The rainfall is, as clearly shown in the last table, considerable, but owing to the character of the geological formation all round Falmouth, it is remarkable how soon the roads and paths dry up, a point of great importance to invalids or holiday makers, and Mr. Kitto confirms my previously recorded impression by stating that there is an almost entire absence of dense fog. To this he adds that the inhabitants of Falmouth experience more bright sunshine throughout the year than almost any other place in the kingdom.

The following table will enable your readers to judge for themselves how far Mr. Kitto's opinion is justified.

Mean Monthly and Yearly Amount of Bright Sunshine Recorded at Falmouth for Eight Years—1881 to 1888.

Month.	Mean Amount of Bright Sunshine in Hours.	Mean Number of Days with Bright Sunshine.
January	46.6	17.5
February	71.3	20.5
March	130.8	25.8
April	174.1	27.1
May	223.4	28.8
June	238.1	26.6
July	215.6	29.3
August	206.8	29.2
September	145.6	27.0
October	112.5	25.3
November	70.9	20.0
December... ..	57.8	20.1
Mean	141.1	24.8

In a letter addressed by Mr. Kitto to the *Falmouth and Penryn Times* in January of the present year, he states that during the last eight years the mean annual number of hours of bright sunshine recorded at the Falmouth Observatory was 1693.6 hours, the most sunny of these years being 1887 with 2074.3, and the least bright year, 1884, with 1534.5 sunny hours. To those who wish to escape from the summer heat of other localities, for those who require an equable climate during the cold that prevails in the winter months, Falmouth offers attractions not readily found elsewhere. May the Falmouthians soon recognise this fundamental fact, and add those features and facilities which are essential for the invalid. If this is done no prophet is required to foretell the reputation which Falmouth will enjoy in the estimation of the medical profession. But even the medical profession will fail to render Falmouth popular so long as the expedition and punctuality of the railway communication cannot be relied upon.

A CASE OF LORETA'S OPERATION FOR DILATATION OF THE PYLORIC ORIFICE OF THE STOMACH.

By WILLIAM GARDNER, M.D., C.M.G.L.S.,

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THE following case is recorded, not because I deem it to be of any value as an isolated instance of success, but because it is the first published example in the Australian colonies of a procedure highly recommended in similar conditions by Professor Loreta, of Bologna, who performed his first operation in September, 1882. A full account of this was published in the *BRITISH MEDICAL JOURNAL*, February 21st, 1885, by Mr. Holmes. On April 26th, 1884, a short account of Professor Loreta's ninth operation, which was for contraction of the cardiac orifice, is given. The operation has also been practised by a few other Italian surgeons, and in two cases by Dr. Burney, of New York, notes of which are to be found in the *New York Medical Journal* of January 16th, 1886. So far as I know, the remote results of these operations have not yet been published, and the value of the operation is still *sub judice*. The immediate results of the published cases have been excellent. The operation is suitable for cases of simple cicatricial or fibrous narrowing of the pylorus, or the cardia, or lower end of the oesophagus. The narrowing in simple cases is due to hypertrophy of the inorganic muscular fibre, and over-distension of this is the object to be aimed at, and the result is said to be as good as in cases of over-distension for fibrous stricture of the rectum.

Reasoning from analogy, every surgeon would be disposed to say that the good result would only be a temporary one, as is certainly the case in all true strictures of the urethra. This is the great point which has yet to be settled, and I offer my first case as an encouragement to others to perform the operation, and note carefully the immediate and also the remote result. In this way, and in this way only, can the permanent value of the procedure be estimated.

The patient upon whom I operated was sent to me by my friend, Dr. Baly, of Yorketown, with a note stating that she had long suffered from pyloric obstruction, and that he considered the case a suitable one for trying Loreta's operation. Every form of treatment had been tried by him for months, and, after consultation with my colleagues, I determined to make the attempt; and, as the evident thickening of the pylorus might turn out to be malignant, I made every preparation for performing pylorotomy, should it be deemed necessary. For the same reason, I made use of a transverse incision, such as Billroth recommends for pylorotomy, and I found this quite convenient for the other operation.

J. H., was admitted to Dorcas Ward on July 15th, suffering from stricture of the pylorus.

History.—Patient complains of sickness and pains in the region of her stomach. When she takes anything it usually lies on her stomach and makes her feel very sick. She has been troubled with indigestion off and on for several years, but during the last three months it has got very much worse, and patient finds her strength failing. As a rule she vomits every other day, and generally in the evening. Sometimes, however, she goes for four or five days without being sick, and then vomits up over a chamber full. The pains across the upper part of her abdomen are of a shooting character, and made their first appearance about three months ago. They are very much worse just before vomiting, on account of the distension of the stomach with gas, which has then occurred. The pains increase in proportion to the amount of flatulence present. Previous health has been good, as is also the family history. Has been married twenty-four years, and has had nine children, the youngest of which is 5 years old. Climacteric three years ago.

Present Condition.—The stomach is of variable size, but distinctly enlarged, and on some days its outline can be traced on the abdominal walls. To the right of the median line, and just above the umbilicus, may be felt a lump about the size of a walnut, which moves up and down with the movement of respiration. The vomited matter is of a yeasty character, very acid, and contains sarcine in abundance. Urine is acid, and contains neither sugar nor albumen. Professor Rennie kindly examined the vomited matters, and reports just a trace of free hydrochloric acid.

July 19th. Complaints of a boring pain in her stomach. Fairchild's peptonising powders; pil. opii. gr. i, bis die.

July 30th. Patient anaesthetised, and stomach washed out with five pints of the lotion. The tumour could be felt readily on each of these occasions.

August 4th. Patient has been on milk diet, and has not been sick since first washed. To have milk, baked apples, etc.

August 6th. Patient sick this evening and last night.

August 7th. Patient vomited again this evening.

August 11th. Patient partially anaesthetised, and stomach washed out.

The Operation.—On August 12th, 1888, the patient having been placed under the influence of ether, Dr. Gardner performed the following operation:—(The stomach was thoroughly washed out with a boric acid solution). A transverse incision, about 4 inches long, was made in the epigastric region, and the skin, muscles, and fascia, down to the peritoneum, were rapidly divided. All bleeding points were ligatured with wallaby tendons, and the application of hot sponges for a few minutes effectually stopped the oozing before the peritoneum was opened. Although no tumour could be recognised in the neighbourhood of the pylorus, the walls of that part of the stomach were very hard and greatly thickened. A portion of the viscus was then drawn out through the opening in the abdominal parietes without difficulty, as no adhesions were present. After the extruded part had been carefully surrounded with hot sponges, an opening 1 inch long, running in the long axis of the organ, was made with scissors, through which the operator inserted the forefinger of his right hand. On examining the pyloric orifice he found it almost completely closed, and it was with some difficulty that a No. 6 gum elastic male catheter was made to pass through it. After patiently boring with the right forefinger, the passage was gradually opened up,

the forefinger eventually being passed with ease from the stomach into the duodenum. The hæmorrhage was very slight indeed, and the interior of the stomach having been cleansed immediately before the operation no difficulty was experienced with the stomach contents. The wound in the gastric wall was brought together with great accuracy and in a most satisfactory manner by means of Gussenbauer's sutures, which were introduced with specially curved needles, and an interval of about 2 millimètres allowed between each. Fine silk was employed. All the stitches were placed in position before any were tied. The wound in the abdominal wall was closed in the usual manner.

August 12th (evening). Patient complaining of pain since the operation; no vomiting. Enemata of milk $\frac{3}{4}$ liiss, and brandy $\frac{3}{4}$ as every eight hours; enemata of port wine every eight hours $\frac{3}{4}$ iij; strychninæ gr. $\frac{1}{4}$, glycerini $\frac{1}{2}$ ij, aq. ad $\frac{3}{4}$ ij. 15 drops = $\frac{3}{4}$ gr. hypodermically every four hours.

August 13th. Patient slept very little during the night; wind troublesome; passed $10\frac{1}{2}$ ounces of urine at 2 A.M. Temperature 100° , pulse 125. Enema of soap and water; no vomiting.

August 14th. Patient slept well during the night; passed flatus *per rectum*, and found great relief; no vomiting.

August 15th. Bowels not open; has passed flatus; there is no abdominal distension, but complains still of flatulence; there is some pain in her stomach.

August 16th. Very restless during the night; still complains of flatulence; no vomiting. A teaspoonful of gruel every two hours.

August 17th. Slept very well during the night; still passing flatus *per rectum*, causing pain; no vomiting after giving gruel; one stitch removed. 6.15 P.M. Patient comfortable. Supp. morph. gr. $\frac{1}{4}$; mitte iij every six hours; enemata of brandy and milk; one teaspoonful of rump steak every four hours; give 10 drops of ac. hydrochlor. dil. a quarter of an hour before, and then gr. iij of pepsin immediately afterwards.

August 18th. Complaints of very little pain; still much flatus passing *per rectum*; bowels moved at 3.30 P.M.; no vomiting. A teaspoonful of milk and two teaspoonfuls of lime water every four hours alternately with the beef; enemata of milk every four hours; injection of strychn. twice daily gr. $\frac{3}{16}$.

August 19th. Wounds dressed; a little discharge; stitches removed.

August 20th. Wound dressed; looking well; there is a little inflammatory hardening about the wound; enema of soap and water, and bowels moved well.

August 21st. Omit raw meat—give chops and fish instead, and also bread and butter; enemata every six hours only.

August 23rd. No vomiting; complains of pain in her right side.

August 24th. There is a little discharge from the centre of the wound. Liq. strychn. m iij, aq. ad $\frac{3}{4}$ j, s. o. s. ante cibos.

August 28th. The edges of wound are uniting fairly well; the skin is a little inverted at the edge; still inflammatory hardening about the wound.

August 29th. Patient complains of pain in her stomach; no vomiting; food does not cause her trouble.

August 30th. Still has crampy pains in her stomach at night; relieved last night by some warm water and brandy; scarcely any discharge from the wound.

September 7th. Patient says that "she feels fine;" never feels sick, but nearly every night she has pains of a burning character about her stomach.

She eats bread and butter, eggs, toast, cake, mutton, beef, custard, and drinks milk and cocoa; she does not take pudding, vegetables, or tea. The temperature rose above 100° on only one occasion. For the short notes of the case I am indebted to my dresser, Mr. Verco, and the account of the operation was written for me by Dr. Giles, who assisted.

On December 24th, 1888, Dr. Baly, at my request, kindly sent me the following note after examining the patient:—

"Patient looks and feels perfectly well, and has evidently gained flesh in a marked degree—weight 7 st. 10 lbs. (weight before operation not known, but Mrs. H. thinks she must have gained a stone). Has never vomited since the operation, and has had no pain since leaving the hospital. Is able to eat ordinary diet without inconvenience, but has felt somewhat uneasy after eating beef, cabbage, or rich cake. Can eat mutton, poultry, fish, and farinaceous puddings, and drinks tea three or four times a week. No flatulence, heartburn, or eructations now after food; bowels regular; ate green peas several times during the season without any bad effect.

"*Examination.*—Abdomen well covered, instead of appearing a mere envelope of skin as it did before operation; skin over site of operation freely movable; some induration still to be felt in the region of the pylorus.....Gastric resonance not increased upwards or to the left." He adds: "You will recollect, of course, that before the operation even a little milk used to caused Mrs. H. great agony."

I have quoted Dr. Baly's words, although not intended by him for publication, as I am anxious not to interpolate in this account any bias of my own in favour of the operation. In conclusion, I must say that, in my opinion, this case warrants me in recommending any surgeons who have the chance to give the operation a fair trial, and publish their results both immediate and remote, for only in this way can we arrive at a satisfactory conclusion.

I have since performed this operation (May 22nd, 1889) on a patient who has been a sufferer for years from pyloric stenosis. He had made a perfect recovery from the operation, and whereas before the operation he had to wash out the stomach daily, he has not since had an attack of vomiting, and has not had any necessity to use the stomach tube. As sufficient time has not yet elapsed to enable me to form an opinion as to the ultimate result, I reserve the notes of the case for a future communication. Mr. Treves's interesting paper in the JOURNAL of May 18th, 1889, gives only two recorded cases in Great Britain, and I send mine as a further contribution to this department of surgery.

ON A CASE OF DIGITAL EXPLORATION OF THE PYLORUS (LORETA'S METHOD), WITH REMARKS ON THE RELATION OF GASTRIC ULCERATION TO PYLORIC STENOSIS.

By C. J. BOND, F.R.C.S.,
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ALTHOUGH the present case cannot be included under the heading of Loreta's operation, yet as the stomach was opened with the object of digitally dilating the pylorus, if necessary, I have thought it better to describe the case under the above heading, in order that it may be compared with other cases in which dilatation has been fully carried out. There have been, as far as I can ascertain, two successful cases of Loreta's operation reported in this country, one by Mr. Hagyard, and one by Mr. F. Treves, both of which recovered and remained well two years and one year after the operation respectively; in neither of these cases is any mention made of any ulceration or abnormal condition of the pylorus beyond the contraction and the adhesions. The following is the history of the present case.

E. R., aged 42, married, eight children, a previously healthy, temperate woman, with a good family history. Her present illness commenced five years ago, with frequent attacks of vomiting; these lasted three months, when she became pregnant, and was well and free from sickness until ten months after the confinement. She then weaned the child, and about this time the vomiting recommenced, and has continued more or less to the present time, and the patient has kept her bed for the last six months. She is very emaciated, weighs 5 st. 8 lbs., and vomits every two or three days two or three pints of yeasty fluid, which contains free acid. Between the attacks of sickness she eats well and feels pretty well, with the exception of at times violent epigastric pain. There is a distinct hard swelling to be felt in the epigastrium a little to the right of the middle line.

The stomach having been previously washed out two days and, again two hours before operation, the viscus was exposed by a 4-inch median incision nearly over the swelling; the liver then came into view, and below its edge the thickened nodular mass, which was the pylorus adherent to the liver and to the pancreas. The stomach was now drawn out of the wound, and by inverting its coats with the forefinger the projecting thickened ring of the pylorus could be distinctly made out. A short incision was made into the stomach parallel to, and midway between, the curvatures, and about 3 inches from the pylorus, and a large quantity of fluid was drawn off, and the forefinger introduced. The pyloric ring was felt to project somewhat into the stomach cavity; it felt, however, hard but smooth, and easily admitted the forefinger. On the posterior wall of the stomach was a hard nodular surface,