Original Communications.

THREE CASES OF PERINEPHRITIC ABSCESS COMPLICATED WITH PULMONARY AND PLEURITIC DISEASE. INCISIONS INTO RENAL REGION. RECOVERY.

Read before the Boston Society for Medical Observation, May 4th, 1868, by HENRY I. BOWDITCH, M.D.

CASE I.—Dr. —, of W., Mass., aged 27, had served as surgeon during the rebellion, and had been weakened by his labors. After the close of the war, he resumed business at W. He rose rapidly into an extensive practice, during which he made many and long drives, and became evidently exhausted by them. He continued, however, as he thought, in good health up to within three weeks of his acute attack.

One day, during the first week in May, 1866, he returned from his visits rather more fatigued than usual, but as a matter of relaxation, went to his garden and planted some vines. Whilst digging for this purpose, he suddenly felt a pain take him in the right lumbar region, about the crest of the ilium and parts adjacent. This gradually extended in a few days down outside of the trochanter and leg to the calf. This was not constant, but at times he was wholly free from it. He kept at his business for a few days, but steadily growing worse. Finally, he took to his bed, owing to the severity of all his symptoms.

I saw him May 12th. He had then begun to have regular fever, pain and sweating at night. On examination, I found that he had had some lameness in flexing the thigh from the moment of the strain. This had increased so much that, at the time of my visit, he was obliged to lie on the back, with the thigh partly flexed, the pain of extension being too severe to allow of its being made. His face was pale, thin and indicative of suffering. His pulse was 92; his skin rather warm. His appetite was gone. No indigestion, no decided constipation. Occasionally, the pain had seemed increased when the bowels were not open-

ed, and at other times the abdomen had been a little tense, but he had never had any great distention or tenderness. He had had no cephalic or thoracic symptoms. His nights had been restless, owing to pains, &c., and for that he had used opiates and bromide of potassium, with relief. On examination, I found a deep-seated, rounded, doughy, but not fluctuating swelling and some tenderness between the crest of the ilium and false ribs. This swelling was felt in front in the cœcal region, and also in the lumbar region of the same side, and it was easily grasped between the two hands, one placed in the cœcal, the other in the renal region. As his bowels had been easily kept open by enemata, and the urine was not altered; as he had had pain and lameness in moving the thigh; as the trouble had come on while digging, and therefore while using the muscles connected with the back and thigh; as at my visit he could not extend his thigh, and as he had repeated chills and fever, I thought it probable that a local abscess was forming, or had really formed, in or about the psoas muscles. This abscess, in case the bowels were not regularly opened, pressed at times on the colon, and caused the local distention named above, and flatulence, &c., easily relieved by simple enemata.

I advised, therefore, that a surgeon should be summoned with reference to the question of opening the abscess, deep seated though it was. This advice was followed, but as a doubt was expressed as to the accuracy of my diagnosis and surgical interference declined, I was requested to see him at least every week and prescribe for him. Previously to summoning the surgeon, I had advised the application of three good leeches to the loins, and the use afterwards of a solution of iodine (3ss.) in sulphuric ether (℥i.) as an external irritant.

A week afterwards, May 18th, I saw him again. He was evidently much worse, and had more suffering. The leeches, instead of relieving, had rather caused increase of pain, owing to the constrained position needed during their application. The pain had been more violent, not constant,

[WHOLE No. 2106.]

but when present always in the right iliac region, and requiring at times $\frac{3}{4}$ of elixir opii daily. There had been no dejection during the week. The consequence was anorexia and great discomfort. He had lain on his back or his right side, with the knees drawn up, and was wholly unable, owing to the pain produced, to lie on the left; sweating, copious at night. At times he had had nausea, flatulence and colic. His countenance was dull, as from narcotism; his pulse was 106; his skin cool and very moist. He looked and felt weaker. His breath was foetid, almost faecal in smell; his urine was high colored, but, by report, not otherwise altered. His diet had been beef-tea and milk, and at noon he had taken some ale. On examination of the diseased parts, more local tenderness was found in the right lumbar region, and the usual depression between the ribs and crest of ilium was gone—filled up with a smooth, uniform swelling. This swelling extended around to the front, and the chief point of pain was two inches forward of, and on a level with, the anterior superior spinous process of the ilium.

I directed a simple enema to be given daily. Opiates externally and internally p. r. n. I had never given up my opinion that an abscess was gathering. This opinion was confirmed at this visit. In a few days there was a sudden pointing of the tumor in the renal region, and, June 6th, Dr. Hodges was called, who let out at least a quart of pure pus from an opening made with a scalpel. On exploration with his finger, Dr. H. felt the kidney lying exposed at the depth of the abscess. Relief followed immediately. The remainder of the case I learned partly from this surgeon and partly from the patient himself after his full recovery.

On 8th, very little discharge having occurred after the first flow of pus, a bougie and catheter were introduced by Dr. H.'s advice, but without effect.

On 9th, a similar result recurring, Dr. H. again saw him, explored with his finger, removed a large coagulum that plugged up the opening, and opened another smaller abscess—between the former opening and the spine—holding three or four ounces of pus. At 8, P.M., the discharge continued very freely, consisting of blood and pus, and to so great an amount as to saturate two thick towels, five thicknesses of cotton sheeting and a blanket, and extended from the shoulders to the knees of the patient, who became thereby thoroughly prostrated.

On 10th, still greater exhaustion; nausea

and vomiting from ether still continued. Pulse rapid and feeble; stimulants, except ale in small quantities, not retained by the stomach. P.M.—The mind was clear, but the respiration was hurried, the extremities were cold, and the lips bloodless. He had some ringing in the ears and prickling of the surface of the body. He was evidently very much exhausted. Milk-punch enemata were given, morphia injected under the skin, and strong coffee given towards morning, which last was retained by the stomach, everything else being vomited.

11th.—More easy. Nausea gone. Pulse 130; but a slough, $2\frac{1}{2}$ by $1\frac{1}{2}$ inches in size, was found on right hip, and skin over sacrum looked red.

Champaigne, coffee, beef-tea, and punch, to be continued.

14th.—Relished food. Two quarts of ale taken daily, and some nourishing articles of diet, ale borne. Copious purulent discharge from openings; mixed with detritus of coagula.

He continued to improve for ten days, when he again had chills, with severe pain on full breath, at the right side of the thorax and shoulder. There was dulness on percussion over the lower lobe of the lung, with slight cough. No jaundice had occurred. All these signs soon subsided.

July 10.—Was able to sit up in the chair, and on 17th went to sea shore to recruit, where he spent nearly three weeks, and by that time was just able to place his heel fairly on the floor and walk, assisted by a crutch. The second opening had by this time closed, and the principal one was discharging serum only.

Sept. 1st.—Both apertures closed. Patient was able, using a cane, to walk half a mile.

Nov. 1st.—I saw him, looking well. On examination, only the slightest tenderness and tumidity could be found near the coecal region.

Here was a plain, but severe case of perinephritic abscess, with slight thoracic complications.

CASE II.—June 11th, 1866, i. e. less than a month after being consulted in the previous case, I was summoned to Taunton, Ms., to a patient supposed to be nearly dying of some obscure pulmonary disease. I found a man, a clerk, aged 38, who had been overtaxed in business. It appeared, moreover, that in January previous to my visit, he had been rather depressed in health, but had kept at his usual occupation of writing and in-door employments. Feb. 22d, he had been exposed to inclement weather while working in a cold, wet swamp, and

although he thought little of it, he found a certain lameness, which, three weeks after, or in the first half of March, suddenly compelled him to stop while walking in the street, owing to severe distress in the right renal region and right leg. From that time the soreness and lameness steadily increased. He had chills followed by fever, and some dyspeptic symptoms set in. He however still kept at work, though suffering, for three weeks longer. About the middle of April a cough began, and in two weeks from its commencement he suddenly raised a large quantity of a greenish (purulent?) fluid, without blood. It came so fast into his mouth that it seemed as if he vomited it. He was confined to the house. The cough and lameness continued, but gradually he was able to drive out, and had done so almost daily for three or four weeks, till about the middle of May. He was then again suddenly seized with copious expectoration, like the preceding in character, quantity and mode of raising. It seemed literally to "pour out" of his mouth, as out of the mouth of a bottle, whereas for some time previously he had raised but very little. Prostration ensued, and the patient was again confined to the house; had severe dyspnoea and violent paroxysms of coughing. The dyspnoea had at times been very great, and for six or seven days before I saw him permanent orthopnoea day and night had existed. He could not lie on his back, and placing himself on either side caused violent coughing. His appetite had remained tolerable, but he had a bad taste in his mouth, and his bowels, which previously had been regular, had become costive. Chill, fever and sweating, daily. He had lost twenty pounds of flesh. Two days before I saw him the symptoms were still greater, with pain in the left side and some rusty sputa.

At my visit, he looked like a man in advanced phthisis. He had no hereditary tendency to the disease. He was sitting in a chair, supported by assistants, and I instantly noticed a peculiarity of his position, as he seemed sitting on one glutæus in order apparently to relieve one side. He was pale, thin, and haggard in looks, and suffering from extreme dyspnoea. He could not easily move, owing, as he told me, to pain in the thigh. His pulse was, however, only 96, small but regular. Owing to his feeble condition and the orthopnoea it was difficult to examine the chest. I noted, however, the following physical signs. Dulness generally of the right back; perfect flatness in lower part of it; not

quite clear resonance in corresponding part of left. In front there was resonance in both breasts, but flatness began to appear at the lower portions of the right and at the side. On auscultation, bronchial respiration in the lower parts of both backs, with a coarse râle at the right, and a fine crepitus at the left. There was a general fulness of the right back, extending down to the ilium. Tenderness and a doughy resistance were found in the renal region, which could be felt extending towards the front in the cœcal region.

From the history of the case and from the physical exploration thus made, I was convinced that this was a case similar to the preceding, and that it had extended into the pleura, and through that the pus had twice formed a passage into the lung and had been discharged on two occasions very copiously; and finally that the disease, a few days before I was called to him, had caused pneumonia of the lower lobe of the left lung, with great aggravation of symptoms and threatened death. I advised that Dr. Hodges should be immediately summoned to examine with reference to an opening of the abscess in the renal region, although I did not see any one spot more prominent or softer than the rest. I urged this course as the sole means of cure.

Accordingly, Dr. Hodges visited Taunton that evening, and fortunately found one small spot in the renal region and just above the crest of the ilium, about the size and form of a watch glass, a little more prominent and softer than the adjacent parts. An opening was made therein, and pus in great quantity followed, with immediate and very gratifying relief to all the alarming symptoms. No hæmorrhage or other important complication occurred. About 12 hours after the operation the patient spat up matter similar to that discharged from the abscess. The rusty sputa and the signs of pneumonia began forthwith to subside, and soon wholly ceased. The cough decreased daily, and patient soon entered into convalescence.

July 23d, i. e. only 42 days after the operation, the patient passed through Boston on his way to the mountains, and I saw and examined him. He looked like a new being, with scarcely a morbid sign. His pulse was 93. On examination, nothing was perceptible under the ribs save the cicatrix caused by the surgeon's operation. All discharge had ceased weeks before. The right chest was rather contracted, as in cases of old pleurisy, and it sounded a little less clearly than in health, but was not flat

anywhere. The murmur was pure in the left lung, and only a slight crumple was heard on full breath low down in the right back.

A most satisfactory result certainly for surgery; and a very significant case for physicians and auscultators to ponder over!

CASE III.—T. M., Boston, a printer, aged 28. I was asked to see him in consultation with Dr. Blake, Dec. 2, 1867, i. e. 17 months after the preceding one. Patient stated that ten years ago he had a trouble somewhat similar to the present, as he thought, and with which he was ill ten or twelve weeks and finally recovered wholly. From that time he had been able to work at his trade until four months before I saw him. At that time (i. e. four months before my visit) he had had a very painful felon on his right index finger, which prostrated him very much and caused him much suffering. As he was recovering slowly from its effects, his general health began to fail, and his countenance became rather sallow. He lost his appetite and flesh, he had hectic, and finally was obliged to take to his bed, where he had been ten weeks before my visit, with the following symptoms.

He had had pain about the right iliac fossa, at first superficial, afterwards apparently deeper in the abdomen. This pain had come not unfrequently in paroxysms of great severity, lasting some hours, with apparently some slight obstruction of the bowels; severe prostration of all the powers, and a very rapid and feeble pulse, so that he had, on several occasions, thought himself dying. Usually his bowels had been regular and the dejections natural, but during these paroxysms there was constipation and distention of the abdomen. There was, however, at no time complete obstruction of the bowels. The urine had been always normal as tested by chemistry and by the microscope. Violent hectic with drenching sweats at night, and repeated severe chills. His pulse had varied from 96 to 130. He had had no thoracic, cephalic, or stomachic symptom—never real jaundice. Soon after the pain began in the side, a swelling had appeared in the same parts which had gradually increased in size. At my visit, I found it extending down from the region of the liver, and almost if not quite continuous with it—its upper outline being lost under the cartilages. The lower part extended down toward the cœcal region, and there had a very definitely rounded outline. It had a somewhat elastic, though doughy, feel, and was slightly tender on pressure. This swelling was evi-

dently connected with, and formed a portion of, a larger mass that extended backward, filling up and rather distending the right renal region. No evident fluctuation could be felt in it.

On auscultation, a slight pleural friction sound, mingled with coarse mucous râles, was heard on full breath, in the lower part of the right lung, and the respiratory murmur was generally rather less in the right lung than in the left.

From the history and the physical signs, I regarded this as a case similar to the two preceding, but less advanced. Though no fluctuation could be perceived, I advised that an attempt should be made to get fluid. I advised this, 1st, because of his long illness and the apparent inability of mere medical remedies (that had been used properly by his attendant) to meet the exigences of the case; 2d, because of the peculiar paroxysms which seemed to threaten death; and, 3d, because there was evidently a commencing of thoracic difficulty, such as had occurred in the two preceding cases. My diagnosis was confirmed by the opinion of the attending physician, Dr. Blake, who, feeling that an operation was called for, had asked a surgeon to see the case a few days previously. That gentleman, while agreeing with our diagnosis, advised waiting until more evident fluctuation should supervene. At my suggestion, Dr. Hodges was called, who agreed with the previous surgeon; but two days afterwards we met again, and then, considering all the circumstances of the case, the commencing pulmonary complication, and the possible other results that might happen during his peculiar paroxysms, it was finally decided to explore in the renal region. Accordingly, after etherizing the patient, an incision and careful dissection were made by Dr. H. in the renal region, and an exploring trocar passed in three different directions into the tumor. No pus followed. But the patient bore the operation well. He was ordered to keep entirely quiet, and to use opiates *pro re nata*. By this course he remained quiet, suffered but little, and had no symptoms of inflammation. The wound supplicated some time quite freely and healthily, but never was there any large and sudden discharge of pus, as from the opening of an abscess. The tumor, however, began gradually to subside, and finally in a few weeks it went away, and the general symptoms at the same time improved. He had never an untoward symptom afterwards, never any approach to the paroxysms of pain and of threatened death, such as he had previously

to the operation. The patient, like his predecessors, has continued since to have uninterrupted health,

Remarks on the preceding Cases, and Analysis of the Symptoms.

These cases were three of the most interesting I have met with since commencing my profession. Singularly enough, they are the only ones I have ever seen of this very rare disease, viz., of perinephritic abscess, as Trousseau calls it. Still further—rare as the disease is in the practice of any one, these specimens all came under my notice during the brief period of nineteen months, and the two severest were within one month of each other. In all of them the abscess pushed upward into the thoracic cavity, and in one instance the perinephritic origin of the thoracic disease was marked by the severe thoracic symptoms that supervened after comparatively mild signs of disease below the diaphragm.

Analyzing them, I find as follows. Patients all males, of the ages 27, 29 and 38 years respectively, and following the professions of physician, printer and clerk. The disease commenced always near the right renal and cœcal region, and in all was preceded by some debilitating influences. Superadded to these, there were in two an unusual physical labor and physical strain. In one there was a special strain (from digging) of the psoas muscles, and in the other exposure to cold and wet in a swamp while working.

The prominent symptom in all was *pain*, generally in the back and at the right renal region; at other times it was more in front and near the cœcum. It was, however, usually felt in both of these places, and sometimes down the legs. This pain caused lameness, which at times was severe and confined the patient to the bed with his knees flexed. At first, this pain was in one case superficial, but gradually it went deeper, and in two it was excruciating and attended with violent paroxysms of distress. There was at times slight obstruction of the bowels, easily removed, however, by enemata or by gentle cathartics. With the dejections came relief to the temporary urgent symptoms. The appetite was lessened or wholly lost, and in two there was nausea; but, as a rule, there was no disturbance of the alimentary canal, nor was there of the urinary functions, except that the urine was in one case temporarily redder than normal. In one case, where the urine was specially examined by chemistry and the microscope, no albumen, blood or

casts were noticed. No jaundice or other disease of the liver in any of them; no general peritonitis; no cephalic symptoms.

In all three, a tumor was found which could be grasped between the two hands placed in front and in the renal region, and filled up that space. It was usually rounded, doughy, rather non-elastic, and generally non-sensitive.

In all there were signs that the abscess extended up into the right pleura, without apparently affecting the liver, after having probably forced its way behind that organ and along the psoas muscles, under the right crus of the diaphragm. This chest affection was in one case revealed only by auscultation and percussion, the respiratory murmur being less in the right back than the left, and some coarse mucous râles on friction were heard at the very lowest part, while no subjective symptoms occurred in that case. In another there were cough and a slight pleuritic effusion, coming on during recovery, and ten days after the opening had been made by the surgeon. Finally, in a third, the thoracic symptoms were so severe that the patient was held to be dying of them, yet the history of the symptoms and the physical signs at examination proved that pleurisy existed on the right side, while acute pneumonia had begun on the left.

In one, only, the breath was foetid, almost fœcal.

The pulse varied exceedingly, sometimes little accelerated, at others being very rapid. In all there were marked chills with fever, and copious night sweating. Emaciation and debility took place in all.

The treatment in all was tonic, with at times leeches, counter-irritants and opiates, with laxative enemata generally when needed during the earlier period. But the opening by the surgeon in the right renal region was in all the first and prominent step towards a cure, which, as we have seen, always took place. In all the bistoury and a free opening were used with great deference to the usual rules of surgery. I cannot but ask whether a trocar, either a small one with a suction pump or one of larger size, might not be tried at least, and thus perhaps one great danger of operating with the bistoury be avoided.

It will be remembered that very severe hæmorrhage occurred in one of our cases. Trousseau names this accident as being at times hazardous. Certainly it was in our first case, the patient being very bloodless, with ringing in ears, &c. Nothing but the promptest surgical skill apparently saved

the patient. In the second and third there was no hæmorrhage, and the happy influence of the operation was undoubted—immediate in one, and more slow but unequivocal in the other.

In two the kidney could be felt, floating, as it were, at the bottom of the abscess.

The recovery was prompt in two, in about six weeks. In the other, where the hæmorrhage occurred, the patient had a longer convalescence, and did not resume business till after six months.

A few words on the Literature of this subject.

Great Britain seems almost wholly to have ignored the existence of this disease, so far at least as it may be considered one to which physicians would be summoned. Neither Graves, nor Watson, Aitken, Todd, Tanner nor Chambers, allude to it. Bennet, of Edinburgh, gives a few cases of abscess of the kidney—but not outside of it, except secondarily. Neither Dr. Wood nor Dr. Flint in this country notice it.

Trousseau* (preceded by Rayer,† Parmentier and others, who have given cases), first made an elaborate article upon the subject. Monsieur Trousseau gives many causes: fatigue, strong muscular efforts, contusions, repeated and violent shakings of the kidney, renal calculi, typhoid and puerperal fevers, &c.

He speaks of the very great infrequency of the disease, and of its very insidious approach. He alludes to most of the symptoms recorded in my cases. Among them he dwells chiefly on the swelling in the lumbar region, the pain in the same part, the chills and fever, emaciation and debility. He does not particularly allude to two prominent facts noticed in all of our cases, viz.: the lameness in the movements of the right legs, owing to an interference with the free play of the psoas muscles, and the extreme frequency of pulmonary and pleuritic complications in consequence of the extension of the disease. And yet the anatomical structure of the parts concerned proves that nothing can be easier than the transmission by contiguity of the perinephritic abscess into the thorax. The psoas muscle extends up into the thorax behind the pillar of the diaphragm. Hence any abscess pressing on or inside the muscle, will very readily gain access to parts above the diaphragm. It was the remembrance of the serious complications caused by this anatomical arrangement in the preceding cases, that induced me in the last case to

urge a speedy operation, when, according to the common rules of surgery and the absence of distinct fluctuation, a delay would naturally have suggested itself. In fact, one surgeon urged delay. Dr. Hodges, I think, was somewhat influenced by representations from Dr. Blake and myself, urging him to explore, at least.

It is a singular fact, however, that notwithstanding the pus in these cases goes directly back of the liver, jaundice was not seen in our cases, and is, I think, a rare complication of the disease.

INGROWING NAIL.

MR. EDITOR,—Like most medical practitioners of many years' practice, I have adopted the various methods taught for the cure of ingrowing toe-nail, most of which have resulted in failures. For several years I have been in the habit of using in all such cases a *saturated* solution of persulphate of iron, with uniform success. Saturate a bit of cotton-wool with the iron and insinuate it, with a piece of stick or whalebone, between the fungous flesh and nail, letting the cotton reflex back over the flesh on the outside also. Success depends much upon the thoroughness with which the bit of cotton is pushed down to the bottom or edge of the ingrowing nail.

L. P. BABB, M.D.

Eastport, Me., June 30, 1868.

USE OF PAPER FOR SURGICAL DRESSINGS.—Dr. Addison Hewson (*Penn. Hosp. Reports*), struck with the fact that paper had been used in the place of lint as a surgical dressing in the recent campaigns of the Prussian army, tested its practicability at the Pennsylvania Hospital, and, after numerous experiments, has settled on the common newspaper as the best substitute for lint, linen rags or muslin.

The advantage of economy is no small consideration, as a yard of good patent lint costs thirty-three cents, while a sheet of paper, which equals that article in usefulness as a surgical dressing, costs only one cent. Dr. Hewson also uses Manilla paper coated with a thin layer of yellow wax in place of oiled silk. In this way a saving of from four to six hundred per cent. is gained; besides affording the advantage of discarding everything appertaining to the dressings each day, by which one source, at least, of renewing contamination experienced in the employment of oiled silk is avoided.—*Medical Record*.

* Clin. Med., vol. iii. p. 713, Paris.
† Maladies des Reins, 1839.