

care of Dr. George Ross, on the 24th of February, 1892. She complained of headache, dizziness, constipation, vomiting and pyrosis. The first appearance of these symptoms dates back to the fall of 1890, when they seem to have come on rather suddenly. The vomiting at this time is described as coming on in periodical attacks, at no particular time of the day, sometimes on rising in the morning, and at other times during or after meals,—never before. The vomited matter consisted of partially digested food, but never contained any blood. These symptoms continue practically unchanged until about four months prior to admission to hospital, when she consulted a physician, who examined her and diagnosed pyloric obstruction with consequent dilatation of the stomach, and had the stomach washed out every morning with great relief to the symptoms, especially the vomiting. Only about one month before admission to hospital was the tumour discovered by the patient herself. She thinks it has not increased in size since she first discovered it. She has been steadily losing weight since the illness began, but has never suffered any pain except a slight distress before vomiting, which was always relieved by evacuation of the stomach contents.

Personal History.—Patient was born in Scotland, and came to Canada at the age of two years. She was brought up in the country and lived on a farm until twenty years of age, when she came to Montreal as a general servant. Five years ago she got married and returned to the country. She has had two children and one miscarriage. The youngest child is five months old. She has always enjoyed good health, with the exception of an attack of inflammatory rheumatism when twelve years of age. Has never used alcohol in any form.

Family History.—Father dyspeptic; no history of cancerous, tubercular or neurotic disease.

Present condition.—Patient poorly nourished, though not emaciated; pale and anæmic. Bowels constipated, moving only every two or three days. Temperature 97°F.; pulse 92; respirations 30. Heart and lungs normal. Urine: sp. gr. 1028; clear amber colour, free from deposit, no sugar nor albumen. Abdomen somewhat distended, particularly about the umbilical region. A dilated stomach with a hard, nodular, movable and painless tumour at the pylorus is easily recognized; the tumour is apparently about the size of an orange, and lies below and to the right of the umbilicus. Hepatic and splenic dullness normal. The stomach was washed out daily, and on the 2nd of March the patient was transferred to the surgical side. Careful examination on two different occasions failed to show any free hydrochloric acid in the stomach contents. The only important point in diagnosis which could not be decided was whether the growth was malignant or simply cicatricial. The patient was prepared for

operation as follows. On the 3rd of March the bowels were thoroughly cleared out by a saline purge. On the 3rd and 4th she was allowed only peptonized milk (three pints daily), and the stomach was washed out twice daily with warm water. The last food was given by mouth at 5 o'clock p.m. on the 4th, and the stomach was washed out at midnight with boro-salicylic solution (Thiersch's). This was repeated on the morning of the 5th and again re-12.30 p.m., just before operation, the last washing being very thorough. The patient had two enemata of peptonized beef-tea on the morning of operation, the last being at 12 o'clock, and consisting of four ounces (the first of five ounces, at 8 o'clock a.m.). Her weight was 95 lbs. When the stomach was emptied the tumour was found to have receded up beneath the lower costal margin, and was only evident on expiration, when it came down below the border of the ribs. The patient was etherized and an incision made in the median line from near the ensiform cartilage to the umbilicus. The stomach was drawn up through the wound, when it was found that the tumour consisted of an infiltrating growth of the stomach wall at the pyloric extremity, involving its whole circumference and more than a third of the organ in length. There were no adhesions, and the growth was sharply defined by the pylorus, the duodenum being quite free. Hard, infiltrated and enlarged glands were found in the gastro-hepatic-omentum, the mesentery, and behind the peritoneum (retro-peritoneal glands). The tumour was evidently carcinomatous, and the disease had spread widely along the neighbouring lymphatics. On this evidence the question of excision of the growth was promptly negatived, and the decision arrived at to establish an anastomosis between the stomach and the jejunum. The transverse colon and the great omentum were drawn upwards and the jejunum found without any difficulty. It was then approximated to the anterior wall of the stomach about an inch above the greater curvature, and an inch and a half beyond the margin of the growth. They were attached by a curved line of fine silk sutures (continuous), including the peritoneal and muscular coats only, which was intended to strengthen and perfect the approximation of the peritoneal surfaces below the inferior borders of the incisions. (These sutures could not be introduced after the rings had been inserted.) A longitudinal opening about $1\frac{1}{2}$ inches long was now made into each viscus about a quarter of an inch above the line of suture, which brought the incision in the jejunum to within a quarter of an inch of its free border and about 8 or 10 inches from the end of the duodenum. There was free bleeding when the incisions were made, but this was arrested as soon as the rings were introduced and a little pressure made upon them. Abbé's catgut rings were now inserted, each