FOURTH QUARTERLY METEOROLOGICAL REPORT AT ST. THOMAS'S HOSPITAL FOR 1856.

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THE mean pressure of the atmosphere was considerably greater in October (30.121 in.) than in the two preceding years, while the rain fall was much less than in the corresponding period of 1855 (5.54 in.) The mean temperature of October was .3 higher only than that of the preceding year. The mean barometric pressure for November and December approaches nearly that of the two preceding years, while the total quantity of rain which fell in these months last year was within a quarter of an inch of the rain fall in the same period of 1855. The temperature of November was nearly the same as in the preceding year, but that of December was 3°.3 higher in 1856 than in the preceding year. The mean heat of the quarter has been about one degree less than in 1855 (44°.6). Several fogs have occurred in the City, especially on Oct. 22nd, 28th, 29th, Nov. 17th and 21st, and Dec. 2nd, 4th, 5th, 16th, and 17th. On only one of these occasions, however, was the denseness accompanied by the darkness characteristic of London fogs in former years, and which, it is to be hoped, may gradually attain the description of the traditional, as the purification of the river proceeds, the smoke is burned, and the streets are properly cleansed and drained.

ANNUAL SUMMARY.

The height of the barometer, taken at a mean during the year, (29.913 in.) is almost exactly what it should be at the level of the sea (29.92 in.); and as the cistern of the barometer at St. Thomas's Hospital, as ascertained by levelling, is nine feet eight inches above Trinity high-water mark at London-bridge, the year may be considered a fair average one, as far as the conditions of the weight of air are concerned. The mean temperature of the year (50°.4) is higher than in 1854 (49°.7) or in 1855, (48°.2,) and considerably more elevated than the average of London for 65 years (49°.7). The rain fall, estimated by a guage placed 26 feet above the ground, amounted to 21.73 in., against 21.14 in. in the preceding year. The mean weight of vapour in a cubic foot of air was 3.51 grs., that for the two preceding years being respectively 3.50 grs. and 3.47 grs. The mean of the highest temperature was 57°.7, corresponding nearly with the same result for 1854. The mean of the lowest temperatures was 46°.3, that of the preceding years being respectively 43°.5 and 43°.8. The effect therefore of the sun's heat during the day had been less counteracted by the radiation during the night in the past year than in the foregoing corresponding periods. This result may no doubt have been assisted by the direction of the wind, which blew more frequently from the S.W. than in 1855, when it was more frequently from the north-easterly directions. The mortality of the year, it is generally admitted, has been inferior to the preceding year. Whether this be due in some measure to the more equable distribution of the temperature, or to other causes, can only be decided by continuous observation.

January, 1857.

OXIDE OF CARBON AS AN ANÆSTHETIC AGENT.—At a late meeting of the Academy of Sciences of Paris, M. Ozanam read a paper on the anæsthetic action of the oxide of carbon. The author started from the principle that the whole series of carbonated bodies, either volatile or gaseous, have anæsthetic properties; and he found, by actual experiment, that the action of the gas in question is analogous to that of chloroform. When the gas is inhaled, four stages are noticed: 1, the premonitory; 2, the stage of excitement marked by contractions and convulsions; 3, the anæsthetic period; 4, return to consciousness or death. Sudden death may occur in two minutes, as with chloroform; but out of twenty-five experiments death occurred but once. From this circumstance it may be inferred that the inhalation of this gas is not so dangerous as has been supposed. Applied locally, this gas had no action where the epidermis was unbroken; but where it had been removed, anæsthetic effects were produced.

A Mirror OF THE PRACTICE OF MEDICINE AND SURGERY IN THE HOSPITALS OF LONDON.

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tam aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.* lib. 14. Proœmium.

LONDON HOSPITAL.

OBSTRUCTION IN THE BOWELS, OF A MONTH'S DURATION, CAUSED BY A CARCINOMATOUS STRICTURE IN THE RECTUM, SUCCESSFULLY RELIEVED BY THE OPERATION FOR ARTIFICIAL ANUS IN THE LEFT LOIN; DEMISE TWO MONTHS AFTERWARDS.

(Under the care of Dr. DAVIES and Mr. CURLING.)

WITHIN the last few weeks we have seen Amussat's operation of opening the loin performed in two cases; the first of these was at St. Thomas's Hospital, in October, for obstruction of the bowel; the other at University College, in November, for cancerous disease of the rectum. In the earlier part of the past year we had an opportunity also of seeing the same operation performed by Mr. Curling, at the London Hospital, for carcinomatous obstruction, and we promised an abstract of the case in our "Mirror" when reporting one successfully relieved by the same measures, by Mr. Solly, in March last (vol. i., 1856, p. 401). Mr. Curling also performed this operation on a child in the month of May, thus making five times in which it has been done in the London hospitals within the last nine months. Mr. Erichsen's case forms the subject of a clinical lecture at page 56 of our present volume. We will, therefore, complete our series by placing on record, to-day, Mr. Solly's and Mr. Curling's cases. We would, however, beg to refer our readers to the report of Mr. Solly's first case, above referred to, and will content ourselves on the present occasion by a reference to the class of cases suitable to this operation. These have been pointed out in Mr. Erichsen's valuable clinical lecture as threefold: 1st, Fæculent distension from obstruction of the rectum or sigmoid flexure of the colon, or arising from the presence of tumours, the blocking up of the gut by cancerous disease, or the gradual closure of a stricture; 2ndly, for congenital absence of the rectum; and 3rdly, for the relief of pain in ulcerated cancer of the rectum. Mr. Solly's case which we have already recorded, his case which appears to-day, and the first of Mr. Curling's subjoined cases, are examples of the first class; the second is illustrated by the case of the child; and the third, by the one given in Mr. Erichsen's clinical lecture.

It is very rarely indeed that a permanently successful result can be anticipated when this operation has been performed, as the ultimate fate of the patient depends so much on the nature of the disease which may have required the operation, and on the effects which this may have already produced. Thus, if undertaken for malignant ulceration, or a stricture of a carcinomatous character, the relief will be but temporary, and of a nature to soothe oftentimes the most agonising,—in fact, the most horrible sufferings. If some days, a few weeks, perhaps some months' existence of comparative comfort are obtained, then has the operation not been done in vain. On the other hand, cases present themselves in which a positive cure may be expected, if the obstruction has depended upon causes of a different nature, as, for instance, a simple stricture situated far up.

In the following case the patient survived the operation nearly two months. It was undertaken for a carcinomatous stricture of the rectum, and when we watched the progress of the case, it was justly considered as a successful instance of relief. It must be borne in mind that the patients do not succumb from the operation itself, or at any rate very rarely so indeed. This has been clearly shown by Mr. Cæsar Hawkins, who found in

forty-eight cases which he had collated, that there was scarcely an instance of a single death which could be fairly attributed to the operation itself.

Elizabeth P—, aged forty, a tailor's wife, admitted February 24th, 1856, under the care of Dr. Davies. She states that her father died from gout, and her mother from typhus fever. Married nineteen years, and has had ten children. Has always had delicate health, and her confinements have usually been attended with considerable uterine hæmorrhage. Has not suffered before from obstinate constipation, nor have the motions previous to her present illness been of diminished calibre. Was confined two months ago, and had less hæmorrhage than usual, but had severe leucorrhœal discharges both before and after the confinement, accompanied by violent pain in the lumbar region. Four weeks since the bowels were regular. Precisely on the twenty-eighth day prior to admission, on going to the closet, she could not relieve the bowels; but after great straining, a small amount of feculent matter passed, of natural size, and not unusual hardness. Since then only a small quantity of slimy matter has come away, and aperient medicines proved of no avail. Pain commenced in the right iliac region, and extended towards the umbilicus; there was no sickness. Croton oil was given a few days before admission, which was followed by increased pain and violent vomiting every quarter of an hour. The day before coming in she was sick twelve times, and all the other symptoms increased in severity, and the pressure of the bedclothes over the abdomen became insufferable.

Feb. 25th.—*Present condition.*—Countenance anxious and cachectic; tongue clean, but dry; no appetite; vomiting ceased since late last night; bowels unrelieved; pulse 120, weak; abdomen distended, tympanitic, resonant on percussion. On digital examination per anum, a close stricture was discovered a finger's length from the anal orifice, and on examination per vaginam, an indurated mass was felt in the posterior wall of the vagina. This day Dr. Davies requested Mr. Curling to see the patient, and he found that she was suffering from carcinomatous stricture of the rectum. After ineffectual means were tried to break up fecal matter beyond the stricture, it was determined, in a consultation of the surgeons, to relieve the patient by Amussat's operation for artificial anus, which was performed by Mr. Curling in the left lumbar region the next day, 26th, while the patient was under chloroform. There was considerable prominence and swelling of this part. A transverse incision was made two fingers' breadth above the ilium, its centre being exactly midway between the anterior and posterior superior spinous processes. On dividing the layers of muscle and the fascia transversalis, a quantity of fat was exposed. On separating this, the peritoneum was brought into view; search was now made for the colon, and the wound dilated a little towards the spine, but the bowel could not be found. The peritoneum was then opened, when a quantity of serum escaped, and a portion of small intestine protruded. Mr. Curling passed his fingers into the cavity, and found the colon contracted and pressed into a small compass close to the spine by the distended small intestines. He drew the colon into the wound, and laid it open by a longitudinal incision an inch and a half long. The sides of the gut were then attached to the lips of the wound by two sutures. Very little blood was lost in the operation. Two vessels were secured, and the edges of the wound were closed by sutures. The patient when carried to bed was much exhausted, and the pulse was scarcely perceptible. She was ordered six ounces of brandy, beef-tea, and two grains of opium immediately, and at four P.M. she passed two quarts of fecal matter with great relief.—Half-past nine P.M.: Doing well; pulse 120. Opium repeated. Patient stated she would willingly undergo this operation four or five times to obtain the same relief.

27th.—Better; pulse 110; solid fecal discharge from artificial anus. Ordered mutton-broth instead of beef-tea.

28th.—Doing well; pulse 110. In addition to discharge from wound, is a well-formed fecal discharge from natural outlet.

29th to 4th March.—She went on tolerably well. She gradually recovered from the operation so as to get up and walk about the ward. The wound healed, and was kept closed by means of a hollow pad and elastic bandage constructed by M. Bourjeaud. The opening in the bowel evinced no disposition to contract, and the motions escaped easily. She continued to suffer from the pains in the back of the sacrum, and after some weeks her health evidently appeared to be giving way. At her own wish she left the hospital on the 9th of April, and went home, where she lingered until the 20th, having survived the operation nearly two months. No post-mortem examination was allowed.

CONGENITAL DEFICIENCY OF THE RECTUM IN A CHILD FOUR DAYS OLD, WITH AN OPENING IN THE VAGINA COMMUNICATING WITH THE ANUS; AMUSSAT'S OPERATION; DEATH THE FOLLOWING DAY.

(Under the care of Mr. CURLING.)

The following case was one of those examples of congenital deficiency which are now and then met with; but differing from the general class in the gut being impervious as far as the sigmoid flexure of the colon, although the rectum itself was represented by an impervious cord, which at its lower part formed a fistulous communication with the vagina. With this state of things, the result must be fatal in a short time unless something surgically can be done to afford relief. Mr. Curling, therefore, performed Amussat's operation,—a procedure of an extremely difficult character in an infant, as contrasted with an adult. The difficulties to be met with in its performance on a child are most graphically described by Amussat himself in his own work. This case formed the subject of a clinical lecture by Mr. Curling, who, in the course of his remarks, divided deficiencies of the rectum into two great classes: the first, where the gut is impervious, but opens in some preternatural situation,—as the bladder, urethra, or vagina; the second, where the gut is really imperforate, either obliterated to a greater or less extent, or obstructed by a membranous septum at a variable height above the naturally-formed anus; or else terminates in a cul de sac without any external aperture. The opening into the vagina is the most common of the first class, and is not dangerous, he observed, because there is an outlet for the feces; but the malformation is of a disgusting character.

The following case comes under both classes; for not only did the impervious rectum open into the vagina, but it terminated in a cul de sac at the brim of the pelvis.

Mary S—, aged four days, was brought to the hospital May 11th, 1856. She had been continually sick, more or less, since birth, and had passed nothing per anum. The abdomen was distended. On examination, a membrane was found just above the anus. This was divided with a bistoury, but the finger seemed to pass up into the pelvis external to the peritoneum, and not into the gut; it was afterwards found that this cavity communicated above the vagina. Nothing passed from the bowels.

The next day Mr. Curling performed Amussat's operation of opening the colon in the left loin. Great difficulty was experienced in exposing the descending colon. After dividing the muscles and fascia, the kidney was exposed; this was of a blackish colour, and somewhat like distended bowel. A little more external to the latter the colon was found; but as it was not much distended, and not distinctly recognised at the time, further search was made. The peritoneum was inadvertently opened, and some small intestine protruded. Soon after, a longitudinal band was seen in the bowel, and of course dispelled all doubt as to its being the colon. Two sutures were passed into the bowel in its long axis, at a little distance from each other, and an incision was made between them. Nothing escaped immediately. The sutures were attached to the edges of the skin, and a small sponge covered the whole. At ten P.M. the child had taken the breast freely, and cried when moved. The abdomen was much less tense, and a great quantity of meconium had passed.

May 13th.—She died quietly at ten A.M. to-day, having survived the operation eighteen hours.

Autopsy.—A small quantity of turbid serum was found in the peritoneal cavity. The cæcum and ascending and transverse colons were greatly distended; the descending colon was contracted, and was stitched to the operation wound, at about its middle. The sigmoid flexure was distended into an almost globular sac, about the size of a walnut, and beyond this was nothing but a small impervious cord, where the rectum should have been. On passing a probe up the anus, it passed through a wound into the vagina, and thence, behind the uterus, up to the peritoneum. The other pelvic viscera were normal.

ST. THOMAS'S HOSPITAL.

STRICTURE OF THE RECTUM FOR EIGHTEEN MONTHS; COMPLETE OBSTRUCTION, WITH GREAT DISTENSION OF THE BOWELS; AMUSSAT'S OPERATION, FOLLOWED BY RELIEF; FATAL TERMINATION NEARLY SIX WEEKS AFTERWARDS.

(Under the care of Mr. SOLLY.)

In the following case the patient had been the subject of stricture of the rectum for eighteen months, which was accompanied by the usual symptoms until complete obstruction set