size; red corpuscles 4,270,000; leucocytes 2,500; hemoglobin 45%.

At the end of his article Osler says, "Doubt has been expressed as to the existence of a separate and distinct disease, to which the term splenic anemia should be given. We do not know whether the anemia is the result of the enlarged spleen, or whether, as seems more probable, both are secondary to some cause as yet unknown. Provisionally, until we have fuller knowledge, it is useful to group together, as I have done here, cases of idiopathic enlargement of the spleen with anemia and without lymphatic involvement, and to label the condition splenic anemia."

(To be continued.)

Clinical Department.

HERNIA REDUCED "EN BLOC"; OPERATION AND RELIEF OF INTERNAL STRANGULATION.[1]

BY C. A. PORTER, M.D., BOSTON.

THIS case entered the Massachusetts General Hospital Jan. 18, 1901, in the service of Dr. C. B. Porter; operation by Dr. C. A. Porter.

Daniel T., age 42, had worn for 5 years a truss for double inguinal hernia of medium size. On Jan. 17, while drawing on his trousers in a hurry, the hernia slipped out by the truss and could not be reduced. In a short time he had sufficient pain to cause him to send for his physician who, under ether, reduced the hernia so that the inguinal canal was empty.

Upon recovery from ether, however, the pain recurred with increased severity, and he was wisely sent to the hospital for observation. On entrance, Jan. 18, at 2 P.M., the temperature was 100.6°, pulse 100, respiration 24. Both rings were large, the right tender on insertion of the finger; both were entirely empty; the muscles of the right lower quadrant were somewhat rigid; the pain through the lower abdomen was moderate in amount and less than in the early morning.

In spite of ice bags the patient passed a restless night, with nausea and finally vomiting in the early morning. No movement in spite of calomel and salts by mouth and two rectal enemata. The pain increased in severity towards noon, with vomiting and increased rigidity of the lower abdominal muscles, the temperature remained the same, but the pulse rose to 120; white count, 17,700.

In view of the evident intestinal obstruction with nothing to be felt in the inguinal canal, a diagnosis of reduction *en bloc* was thought probable, and under ether an incision was made through the right rectus muscle. On walling back the intestines the cause of the obstruction was at once evident; distended ileum could be seen to enter a peritoneal opening opposite the internal ring, and collapsed and pale intestine emerged from the same aperture. Upon slight traction a short knuckle of intestine popped out, showing well a distinct sulcus where constriction had occurred. Gas immediately filled the previously collapsed portion, and the dark purple color rapidly changed to normal pink.

On more careful examination of the now empty sac it was found to lie in the subperitoneal tissue, entirely within the muscles, and in no relation to the internal ring or inguinal canal. The case was then one of inguinal hernia which, as there were no, or only slight, adhesions between the sac and surrounding tissues, had been converted by manipulation into the so-called "properitoneal or interstitial variety."

On the left side the sac was found to be inverted, projecting into the general cavity like the finger of a glove. To its tip a coil of intestine was firmly adherent, and the cord could be felt running along the outer surface of the sac. Both sacs were tied off, and the abdomen closed. The patient's condition did not warrant any operation for radical cure.

Recovery was uneventful, except for slight infection of the wound. The bowels moved freely on the following day. In a month Dr. Scudder operated upon both hernial openings.

After apparently successful reduction of strangulated hernia by taxis, the symptoms may recur under the following conditions:

(1) Incomplete reduction, especially in fat persons, when the hernia and sac are pushed up beyond reach into the inguinal canal.

(2) Reduction into another pre-existing sac, connected by a common neck with the one in which the gut was first found.

(3) Reduction *en bloc*, where the sac, with contents, is pushed entirely beyond the inguinal canal into the submuscular space.

(4) Reduction through a rent in the sac. The neck has even been completely torn away and found free in the general cavity, encircling the intestines like a ring.

(5) Complete reduction from the sac, yet with adhesions of the intestines sufficient to form a kink.

(6) Finally, obstruction developing as a result of changes in the intestinal wall itself, varying in severity from transient traumatic paralysis to gangrene and perforation.

Whenever severe symptoms recur after taxis, or even after the ordinary operation for strangulated hernia, it would seem conservative to perform laparotomy at once, and examine the intestine. Should its condition be doubtful it may be surrounded with gauze and watched for 24 hours. Leaving questionable intestine near the open inguinal canal in ordinary strangulated hernia, in view of the possible subsequent complications, seems to me inferior to making a rapid abdominal section.

In the not uncommon cases where a certain amount of intestinal paralysis follows reduction, it is often a nice question of judgment whether

[1] Read before the Suffolk District Medical Society, Surgical Section, May 1, 1901.

these will pass away under catharsis and enemata, or whether operation is indicated.

The duration of strangulation, the severity of the symptoms, the condition of the gut — if it has been seen — are the only guides, with a distinct bias in favor of operation if the symptoms persist more than 24 hours.

A CASE OF INTUSSUSCEPTION; RESECTION OF FIFTY-SIX INCHES OF SMALL INTESTINE; RECOVERY.[1]

BY F. G. BALCH, M.D., BOSTON.

THE following history is given by Dr. Boland: He first saw Maud H., 16 years of age, on Jan. 25, 1901. At noon she had eaten a hearty boiled dinner with turnovers, etc., included. In the afternoon she ate apples, raw cucumbers, candy, etc. At 5 P.M. pain and vomiting set in and continued. At 11 P.M. Dr. Boland saw her. She was still in great pain and vomiting. Her general condition was good. A mass was easily felt in the abdomen, the shape of a Vienna crescent roll, convexity down, and the ends parallel with the spine. It was movable from side to side at least two inches. The belly was so empty and thin and soft that it could be felt as easily as a bread roll in an overcoat pocket. She was given a subcutaneous injection of a sixth of a grain of morphine and a hundredth of a grain of atropine. The conditions next morning were the same, and the subcutaneous injection was repeated. The condition at 7 P.M. was very much worse. General abdominal distention masked the mass. She was then sent to the Carney Hospital with a diagnosis of intestinal obstruction. When Dr. Boland first saw her, the temperature was 99.6° and the pulse 90. The hospital records say that she had no movement of the bowels after the morning of the day she was taken sick. Her morphine did not stop the nausea, and she continued vomiting a dark green fluid through the night. Her mother said that she had passed some gas but no feces during the night. Applications were continued, and a low suds enema was given. She slept several hours after this. There was but little tenderness in the lower abdomen. In the evening before she was sent to the hospital she complained of considerable pain, and was vomiting. There was some distension of the abdomen and slight tenderness. She was brought to the hospital at 9 P.M. Physical examination then showed a symmetrical abdomen, lax but somewhat more prominent than normal in the region of the umbilicus. No visible peristalsis. On palpitation the abdomen was somewhat tender, and a mass could be felt in the region of the umbilicus extending outward and downward and somewhat rounded in outline. The region was dull on percussion. Leucocyte count was 20,000. When I saw the patient a little later the distension had increased so that it was hard to make out anything of the shape of the tumor. She seemed to me very slightly more tender in the appendix region, so I first made an incision in the right linea semilunaris about on a level with the umbilicus. It was at once evident that the mass had no connection with the appendix, and also that it would be impossible to remove it by that incision. I then opened in the median line and came upon the crescent-shaped tumor exactly as Dr. Boland had described it. With some difficulty I got the mass outside of the abdominal cavity and found that it was a large intussusception — *jejunum into ileum*. There was considerable free purulent fluid in the abdomen, and the whole mass looked so badly that I decided to resect the intestine. This was accordingly done, and the ends brought together by end to end anastomosis. The edges of the incision in the mesentery were sewed over and over separately, as being the quickest way to stop bleeding, and then brought together with a continuous stitch. The ends of the bowels were united by a double layer of continuous sutures, the first approximating the edges of the gut and the second being a Lembert stitch through the peritoneal coat. After the suture was completed, the omentum was carefully wrapped about the point of union and both incisions closed except for a small gauze drain in the median line down to the anastomosis. The abdominal cavity was not washed out but was sponged out with dry sponges. There was considerable shock to the operation, and quite vigorous stimulation was needed.

The patient rallied fairly well from the operation but was quite weak the next day. During the next 24 hours the bowels moved 3 times, and considerable gas was expelled after a high enema. She was slightly delirious and got out of bed once during the night, and insisted that she felt all right, and that we were starving her. During Jan. 26 she had $\frac{1}{40}$ of a grain of strychnia every 4 hours, and 6 nutrient enemata during the day.

On Jan. 27 she was somewhat restless, but in the afternoon her bowels began moving very freely, and she felt better. She had $\frac{1}{30}$ of a grain of strychnia every 3 hours and 3 nutrient enemata during the day. On the 28th she was very comfortable. She slept 8 hours during the night. She was given milk and lime water by mouth and one nutrient enema. Leucocyte count was 16,000. On the 29th the wick was removed under chloroform and a small strip of gauze put in in its place. She was comfortable. She was given $\frac{1}{10}$ of a grain of calomel every $\frac{1}{2}$ hour for 6 doses. Feb. 3 the last wick and all the stitches were removed. Her convalescence from now on was uneventful. She was kept on liquids for 3 weeks, but when she left the hospital about the middle of February was eating regular diet and getting fat. Her bowels moved regularly, and she did not seem to miss the 56 inches of small intestine at all. The leucocyte count had come down to 11,000 on Feb. 1, and a few days later went up again to 14,000, where it stayed for several days. It then came down to 9,000.

[1] Read before the Surgical Section of the Suffolk District Medical Society, May 1, 1901.