Clinical Remarks ON ABSCESSES CONNECTED WITH THE FEMALE PELVIC ORGANS.

Delivered at St. Thomas's Hospital,

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GENTLEMEN,—Among the many interesting cases now in my wards there is one to which I have often directed your attention, and with which you are therefore in some degree well acquainted. But it merits a more thorough consideration than I have yet accorded it, and I purpose to devote the present lecture to its discussion.

The case to which I refer is that of an unmarried woman, twenty-eight years of age, who has now (Aug. 1st) been under my care for the last four months. Her history was that she had had good health until Christmas, at which time she began to suffer from cough and abdominal pain; that these symptoms had continued; that about ten days before admission a painful swelling was observed in the lower part of the abdomen; and that the catamenia had been absent for ten weeks.

On admission her temperature was nearly 103°; she had a slight cough, associated with comparative dulness at the left apex, and mucous râles in the same situation; and a fluctuating swelling, apparently as large as a duck's egg, immediately above the outer half of the left Poupart's ligament, within the abdomen but adherent to the parietes. It was clear that there was an abscess situated in the venter of the ileum, and as there was no reason to suspect that it was connected with diseased vertebræ or the kidney, and as it was not far from the site of the ovary, it was thought that it might be due to inflammation involving that organ. As the patient was unmarried no vaginal examination was made. After three or four days the abscess was opened and treated with antiseptic precautions. Three or four ounces of thick fetid pus escaped. The result was very satisfactory, for the abscess rapidly disappeared, leaving only a small sinus, the temperature went down to the normal, and the patient's general health improved, but she still had a slight cough, and the physical signs at the apex of the lung continued. About a month later, without any obvious cause, her temperature suddenly rose to 104·6°, and remained high during the day, and for the next day or two it varied between 98° and 101°. She still had dulness at the left apex, with *bruit de pot fêlé* and mucous râles. But these symptoms had not undergone any particular aggravation, and there was no sign of renewed suppuration within the abdomen. Ten days later, however, two or three hard, tender lumps, about the size of almonds in the shell, were discovered within or beneath the abdominal walls on the right side, in the corresponding situation to the abscess which had existed on the opposite side. These gradually increased in size, then seemed to run together, and at length an abscess formed on the right side, precisely like the one formerly present on the opposite side. On May 29th this was opened, and about an ounce and a half of thick fetid pus was evacuated. For a week or two before this operation the temperature had shown signs of rising, and a day or two before it had reached 102·2°. This operation was also successful, inasmuch as the abscess rapidly contracted, and the temperature for a week or more rarely rose above the normal. After this, however, the temperature became variable, ranging daily from about the normal to 101° or 102°; she perspired a good deal, especially when asleep; and, though the physical signs presented no marked change, her cough became more troublesome. On the evening of June 25th, after the temperature had been rising for two or three days to 102°, she complained of extreme pain across the lower part of the abdomen, and her temperature reached 102·8°. In the early morning of the 26th it attained 104·4°, and later on the same day 104·6°. On this day it was noted that the abdomen was tumid and tense, and in the lower part hard, with some dulness just above the pubes. In this situation there was also a good deal of aching and tenderness. Further, she had some pain in micturition. No lump could be felt. The old wounds still discharged a little pus. On the evening of the 29th, whilst the patient was coughing, she felt something give way, and soon after there was an abundant discharge of pus from the vagina. Again her temperature fell, and again there was improvement as regards both the local phenomena and her general health. The vaginal discharge continued, though in rapidly diminishing quantity, for about a week, and then ceased. An examination was now made for the first time per vaginam et rectum, with the following result:—The uterus is fixed low in the pelvis by a mass of inflammatory exudation, which is limited to the posterior half of the pelvis, and is especially well-marked in Douglas's pouch. The mass here is firm, except in one spot, which is soft, but does not present obvious fluctuation.

From that time almost to the present—namely, Aug. 1st—the patient has remained much in the same general state of health in which she had been during the greater part of her stay in the hospital. Her temperature has varied irregularly from 97·5° to 101·5°. She has been liable to profuse perspirations, has continued very weak, has been troubled more or less with cough, has complained of occasional aching pains about the lower part of the abdomen, and the sinuses there have still discharged slightly from time to time. The most favourable facts in her recent history are that indications of disease in the left lung are less obvious than they were on admission, and that the moist sounds have almost wholly disappeared, and that for the last week or two she seems to have gained flesh and become stronger. There has been no return of the catamenia.

What is the matter with this patient, and what are her prospects? Of course it is clear that she has been suffering from inflammation with suppuration around the pelvic organs. The fact that abscesses formed and presented, first in the left iliac fossa, next in the right iliac fossa, then in Douglas's pouch, and that later there were other obvious signs of inflammatory exudation in the cavity of the pelvis, are conclusive on this point. Admitting so much, the question next arises, To what was the suppuration due? Now, it is well known that abscesses connected with the upper part of the abdomen tend to gravitate into the lower part, and even into the cavity of the pelvis. Psoas abscesses and renal abscesses not infrequently find their way into the venter of the ileum, and then come to the surface in the inguinal region; or even into the pelvis, where, amongst other things, they may open into the rectum, vagina, or bladder, or into all of these cavities. I have known hepatic abscesses descend similarly into the pelvis and involve the pelvic organs; and I can recollect one remarkable case in which an empyema perforated the diaphragm, travelled along the meso-colon to the cæcum, into which it opened, and thence passed downwards into the pelvis, where it perforated the rectum and vagina. The knowledge of these possibilities explains the statement made early in the case that there was no evidence of spinal or renal disease. And I may add that the result of repeated investigations was to satisfy me that the pelvic suppuration in this case was not due to the importation of disease from elsewhere in the body, but had originated in the region in which it was discovered. There are many causes of suppuration in the pelvis and its vicinity; and, indeed, the subject is one admitting of considerable discussion. I shall not enter on such a discussion, but proceed to quote in detail two completed cases which have recently been under my care, in the belief that their consideration will suggest the answers to the questions propounded at the beginning of this paragraph.

CASE 1. *General tuberculosis; tubercle of uterus and Fallopian tubes; tubercular peritonitis; abscess in pelvis, opening into vagina and rectum; death; autopsy.*—Edith S——, a single woman, aged twenty-four, was admitted under my care on Dec. 19th, 1882. About twelve months previously she had some abdominal pain, which she supposed to have been caused by moving a wardrobe. This, however, soon disappeared under treatment. Her present illness began on Dec. 6th, when, owing as she thought to catching cold, she was attacked with pain in the abdomen. This continued off and on, but got much worse three days before admission, when she took to her bed. The pain began across the upper part of the abdomen. On admission she was suffering from well-marked peritonitic symptoms. She lay on her back; her abdomen was somewhat distended, tense, and extremely tender on pressure; her respiration was entirely thoracic. There was no evidence of tumour or of fluid. Her skin was hot, her face flushed; her tongue was

red and raw-looking, and studded with patches of fur; she had no appetite, but was thirsty and occasionally sick. The bowels were constipated, and she had some dysuria. There was a little rhonchus at the lower part of both lungs behind, but no other indication of pulmonary affection; heart healthy. Pulse weak, about 100; temperature ranging from 102° to 103·6°. She was quite sensible. She was treated with opium, and a day or two after admission twenty leeches were applied to the neighbourhood of the umbilicus. After this there was some improvement. The abdomen became less and less tense and tender, and it was obvious that the peritoneal inflammation was gradually subsiding; but on the other hand, her temperature, which became very variable, still rose daily to 101°, 102°, 103°, and even to 104°; her tongue remained dry, she frequently vomited, her nights were restless, and she seemed to get weaker. Further, in the course of two or three weeks profuse night sweats came on, and she had occasional attacks of diarrhœa. Consequently, I came more and more to the conviction that the case was one, not as I had at first anticipated and hoped, of simple peritonitis, but of peritonitis secondary to tuberculosis, or of peritonitis associated with some circumscribed accumulation of pus. Still it was felt that the gradually returning flaccidity of the abdomen, with the almost complete disappearance of tenderness, and the absence of all evidence (from palpation) of circumscribed swelling or tumour were to some extent opposed to these conclusions. On Jan. 25th, after a bad night, she suddenly passed a considerable quantity of thick pus from the vagina. After this, pus continued to escape in varying quantities, but more or less constantly. It was free from offensive smell. For some days after the bursting of the abscess she seemed to improve; her temperature went down a little; abdominal discomfort diminished; she took food better than she had done, and she became cheerful. But this improvement did not last, and she began to complain especially of pain and tenderness in the iliac regions. The abdomen, however, had by this time become collapsed, and was still generally free from tenderness, and from all evidence of tumour or fluid. On Feb. 7th a vaginal examination was made, and the abscess was found to have made an opening at the back of the vagina, immediately behind the cervix uteri. It was observed also that no large collection appeared to exist between the vagina and rectum. About this time an abscess that had been forming in the right axilla was laid open. From this date she remained for the next few weeks with but little change. The discharge continued from the vagina, and from the axilla; she complained of more or less tenderness and pain in the iliac regions; her temperature was very variable, but of the hectic type; she perspired much at night, and she slowly lost flesh and strength. Her tongue was fairly clean; her appetite pretty good, and she was rarely sick. On March 11th she passed for the first time a little solid fæces with her vaginal discharge. This continued for some days, and then disappeared for a time, to return again on the 27th, after which more fæcal matter passed by this route. The discharge, however, now and henceforth. was offensive. About the same time she began to suffer off and on from diarrhœa, and pus was often detected in her motions. On the 16th an abscess which had been presenting in the perineum was opened, and much pus escaped from it. It continued to discharge. From this time she slowly but steadily got worse. The discharge from the vagina, which was now always offensive, continued. She complained of pain in her back, and in the iliac regions. She lost her appetite and began to vomit. Her tongue became dry, and sordes accumulated on her teeth. Her temperature, though often rising high, occasionally descended below the normal. Her pulse, which had hitherto been a little over 100, ran up to 120, 130, and 144. Her perspirations at night were generally profuse. She grew exceedingly weak and painfully emaciated, and her abdomen got as hollow as that of a person dying from obstruction of the œsophagus. She was very restless, especially at night, but retained her senses perfect to the last. She suffered a little from urticaria a few days before her death, which resulted from exhaustion on April 30th.

Autopsy.—Body extremely emaciated. On opening the abdominal cavity, this was found, excepting in the pelvis, to be free from serous effusion, congestion, or the signs of recent inflammation. But the great omentum was adherent to the parietes in front and to the bowels behind, the bowels to one another, and the liver to the diaphragm, by thin membranous adhesions; and these were studded somewhat thinly with round and nodulated masses of yellow tubercle, varying from the size of a pin's head to that of a pea. The lower part of the mass of small intestines was adherent to the brim of the pelvis, to the bladder, and to the uterine appendages; and this formed the roof of an abscess, which mainly occupied the recto-vaginal pouch, and into which the uterus and its appendages projected. The walls of this cavity were flocculent, discoloured, and dirty-looking, and it contained only a little turbid pus. In its parietes tubercles were found here and there. Further examination showed that the abscess communicated by two orifices with the upper and back part of the vagina, and by several small orifices with the contiguous rectum. The form and size of the uterus, and the substance of its walls, were normal; but the mucous surface was occupied by an abundant tubercular deposit. The Fallopian tubes were much twisted and thickened, and their dilated channels were full of cheesy tubercle. The spleen contained a few caseous tubercles. Grey tubercles were sparingly scattered throughout the lungs, and the lower part of the right was in a state of grey hepatisation. The remaining organs were all healthy.

This case is a very instructive one, for, apart from its value in relation to the case with which I commenced my lecture, it illustrates several points of much importance. In the first place, it shows that the symptoms of tubercular peritonitis may come on in an apparently healthy person with the sudden severity of idiopathic peritonitis, and that in the early stage the two affections may excusably be confounded. In the next place it demonstrates that the peritonitis of tuberculosis may subside wholly, leaving no clinical trace whatever of its former existence, and merely such old adhesions behind as result from simple peritonitis. And, in the third place, it furnishes an example of a fact I have often observed, that tubercle of the uterus need not present any symptoms to direct attention to the uterus as the seat of disease. I may add, in reference to this case, that while somewhat early in its progress I had formed the opinion that the persistence of hectic temperature and other symptoms were due either to the presence of tuberculosis or the formation of a deep-seated abscess, and that although for a time after the first discharge of pus I hoped, and thought it probable, that the latter alternative had been the sole cause of her later sufferings, I never got quite rid of the fear, which finally predominated and was justified by the event, that the pelvic suppuration was connected with tuberculosis of the internal organs of reproduction.

CASE 2. *Fibrous tumour of uterus developing with pregnancy; miscarriage; pelvic inflammation with discharge of pus and of a fibrous tumour per rectum; recovery.*—Sarah S——, aged thirty-one, three months and a half married, was admitted under my care on Oct. 27th, 1882. She has always been delicate, but has never had any serious illness. Ever since her marriage she has complained of some uneasiness in the cæcal region. Her present illness, however, began on the 14th of the month, when she was attacked with severe pain in the cæcal region, and fever. The medical man who was called in assumed that she was suffering from typhlitis, and treated her accordingly. During the fortnight prior to admission she had diarrhœa, alternating with constipation and vomiting. When I first saw her she was already much better than she had been; her fever had disappeared; the swelling in the cæcal region had diminished, and it was much less tender and painful than it had been. She was pale and delicate-looking, and spare. There were no signs of thoracic disease. The abdomen generally was flaccid, and not tender on palpation. But in the cæcal region was a rounded but slightly irregular tumour, apparently about the size of an orange, which extended a little beyond the mesial line and nearly as high as the umbilicus. It was tender, but not extremely so, hard, and without sense of fluctuation, and very slightly movable. In the left iliac fossa, a little internal to the anterior superior spine of the ilium, was a second tumour—oval, hard, as big as a large plum, and freely movable. There was, further, an indistinct sense of resistance, deep seated, thoughout the region intervening between the tumours, suggestive of a solid background from which these stood out in relief. The tumour in the cæcal region, if it had been alone, might well have been (as had been supposed) due to typhlitis; but the presence of a second tumour on the opposite side, and of the indistinct solid substratum, rendered this view untenable. And after full consideration it was concluded either that the tumours were malignant, or that they were fibrous tumours of the

uterus which had grown with the enlarging walls of the uterus during the pregnancy, which it was suspected might have arisen shortly after her marriage. There were no tumours elsewhere in the abdomen, or in any other part of the body. And for these and other reasons the last explanation was that to which I leaned. She remained fairly well; and, indeed, seemed improving in health, sleeping well, having a fair appetite, and complaining of little abdominal uneasiness. On the 2nd or 3rd of November she was examined by the obstetrical physician, who reported that she was pregnant. The next day the temperature, which had hitherto been normal, rose to 100°. It remained at about this level, and she became feverish, and complained of pain in her limbs and nausea. On the 7th her temperature rose to 104·8°, and she had a severe rigor. She had another on the 8th. She remained very ill, and on the 10th had a miscarriage. There was reason to believe, partly from the patient's symptoms, partly from the condition of the fœtus, that the death of the fœtus had occurred about the time at which the patient's temperature rose—namely, a week or so before the miscarriage. At this period a third movable tumour, about the size of an almond, was found in the lower part of the abdomen, midway between the other two. From this time to about the 20th the patient went on very well. Her temperature remained about normal; she had little pain or uneasiness in the belly, and her appetite and sleep were good. The tumours were carefully examined from time to time, in the hope that they would be found to diminish in size with the diminishing womb; and it was believed that they did diminish slightly, and that they also became harder. On the 20th she began to have recurrence of fever, and renewal of pain in the lower part of the abdomen, and tenderness in the situation of the tumour. Between this date and the 30th the temperature ranged between 100° and 105°; and she had one or two rigors. Again she was very ill and weak, and there seemed reason to believe that the case might, after all, end unfavourably. On Dec. 1st, however, the patient began to pass pus with her motions; and her temperature again descended to the normal. Her pain subsided, and the abdominal tumours were believed to have become somewhat smaller. Dr. Gervis, who examined her on the 4th, stated that there were evidences of "pelvic cellulitis." On the 5th the patient, who was still passing pus with her motions, also discharged from the rectum a hard round mass, about the size of a pigeon's egg, which on section looked like, and on microscopic examination turned out to be, a fibrous tumour of the uterus. The discharge of pus continued for a few days more, and then ceased. From this time improvement was progressive. The pain ceased; the abdominal tumours gradually disappeared; her appetite returned; she slept well; she recovered her strength and healthy look; and she left the hospital well on Dec. 22nd. She came to see me a couple of months later, looking and feeling as well as she ever had done. I examined her carefully, and no trace of tumours was to be detected.

This case, like the former one, presents many points of special interest, and deserves special study. It may be fairly assumed, I think, that the original diagnosis of the case was correct. I am free to admit, however, that my reliance on the accuracy of my diagnosis had sensibly diminished by the time at which the discharge of a fibrous tumour from the rectum occurred to confirm it. The course of events seems to have been as follows:—The patient had at the time of conception small uterine fibrous tumours; they enlarged (as they always do) with the enlargement of the womb, and then, from some cause or other, became involved in inflammation; this inflammation was subsiding when, as a consequence apparently of the examination of the womb for diagnostic purposes, the death and discharge of the fœtus took place, and concurrently pelvic inflammation became re-excited or intensified; finally suppuration developed in the cavity of the pelvis, involving also the outer walls of the uterus and the tumours connected with it, of which one became detached and was evacuated with the abscess by the rectum.

It is very interesting to compare the steady progress from bad to worse, and ultimate death, in the case of pelvic suppuration, associated with the presence of tubercle, with the final complete recovery after alarming relapses and complications of the patient where pelvic suppuration was simply "idiopathic."

I do not know that I need discuss exhaustively the resemblances and differences between the two cases just narrated and that which forms the text of my lecture, or that I need weigh minutely the evidence which may be derived from them interpretative of its pathology. It will, I think, be admitted that, while there are many points of resemblance between them, it is to the former of the two completed cases rather than to the latter of them that the case now under treatment claims most affinity. For while in all the cases the most striking phenomena of disease were connected with pelvic inflammation originating in, or at any rate involving, the essential organs of reproduction, and proceeding to the formation of abscesses which discharged themselves by one or more of the routes which such abscesses usually select the last case stands apart from the others in the facts that the pelvic suppuration was connected with the presence of fibrous tumours of the uterus and with pregnancy, and was induced or aggravated by the induction of premature labour. On the other hand, there are many considerations which collectively render it almost certain that my present case and that of Edith S—— are essentially identical: in both the pelvic suppuration has been chronic in its progress and the abscesses have been slow to heal; in both there has been persistent hectic fever; and while in one tubercles were found after death in the uterus and Fallopian tubes, peritoneum, lungs, and elsewhere, in the other there have been from the beginning obvious signs of the presence of tubercle in the lungs. Indeed, I am driven to believe that my poor patient is suffering, as the other did, from general tuberculosis with special implication of the reproductive organs; and, alas, I cannot but fear that, even though of late there has been manifest improvement both in her local maladies and in her general health, the issue of her case will be unfavourable, and probably not long delayed.