the hospitals of continental Europe, I have been able to study practically the different methods. Aware that a distinguished French surgeon had opposed the starched apparatus in his writings, I asked him, "Have you ever tried it?" He candidly and tersely replied in the negative, adding, "*I am satisfied it cannot answer.*" This is not a question to be settled by display of erudition or speculative predication. Its essentially practical nature only allows of appeal to experience for its solution.

University College, London, Sept. 11th, 1854.

ABSCESS IN THE BROAD LIGAMENT OF THE UTERUS; RECOVERY:

WITH REMARKS ON THIS DISEASE, ON TYPHLITIS, AND ON ABDOMINAL HERNIA BETWEEN THE RECTI MUSCLES.

By JOHN SHEPHERD FLETCHER, Esq., Lecturer on Practical Anatomy at the Chatham Street School of Medicine, Manchester.

On December 5th, 1849, I was requested to visit Mrs. Dean, of Manchester, who, I was informed, had been suffering from severe abdominal pain for some days. She was forty-one years of age; was married, but had had no family. She was of a thin, spare, habit of body, with pallid and anxious countenance: had enjoyed tolerable health up to a few months ago, when she began to be irregular in her menstrual periods, only menstruating twice in seventeen weeks, during which time she suffered from pain in the abdomen, particularly on the right side, but had not up to my visit, noticed any swelling. I had seen her about ten days before, in attendance upon her sister during confinement, when she appeared in tolerable health, making no complaint to me. I found her complaining of great pain over the greater portion of the abdomen, but particularly over the right iliac region, where there was a little swelling. Upon careful manipulation, I found that there was a regular and defined tumour immediately beneath; it was of about the size of a large orange, or rather larger, soft, and most like a cyst filled with fluid, very tender and painful to the touch, slightly moveable, and giving an indistinct sensation of fluctuation. Its surface was smooth and regular. Percussion yielded a very dull sound over the swelling; but in all other parts the abdomen was normally resonant. The pulse was quick and small; the surface hot; she had occasional attacks of heat and cold, but no decided rigor; the bowels were regular, and had been slightly moved on the preceding day; she passed urine freely; the tongue was dry, and coated with white fur; she had vomiting after almost everything taken, and anorexia. The pain was constant, and very severe. She described it as of a severe darting, throbbing character. Examination *per rectum et vaginam* gave no further information, except as to the situation of the tumour, which was on the right side of the uterus. She was ordered to have ten leeches applied over the painful part, followed by fomentation and linseed poultice; to take effervescent mixture with hydrocyanic acid, and the following pills:

R Hydrargyri chloridi gr. vj,
Pulveris opii gr. ij,
Confect. rosæ q. s. M.

Fiant pilulæ vj quarum sumat i quartâ quâque horâ cum misturâ.

Dec. 6th. She was partly relieved from pain, having slept a short time in the night. There was less vomiting; the bowels had not been relieved. In other respects, she was in the same state as on the previous day. The mixture and pills were continued; and she was ordered to take immediately a powder containing half a drachm of jalap and two grains of calomel.

Dec. 26th. The general symptoms had continued very much the same up to this day. The tumour had continued to increase in size gradually, and without any intermission, until it had now attained a very considerable size, being about as large as a child's head; the walls of the abdomen were elevated on this side at least two to three inches

higher than on the opposite side, having quite a conical shape; the skin at the apex was slightly discoloured. The tumour was felt to have a very defined wall, extending to and filling up the centre of the ilium on the outer side; above it extended to near a level with the umbilicus, in the centre to a little past the median line, and below it encroached on the cavity of the pelvis. It was soft, and slightly moveable; the manipulation of it gave very great pain; fluctuation was distinct, the upper surface very close, although not adherent to the skin, having evidently by its pressure forwards considerably thinned the abdominal walls at this point. The constitutional symptoms had continued as previously described, with much fever, restlessness, quick pulse, and great emaciation. She had no rigors; the bowels were costive, requiring aperients or enemata to keep them acting; the flow of urine was normal, containing a deposit of urate of ammonia; the stomach was irritable, rejecting food for a day or two, and then remaining quiet for a time. Examination *per rectum et vaginam* gave no information, beyond showing the uterus free and the back of the tumour close to its right side.

The treatment during this interval had consisted in the application of leeches on several occasions, with constant poultices, and the administration of an effervescent saline mixture containing morphia and prussic acid, with the following night draught.

R Morphiae muriatis gr. j,
Liquoris ammoniæ acetatis ʒiv,
Spiritus ætheris nitrosi ʒj,
Syrupi anrantii ʒj,
Aque q. s. M.

Fiat haustus ʒj horâ somni sumendus.

Jan. 10th, 1850. Since the last report, she had continued to suffer most acute pain, and was very much reduced. The constitutional symptoms continued severe; the pulse was very quick, small, and feeble; the tongue greatly furred; the stomach very irritable; the fever considerable, but more hectic in character; the bowels were still irregular. The tumour had continued to increase slightly in size, but not so rapidly as about the time of the last report. It now formed an immense bag of fluid, raising up the right side of the abdomen to a great extent; it was slightly moveable, and most acutely painful. The skin was not yet adherent to its upper surface, but was very thin; and on the previous day I proposed to make an opening into it at the projecting point, either with the lancet or by issue; but to this the patient and her friends objected. She was slightly unwell four days ago, the discharge being darker than usual, and in small quantity. The treatment had continued the same as last reported, except that she had had considerable quantities of beef-tea, with wine; and about ten or twelve days ago, I directed the application of a large blister over the whole surface of the swelling, the blistered surface to be kept raw, and very hot linseed-meal poultices to be applied to this surface day and night, and to be changed every four hours. She was directed to continue the mixture and night draught.

Jan. 11th. On this day I thought I noticed a very slight diminution in the swelling. Her vomiting was less frequent; the pain was easier; and altogether she seemed slightly improved.

Jan. 25th. From the date of my last report the swelling had continued to decrease perceptibly in size every day, though not very rapidly; the vomiting ceased; the pain was much relieved; the appetite was improved; the bowels had acted more regularly; and the urine had passed freely. On my visiting her this morning, I found her sitting up, greatly improved in general health and strength. The tumour had subsided to about the size of half an orange; it felt flattened, and was only slightly painful to the touch; it was situated apparently behind the external abdominal ring, and fixed. The whole of the discharges from the body had been watched closely, in the expectation of finding matter in some; but no such discharge has taken place. The treatment adopted since the 10th, had been the constant application of very hot poultices, with the rubbing in

of an ointment containing iodine and iodide of potassium. She has also taken the following mixture.

R. Sodæ sesquicarbonatis 3 ij,
Spiritus ammoniæ comp. 3 iss,
Morphiæ muriatis gr. j,
Syrupi rhaeados 3 ij,
Aquæ q. s. M.

Fiat misturæ 3vj, cujus sumat 3j ter in die.

All trace of swelling has since gone; and the lady continued twelve months ago in good health.

REMARKS. The preceding case is one of rare occurrence, and terminated in an unusually favourable manner by the absorption of the immense quantity of matter which the abscess must have contained. Abscess in the broad ligament and ovary is not a very unfrequent disease after parturition, giving rise to symptoms which are often serious and sometimes fatal. It has long been my own conviction that many, if not most, of those cases met with frequently after parturition, where the patient complains of deep-seated pain in one or other iliac fossa, with tenderness on pressure and other inflammatory symptoms, arise from inflammatory action in the uterine appendages. This irritation, in a less degree continued, for some time after confinement, not very unfrequently gives rise to the formation of a chronic abscess in one or other ovary, or in the broad ligament; and most of the cases recorded will be found to have some connexion with a previous confinement. In this case, no such connexion could exist; and it differs also from the class of cases just alluded to in its remarkably rapid origin and course; the only assignable cause being the irregular and checked menstruation. There may perhaps be room for doubt as to the exact seat of origin of this abscess, whether in the broad ligament, or in the ovary. I lean to the former, because had it been seated in the ovary I think I should have detected this organ swollen and enlarged on making a vaginal examination; whilst if the abscess had its seat in the ligament, the detection of any defined swelling was less likely.

The termination of this case was most satisfactory; but was such as can, I regret to say, be very rarely expected in similar cases. Abscesses in these parts frequently open by their walls becoming adherent to some neighbouring organ—the intestine, uterus, or bladder; ulceration taking place, an opening is formed between the two, through which the matter finds its way, and is thence discharged from the body. When this swelling began to subside and during the whole time afterwards, a most careful watch was kept upon all the discharges from the body, but without any abnormal element presenting itself. The only way that any pus could have been discharged in this case without being observed, was that a small quantity might have passed along the Fallopian tube, and escaped with the slight menstrual discharge which took place four or five days before the swelling began to subside.

These swellings frequently make their way, as in this case, towards the surface; when they either open by ulceration or are opened by the surgeon.

With regard to the treatment, I believe that little can be done by medicine beyond keeping the bowels regular, and treating symptoms as they arise, with the administration of opiates to allay pain, which is at times very severe. It is to local measures that we must trust in the main for the checking of such cases in their early stages, when the application of leeches with very hot fomentations and constant hot poultices are often sufficient to arrest the disease, and promote the absorption of any abnormal deposit that may have occurred. If these fail, I would strongly advise the plan adopted in this case of applying a large blister over the whole swelling, keeping it open, and constantly having applied to it very hot linseed poultices.

I speak strongly of this plan, not only from the favourable result in this case, which I attribute in great measure to this treatment, but also from the good effects I have seen it produce in a class of cases very similar in character; where, in either sex, the cellular tissue around the cæcum or sigmoid flexure of the colon becomes inflamed, giving rise

to great swelling, hardness, and pain in one or the other iliac region; these local symptoms being accompanied by much pyrexia and general disturbance of the system; the local inflammation not unfrequently terminating in suppuration. This disease has received the name of typhlitis; and in treating it I can speak strongly of the pleasing results which I have seen in the two or three cases that have fallen under my care from the local treatment by an open blister and constant hot poultices. I well remember the rapid absorption which followed this treatment in a case of this disease seen by me some time ago, in consultation with my friend Mr. Williams of this city, under whose care the man had been for some time previously. The application of leeches to the extent of relieving acute pain is desirable; but it should not be carried too far, as the system is often low and reduced in these cases, requiring a supporting diet. A series of cases illustrative of this disease appeared in the *Medical Times and Gazette* of August 12th; and I perceive that Dr. Bennet thinks that the recovery in a case under his care was brought about to a considerable extent by the "local employment of warmth and moisture in the form of a large poultice."

As an illustration of the serious nature of typhlitis, in its most severe form, I would cite a case which fell under my notice in June last.

CASE. Mr. N., a butcher, aged about 30, was first seen on June 18th, 1854. He complained of a slight pain in the right iliac region, which he attributed to a strain whilst lifting a large piece of meat. On examining the abdomen, a small hard tumour was felt at the seat of pain, with tenderness on pressure. The pulse was quick; he had much pyrexia; the bowels were open in the morning.

The following day he was much worse; the pain was more severe; the bowels had not been moved; and he had difficulty in passing urine, with frequent vomiting.

The symptoms continued to increase in severity, being precisely those attendant upon obstructed bowel, with the addition of great difficulty in passing urine, and the swelling in the right iliac region, which, on the third day, lost its defined character.

The treatment consisted of the application of leeches, blisters, and poultices, bleeding from the arm, purgatives, and general antiphlogistic remedies; but, beyond giving slight relief from pain, no good resulted. He died on June 22nd, in little more than four days from the time he was first seen by me.

At the *post mortem* examination, forty-eight hours after death, on opening the abdomen, we found traces of very severe peritonitis, with the deposit of large quantities of lymph. In the right iliac fossa, corresponding to the tumour felt externally, was found a large sac, containing a great quantity of pus, which extended around the cæcum and on to the front and right side of the bladder.

Another variety of abdominal swelling, to which my attention has been drawn within the last two years, is what I would name "abdominal hernia between the two recti muscles"; a full description of which I do not remember to have met with in any work.

The first case of the kind which came under my notice was that of a lady resident in this city, who, having been confined of her first child about eighteen months before, had within the last three or four months noticed a considerable swelling in the centre of the abdomen, concerning which she came to consult me. I found her general health very good; and when she stood erect, the tumour, about which she was very anxious, was distinctly to be felt through her clothes; from its size, giving her much inconvenience when walking or moving about, but less so when she retired to bed. She had noticed it first about four months back, when it was small compared with its present size, having ever since been gradually on the increase, never giving her pain. Being unable to satisfy myself as to its nature, I desired her to remain in bed until I called upon her the following day, to make a further examination. At my visit, I was surprised to find that, as she lay flat on her back in bed, all trace of swelling or tumour of any kind

had completely gone: on her raising up the trunk, so as to change her position for examination, I observed a large mass to start forwards in the centre of the abdomen, where a swelling then appeared, about the size of a child's head, but more elongated in shape, extending from the umbilicus to near the top of the pubis; the sides of the abdomen being at the same time considerably flattened and hard, whilst the swelling was softer, and gave a very resonant sound on percussion. This swelling immediately subsided on her resuming the horizontal posture, returning again on rising, and becoming still more prominent on assuming the erect posture. An examination of the abdominal parietes, when she lay at rest in the horizontal posture, at once pointed out the cause: they were soft and flaccid; and along the course of the linea alba, from the umbilicus downwards, I found the two recti muscles quite separated from each other, the inner border of each being quite free and distinct, and the ends of the fingers readily introduced between them. This at once brought me to the conclusion that there was a separation or rupture along the linea alba, and that, during the act of rising or standing, the two recti muscles contracting forced out between their inner borders a large quantity of the intestines, which, covered by skin and peritoneum, formed the tumour of which this lady complained.

It seems to me most probable that this rupture along the linea alba must have occurred at her previous confinement, and that the gradual outward pressure of the intestines had greatly enlarged it. I advised her to have an abdominal bandage, with a large and strong piece of sole leather in front, so as to form a strong support in front: the bandage to be worn tolerably light, and to be used night and day. This was the only treatment required. At about the end of twelve months, she reported herself quite well, and discontinued the bandage, but has since been obliged to resume it.

I have since seen two similar cases; one I saw in consultation with a medical gentleman, who had, up to the time of my visit, considered the case as ovarian.

6 Lever Street, Manchester, September 1854.

CASE OF POISONING BY THE OIL OF BITTER ALMONDS: RECOVERY.

By JOHN PURSELL, M.D., F.R.C.S.

J. D., four years of age, a fine grown boy, was brought to my residence at half-past twelve P.M., on Sunday the first of Dec., 1850. He had swallowed about five minutes previously four or five drachms of the "oil of bitter almonds", the bottle containing which had been incautiously placed on the kitchen table shortly before, for the purpose of preparing the essential oil for pastry. The child observing his mother's attention to be temporarily engaged in preparing the family dinner, took hold of the bottle, and placing the neck in his mouth swallowed (as far as could be estimated from what remained in the bottle) the quantity specified above. Having hastily replaced the bottle on the table (after he had at length attracted the attention of his mother) he ran quickly up stairs, followed by his mother, who was alarmed at seeing him remove the bottle from his mouth. On reaching the passage, he staggered and fell on the floor apparently insensible. The father hearing the shrieks of his wife hastened down stairs, raised the little fellow up, and speedily conveyed him to my residence, distant about a hundred yards.

On seeing him, I found the following symptoms present. The countenance was very much flushed; the eyeballs were remarkably prominent, had a rolling motion, and nearly protruded from their sockets; the pupils were widely dilated and insensible to light; the pulse was full and strong, but slow; the breathing was stertorous; there was complete opisthotonos, and frequent convulsive action of the muscles of the face and neck. From the rigid contraction of the jaws, I experienced some difficulty in administering a strong

solution of the sulphate of zinc, the action of which I excited by irritating the fauces with a feather. I adopted this expedient to gain time, while the stomach-pump was being prepared. This being procured, I speedily introduced the tube into the stomach (not until the little patient had nearly divided the tube with his teeth) and injected several portions of warm water, which returned with a good deal of undigested food, emitting strongly the characteristic odour of bitter almonds. I continued to throw in warm water until the fluid drawn up no longer presented the peculiar smell of the poison. Cold affusion was now resorted to, and continued for some time; brandy and water was administered, and repeated at frequent intervals, the patient having fallen into a state of collapse, mustard cataplasms were applied to the epigastrium and the whole length of the spine. On the establishment of reaction, castor oil was prescribed, which acted freely; and we soon had the satisfaction of observing returning consciousness, after persevering in our efforts for about four hours. In half an hour, the patient was sufficiently recovered to permit of his removal home by his parents, who anxiously awaited the issue.

I visited the little patient two hours afterwards, and was much gratified in observing that he had entirely recovered his accustomed animation and cheerfulness, after having swallowed so large a dose of the poison.

REMARKS. This case affords an additional illustration of the necessity of prompt and decisive treatment, when available. There is no doubt that a successful issue was occasioned by the circumstance of my being at home, and in prompt attendance upon the little patient the moment he was brought in, and by the stomach being immediately emptied of the poison; three or four minutes' further delay would probably have rendered abortive all efforts to counteract the deadly effects of so active a poison, in consequence of its rapid absorption into the system.

It may not be unimportant to add that the preparation which the child obtained and swallowed from the bottle was the genuine and concentrated oil of bitter almonds, the father requiring the preparation in the conducting of his business as a capillaire maker and distiller, and preparer of compounds.

36, Harleyford Place, Kennington Park, Sept. 4th, 1854.

A NEW FORM OF ASTRINGENT APPLICATION.

By WILLIAM BAYES, M.D., Physician to the Brighton Dispensary.

PURE glycerine dissolves nearly its own weight of tannin, affording a very powerful local astringent application.

The solution of tannin in pure glycerine appears to me to supply a desideratum long felt, and capable of a great variety of useful applications.

The solvent property of glycerine over tannin allows us to form a lotion of any desirable strength, as the solution is readily miscible with water.

The solution of tannin in glycerine, in one or other of its strengths, is peculiarly applicable to many disorders of the mucous membrane, readily combining with mucus, and forming a non-evaporisable coating over dry membranes; hence it may with benefit be applied to the mucous membranes of the eye and ear in many of its diseased conditions. It forms a most convenient application to the vaginal, uterine, urethral, or rectal membranes, where a strong and non-irritant astringent lotion is desired.

In local hæmorrhages, where the bleeding surface can easily be reached, it will prove very convenient, and may be applied either with a sponge or small brush.

The solution must be kept in the dark, and should not be prepared for any great length of time before used, or decomposition will occur.

It is singular that glycerine does not possess the same property towards gallic acid.

28 Old Steine, Brighton, September 1854.