which passes the bile-duct which runs into the second part. Finally, there is the termination of the duodenum, which is held up to the second lumbar vertebra and the under side of the celiac axis by a band of fibrous tissue which originally was muscular fibre. Those are pretty fixed points; and if you look at this diagram, you will see first that in all these cases of prolapsed viscera the stomach is very much enlarged. In the second place, it stands to reason that the upper part of the stomach, where it goes through, cannot fall down; consequently, if the stomach is to fall, there must be a general enlargement of that organ; and this seems to be the case. Though the pylorus undoubtedly does fall, it does not fall so very much.

As to the so-called ligaments, simple bands and folds of peritoneum which pass from the wall on to a viscus hardly deserve the name of ligaments. I think it is misleading, and do not believe they have a restrain-

¹ See page 343 of the Journal.