and healthy granulations, and when the catheter is introduced, it ought but seldom to be left in the bladder, unless the difficulty of introducing it is very great. Passing a bougie every day and keeping it in for a few minutes, will do more good; for an attempt to pass the catheter into the bladder will fail, unless the course of the urethra can be found; in all cases, therefore, it will be prudent first to give a fair trial to the bougie before the catheter is used.

There are some cases of stricture in which no instrument can be passed into the bladder: fistulæ, under such circumstances, are advantageous as a salutary effort of nature to save the life of the patient.

Enuresis — Involuntary Flux of Urine.—*Enuresis puerpera.*—When gangrene of the bladder is produced by long continued pressure, and a part of it sloughs, the unfortunate patient becomes subject to an involuntary discharge of urine. Sometimes the inner surface of the urethra is studded with minute calculi, which may be detected by introducing a catheter into the bladder and the finger into the vagina.

There is no particular remedy for this disease. Injections may be used to keep the vagina clean and wash away the lithic deposits. The patient may be rendered more comfortable by putting a portion of soft sponge into the orifice and withdrawing it three or four times a day.

Enuresis paralyticorum. This species arises from diminished power of the sphincter vesicæ, the detrusor power remaining unimpaired. In this case there are two modes of alleviation, one by an instrument called the "sphincter urethræ," which will be found very inconvenient; the other by a bladder being fixed to the penis, which most patients prefer.

Incontinence of urine will often be produced by stricture, especially when near the neck of the bladder; for if obstacles to the exit of the urine are long continued, the parts become overstretched and hardened, so that the sphincter of the bladder at length loses the power of contraction.

Enuresis infantum may arise from too great a mobility of the muscular fibres of the bladder, or a diminished power of its sphincter. In this disease, the indication is to increase the tone of the part. Taking large quantities of liquids should be avoided, and the remedies to be employed are the sulphate of zinc, cold bathing, and blisters to the perineum or sacrum. The tincture of cantharides may also be given advantageously, beginning with the dose of twenty drops for a child seven years old, and increasing it till strangury is produced; till this is effected little good will be experienced. The patient should feel a sense of heat and uneasiness, and frequent desire to make water. If the pain be violent the dose may be lessened, and continued in such a quantity as can be borne without inconvenience. Electricity is sometimes of use.

I have now brought these papers to a close. One more might have been added on syphiloid disease, but as I can discover nothing in the manuscript before me that could throw any light on this morbid complication, either in a pathological or therapeutic point of view, (for, in Mr. Pearson's time, the curative efficacy of the iodide of potassium was not known,) I have deemed it best to omit it, and I am the more justified in doing so after the recent publication of M. Ricord's valuable lectures on syphilitic disease in the pages of the *Lancet*, which comprise all that is known on this subject.

I am but too conscious of the very imperfect character of the notes which have been so indulgently recorded in this Journal, and I sincerely hope, if any autograph of the late Mr. Pearson on lues remain in the possession of his relatives, it will one day be given in a complete form to the public. Such a publication could not fail to become a standard work on this important subject, and at the same time it would be carrying out his declared intention.

In justice to the high professional reputation of the late Mr. Pearson, I think it right to add that he was the first to describe the symptoms and treatment of those forms of disease which he has denominated "erethismus" and "eczema mercuriale," and that he was also the first to recommend "free exposure to air" in cases of excessive salivation.

It might probably appear, *primâ facie*, that his mercurial treatment was unnecessarily severe; but when we find M. Ricord (the most experienced surgeon in lues of the present day,) stating it as his opinion that the syphilitic diathesis can hardly be eradicated, we ought not to be surprised that Mr. Pearson should have insisted on a decided and protracted adhibition of mercury as the only antidote to the true syphilitic poison.

Southampton, December 13, 1848.

A CASE OF INCOMPLETE REDUCTION "EN MASSE" OF AN INGUINAL RUPTURE;

WITH THE SUBSEQUENT TREATMENT, AND APPEARANCES OF THE PARTS POST MORTEM.

By JAMES REID, Esq.,

Surgeon to the Kent and Canterbury Hospital.

The reduction of a hernia in a mass with its investing peritoneal covering, by the efforts used in applying the taxis, and the appropriate mode of treatment, has, until the last few years, rested almost entirely upon the authority of foreign surgeons.

Mr. Luke was the first, I believe, in this country, to make the occurrence the subject of a particular treatise.* Since his excellent paper, founded on the

* Previously to this, cases of the accident had been noticed by Sir C. Bell, Messrs. Green and Callaway, and Mr. Bransby Cooper; but Mr. Luke was the first British surgeon who deduced the line of practice to be adopted.

experience of five cases, was read before the Medico-Chirurgical Society, and published in their "Transactions," notices of three other cases have appeared in the English journals. The hitherto supposed rarity of the accident has therefore much diminished, and the influence that the probability of its occurrence should exert, during the investigation of an obscure case in which symptoms of strangulation exist, has become more recognized. Under present circumstances, however, every additional case may be viewed with interest, and may assist in confirming or elucidating the information already obtained upon the subject. It is with this view that I am induced to publish the following case of incomplete reduction "en masse."

J. H—, a strong active old man, aged 75, was admitted under my care, into the Kent and Canterbury Hospital, with symptoms of strangulated hernia. He had been subject to double inguinal rupture, partly occupying the scrotum, for which he had worn a truss forty years; and more recently to a protrusion, the size of a walnut, at the navel. The right inguinal rupture had appeared some few years after the left, and had troubled him most, having on one occasion become incarcerated for several days, occasioning constipation and vomiting, and being at length reduced with difficulty. Two days previous to his admission into the hospital, he exerted himself more than usual in spearing for eels; feeling afterwards indisposed, he went to bed sooner than usual, and was soon attacked with severe pain in the abdomen, followed by vomiting. He then discovered that the rupture had descended, and made ineffectual attempts to reduce it. The next day he renewed the efforts, applying for that purpose a hot tile, and making pressure upon it. After an attempt continued for some time, the swelling was reduced in size, and he considered that he had returned it, but the symptoms still continued. A medical man was now sent for, who detected a small swelling in the situation of the inguinal canal; an attempt was made to reduce it, and purgatives were administered.

He was admitted into the hospital forty-eight hours after the occurrence of the first symptoms. The countenance was anxious; there was constant vomiting, accompanied by hiccough; the matter thrown up was the contents of the small intestine; the abdomen was distended, but not tender, except in the immediate neighbourhood of the right inguinal region; there had been no action of the bowels for forty-eight hours. Tongue stained by the matter vomited; pulse of natural frequency, full, intermitting; the radial artery felt ossified. About the situation of the right internal abdominal ring, there was a small diffused swelling, (better perhaps described as a fullness of the part,) so ill-defined that it was said, at first, there was no protrusion; however, on comparing it, with the opposite side, and pressing in the fingers around it, the tumour was more readily detected. Pressure upon the swelling produced pain, and caused it to recede; but it returned immediately upon the pressure being relinquished. A lump, feeling like a loose sac containing omentum, occupied and extended from the external ring.

The taxis in the warm bath, a turpentine injection, &c., producing no change, an operation was determined upon. An incision was made opposite the internal ring directly over the swelling, and continued parallel to the inguinal canal. The tendon of the external oblique, the fibres of the internal oblique and transversalis, each, in distinct layers, were divided, and a hernial tumour, the size of a large walnut, was exposed in the upper part of the inguinal canal. A portion of small intestine, of a dark colour, but reserving its natural lustre, and a small quantity of dirty fluid, were found in the protruded sac. This portion of the sac was but a small part of the whole; the remainder was situated within the abdomen, so that it required the full length of the index finger (a middle sized one,) to reach the seat of stricture—the neck of the sac. It was necessary before dividing the stricture, to obtain more freedom by incising the lower edge of the abdominal muscles in a direction across their fibres, and, in order to prevent the neck of the sac receding from the finger, to have it held by the divided edge. The nail of the fore-finger was then, with difficulty, insinuated between the intestine and the stricture, and the latter was divided. Although the finger freely entered the abdomen through the neck of the sac, some obstruction opposed the return of the intestine. A resisting band was felt, situated to the inner side of the neck of the sac, between which, and the abdominal parietes, the intestine was pressed, and could be felt passing towards the mesial line beyond the reach of a finger; it was dislodged from this situation and pushed back into the abdomen. The wound was closed, and a bandage applied. The further details of the progress of the case until the patient's death are briefly these:—

No immediate relief was afforded by the operation; partial quiet and alleviation of symptoms were obtained by an opiate administered directly after; the vomiting continued and constipation remained. No satisfactory action of the bowels was obtained by the free exhibition of enemata, thrown up with the long elastic tube introduced to its full extent. Symptoms of peritonitis were established (in spite of remedies,) twenty-four hours after the operation, and in thirty-six hours, evidences of failing vitality appeared; gangrene of the posterior part of the scrotum was discovered, and in the course of twelve hours it spread over the scrotum, penis, lower part of the abdomen, and upper part of the thighs. The patient died in rather more than forty-eight hours after the operation.

Post-mortem examination thirty-six hours after death.—The gangrenous integument was distended with gas. The layer of adipose tissue was thick; the edges of the wound not adhering. There were evidences of general peritonitis, which were most marked in the right inguinal region, where the convolutions were glued together by recently effused lymph. The portion of intestine that had been strangulated, consisting of nearly a foot of the upper part of the ileum, was dark coloured, almost black, covered with patches of recently effused lymph, puckered up in the position it must have assumed in the sac, and deeply marked by the stricture, having an additional depression, partly encircling it below the indentation. The position and

relation of the sac will perhaps be better understood by describing it as forming a double pouch, with a common neck and opening; a smaller pouch, about one-fifth of the whole, partly within the abdomen, and partly protruding through the internal ring, and a second and larger pouch, placed nearly at right angles to the former, and extending from the inner side of the internal ring between the peritoneum and abdominal parietes. The cord of the obliterated hypogastric artery had been separated from its natural position on the inner side of the internal ring by the interposition of the larger pouch. It was this which formed the resisting band felt during the operation, and which had caused the second mark upon the portion of intestine that had been strangulated. The sac was readily drawn out from its double position, and then formed a simple bag. The outer side of the neck of the sac was only slightly separated from its connection with the abdominal parietes. The substance which had been felt at the external ring proved to be a mass of fat, connected by a long pedicle, extending up the inguinal canal to the exterior of the protruded portion of the sac.

Mr. Luke, in his observations, says "that the firmness of the adhesions of the parts in which a hernia is imbedded bears no proportion to the duration of the hernial protrusion." This remark is of great importance in relation to the efforts that it is safe to make in reducing a hernia by the taxis, both as regards the degree of force to be used, and the period to which it may extend. The evidence furnished by the present case is not very satisfactory on this point, as I could not obtain from the patient a very clear detail of what had previously occurred. As far as I could ascertain, the force used was not sufficient to cause much pain, the reduction of the swelling was perceived by a gradual diminution in its size, not by any sudden decrease. There was no appearance of injury or bruising of the integuments in the neighbourhood of the swelling when he was admitted into the hospital, and the intestine also was free from ecchymosis. On the whole, I am inclined to the opinion that the reduction was effected more by the continual employment of a degree of force, not injurious perhaps in itself, than by any one or more undue violent efforts.

My first conclusion with regard to the nature of the present case was, that a scrotal rupture had been partly reduced, a portion of intestine remaining in the inguinal canal, constricted in some manner at the external ring. This opinion was founded on the evidence of the indefinite swelling, the form a protrusion assumes when small and confined to the inguinal canal, and the pressure at the external ring of what I thought was a hernial sac. The ready yielding of the tumour and its reappearance raised a difficulty to such a diagnosis, and a suspicion of the real nature of the case was then entertained; but the supposed sac at the external ring was an obstacle to such a view of the matter. The clear indication, under existing circumstances, was to cut down on the swelling in the canal, and explore the mystery. The formation of fat about the sacs of old herniæ is mentioned by some authors on hernia.

I have, since this case occurred, noticed a similar

mass of fat appended to an old scrotal hernia that became the subject of a *post-mortem* examination; it was uniformly attached to the sac, though easily separable, and might have been left behind in the reduction of the sac, in the manner that I conjecture the mass in the present instance to have been. More recently, in operating upon a strangulated inguinal rupture, which had existed many years, and been operated on before, after I had divided a very thick layer of fascia, a mass was exposed, resembling at first sight, omentum covered with a thin sac; it proved to be a layer of fat about 1-3rd of an inch thick, connected with the sac which was situated beneath it.

Mr. Luke, in speaking of the facts connected with reduction in mass, and the conclusions to be drawn from them, remarks "that the presence of a sac, even without hernial contents, causes an abdominal fulness in the part, easily ascertained by examination. The absence of such fulness in a part where hernia is known to have previously descended, necessarily leads to the conclusion that the sac upon which it depended has been displaced, and probably returned, together with the hernia. The sac in inguinal hernia below the external ring, becomes united with the spermatic cord, whereby the latter is usually rendered indistinct and obscure. The absence of that indistinctness and obscurity implies the removal of the cause which previously produced them, and, therefore, that the sac has been displaced. The continuance of the indistinctness or obscurity leads to a directly *contrary conclusion*."

The present case shows that the conclusion to be drawn with regard to the presence of the sac, from the existence of a substance feeling like omentum in the situation recently occupied by a hernial protrusion, suspected to have been reduced in mass, should be received with some reservation.

Unconfirmed by other evidence, it cannot be viewed as a certain proof. In addition to this, the existence of depositions of fat in the cord often placed at the external ring, cysts of the cord, and varicocele, would cause a fulness and obscurity about it, which could not be distinguished from that occasioned by the sac, with or without some portion of its contents. The only effect, perhaps, of this uncertainty on practice in such cases would be to afford additional reason for an exploratory operation. The direction which the returned bowel with its investing sac took, to the inner side of the internal ring, is not that which appears generally to have been observed in inguinal hernia,—viz., below the level of the internal ring towards the cavity of the pelvis, or else towards the outer side of the ring. The incomplete reduction of the hernia is in accordance with the results of the experiments made by Jules Cloquet on the dead subject,—that "in external inguinal hernia, the reduction is generally incomplete, and the swelling re-appears as soon as the efforts at reduction are discontinued." I cannot help thinking that, in this instance, the obliterated hypogastric cord had some share in causing the small portion of the rupture to re-appear when apparently reduced, and preventing the complete reduction of the whole. By the approximation of the internal ring, from the long continuance of

the rupture, towards the obliterated artery, and by the interposition of the sac and intestine between the parietes of the abdomen and the peritoneum, (the neck of the sac retaining its connections externally,) the inner edge of the neck and the obliterated artery would be forced in a direction backwards and somewhat outwards, so as to bring the latter more nearly opposite the internal ring. Its resistance, added to that afforded by the connection of the peritoneum with the walls of the abdomen, would then form an obstacle to the complete reduction. Be that as it may, the cord of the vessel exercised considerable pressure, much more than might, *a priori*, have been anticipated. The difficulty in returning the intestine after the neck of the sac had been divided, and the mark discovered about the portion of bowel that must have occupied the large pouch, sufficiently show this. The manner in which the reduced portion of rupture was girt between the hypogastric cord and the abdominal parietes would have prevented the reprotrusion of that part by the efforts of coughing and straining, as have been recommended, the effect of such attempts being to cause the cord to press more tightly upon the part it constricted. The depth from the surface at which the stricture was placed, and the obstacle the hypogastric cord occasioned to the return of the intestine, furnished the only difficulties in the operation. The return of the intestine might have been facilitated by dividing this cord if it could have been recognized; but then, it should be remembered that it is sometimes pervious by a narrow canal conveying blood for the supply of superior vesical arteries, and a troublesome, perhaps serious hæmorrhage, might have resulted. The continuance of the symptoms of strangulation after the operation was due to the portion of bowel not recovering itself after it was replaced.

Canterbury, Nov. 7, 1848.

CASE OF SUDDEN DEATH, CONNECTED WITH PREGNANCY: PHLEBITIS AND DUODENITIS.

By R. F. GEORGE, Esq., Surgeon to the General Hospital, Bath.

(Read at the Quarterly Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association, September, 1848.)

I am induced to bring before this meeting a brief statement of a case which fell under my observation in the early part of last year, on account of its bearings both upon pathology and forensic medicine.

On the 6th of March, 1847, I was requested to see a stout girl from the country, between 15 and 16 years of age, who, I was informed, had been suffering for the last three months from a painful swelling of the left leg. The disease commenced with acute pain in the calf, followed quickly by a firm colourless tumefaction of the whole limb up to the knee. The catamenia had been suspended for four months, but there was no

sickness, no loss of appetite or strength, slight excitement of the circulation, and little apparently amiss in the general health beyond the interruption of the menses and a sluggish state of the bowels. She had a childish horror of medicine, and had therefore imperfectly attended to the directions of her medical adviser, and had rejected the various nostrums which her matronly friends recommended for the restoration of her periodical function. I further learnt, that about six weeks before she came to Bath, after the application of some leeches to the lower part of the leg, and other remedies, the swelling of the limb rather lessened, but that in the night she was attacked with intense pain in the region of the heart, with anxiety, and coldness, which symptoms, under the use of stimuli, passed off, and immediately afterwards the leg returned to its former state of tumefaction. From the character of the swelling, and its history, there could be no doubt of its being the result of inflammation of the saphæna vein, though the cause of that phlebitis was obscure.

I ordered the application of leeches to the calf, with rest, and some aperient medicine, and two days later, finding her easier, I directed their repetition, which removed the pain and swelling, and in three days the patient was able to walk without inconvenience; but on the eighth day she was attacked with violent pain of the same character in the right calf, which the prompt use of leeches relieved in a few hours, and during the remaining four days of her life she moved about with ease. On the day of her death she appeared in good health and spirits, made a hearty dinner of beef, vegetables and porter, with the family, at one o'clock, and remained in the same room where she had partaken of that meal until three. Immediately that she quitted the apartment she began to groan, complained of agony at the pit of the stomach, became faint and vomited, and in three quarters of an hour breathed her last.

I reached the house about half an hour after her death, and hearing the history, desired that a vessel containing a large quantity of the matter vomited, consisting of partially digested food, of a brown colour, and strongly smelling of beer, should be set aside for future examination, a direction which, through the stupidity of the nurse, was not attended to.

Examination twenty-four hours after death:—Body well formed and very fat; complexion muddy; breasts developed with dark brown areolæ; legs still rather swollen and hard; no indurated cord or knot perceptible in the course of the saphenæ; a thick layer of fat deposited between the skin and muscles; blood in the superficial veins extremely fluid. The lungs were healthy, a small quantity of serum being collected in the cavities of the pleura, but not more than would be caused by infiltration. Heart small and rather pale, its right side filled with fluid blood, and a small quantity of colourless serum was found in the pericardium. The mouth and fauces, as well as the œsophagus, presented a healthy appearance throughout. The stomach, and three feet of small intestine, were removed for future examination. The rest of the intestinal tube, and other abdominal viscera, were in a normal