

NEPHRO-LITHOTOMY.¹

RECOVERY OF COMPARATIVELY GOOD AND CONTINUOUS HEALTH DURING THE PAST EIGHT YEARS.

BY FRANK E. BUNDY, M. D., AND WILLIAM INGALLS, M. D.

OCTOBER 4, 1872, I was called to see Mrs. G. and attended her through a miscarriage. December 9th I was called again on account of excessive flowing, which had continued more or less since her miscarriage. It was at this time that she drew my attention to a trouble with her bladder, from which she had suffered for years. I learned the following concerning her previous history: She was thirty-one years old; her father died in California at the age of ninety-eight from the results of vaccination; her mother at the age of forty-five at the City Hospital after an amputation of the thigh, for disease of the knee-joint; she had four brothers and two sisters in good health; one brother had recently died of consumption. She was married at the age of fifteen, soon after her first menstruation. The menstrual discharge has always been profuse. She has had two children and two miscarriages. Her labors were natural.

In 1859, about two years after marriage, she began to suffer from frequent and painful micturition, which became so distressing that she finally submitted to an examination, which disclosed a uterine polypus as large as a good-sized orange; this was removed by Dr. Storer, and she regained perfect health.

In 1864, while sitting in a chair partially asleep, and resting the left side of her head on a table, she was struck from behind a severe blow on her right side and back with a chair. This blow was followed by severe illness, which obliged her to keep her bed for several days; she had great pain and soreness in the region injured, from which she never entirely recovered.

In March of the next year, 1865, on stepping from a horse car, she was seized with intense pain in the region of the right kidney; it was with great difficulty that she could be got home and into bed. The pain extended down the thigh and leg, and was so severe that morphia in large doses failed to control it, and she was kept for hours under the influence of ether; she had constant nausea and vomiting, and frequent, painful, and scanty micturition. She was confined to her bed for three weeks, and it was five weeks before she could use the right leg. She slowly recovered, but for more than a year at each menstruation she had a return of her distressing symptoms. She has never been free for any length of time from trouble while urinating. Some time in 1869 or 1870 she first noticed, in addition to the brick-dust sediment, which was almost constant, a deposit of thick white matter in the chamber; her distress increased rapidly, and finally the desire to pass water was so frequent at night as to seriously interfere with her rest, and she would frequently find herself asleep sitting on the vessel; she could relieve herself by pressing with her hands over the bladder, and forcing out what she said looked more like white soft soap than anything else. When about the house, she wore a napkin constantly. What follows is from notes.

December 10th. An examination of the urine

shows the amount and color natural, a large quantity of mucus, some pus, and a little albumen. A vaginal examination finds the uterus retroflexed, the fundus easily reached in the posterior cul-de-sac, and very tender; the depth of the cavity is five inches; the bladder is also retroflexed so that in passing the catheter the beak is turned backwards. There are several external hæmorrhoids and evident disease of the rectum.

January 24th. Since last date, Mrs. G. has been treated with reference to the condition of her bladder and rectum. The bladder has been cleansed daily with carbolized water, and she has taken medicine internally; as a result, the organ is less sensitive, and the amount of pus and mucus is less. She has menstruated once, the amount of discharge being small, and attended with hæmorrhage from the rectum and bladder. Ether was given, and three small hæmorrhoidal tumors removed.

February 22d. Since the last date there has been but little change in the condition of the patient. Under ether, applied acid nitrate of mercury to several patches of diseased mucus membrane in the rectum. She has menstruated again, attended as before by a bloody discharge from bladder and rectum.

February 28th. Was called in great haste, and found that instead of using a soothing injection that I had ordered, Mrs. G. had injected an ounce of dilute nitric acid into her rectum. The pain and distress resulting from this accident continued for several days, but it was the last application needed for the rectum.

April 23d. Drs. Ingalls and Bixby in consultation. Since February 28th the history of the case has been, in short, as follows:—

February 29th, the day after the injection of the nitric acid, great pain was felt in the region of the liver; on examination a tumor was easily defined, hard, and excessively tender; this I took to be an enlarged liver. The area of dullness gradually increased for two weeks, until it extended down to within two inches of the crest of the ilium and anteriorly to within an inch of the umbilicus. The patient is compelled to lie on her back or right side, any attempt to turn on the left causing great pain. By the use of leeches, poultices, blisters, and tincture of iodine, the pain, tenderness, and swelling has diminished. For the last three weeks there has been almost constant nausea and frequent vomiting; she has complained of severe aching in her right side, and at times of excessive pain in the right umbilical and lumbar regions, and there is also a spot about the size of a half dollar, three inches to the right, and a little above the umbilicus, that is very tender on pressure. The pulse has been natural, except when suffering great pain; the tongue more red than natural, but always moist and free from coating. The bowels are constipated; she has no appetite, and her nights, as a rule, are rendered sleepless by pain. The bladder, although still sensitive, is much less so than it was two months ago. She passes during the twenty-four hours about four pints of urine, in which there are about four ounces of pus and but little mucus; the odor is highly offensive.

Although she has been in bed five weeks, has taken but little nourishment, has suffered almost constant pain, and had but little sleep, neither her strength nor flesh seem to be seriously impaired. She is bright

¹ Read before the Surgical Section of the Suffolk District Medical Society, March 25, 1882, by Dr. Ingalls.

and cheerful and invariably answers to my "How are you this morning?" "Nicely, I thank you."

Night before last she had a severe chill lasting an hour, and last night another.

After a careful examination and consultation, it was decided that either within the abdominal cavity or in the walls, there existed a collection of fluid, probably pus, and that the case might prove to be one of perinephritic abscess. It was decided to aspirate the tumor, and the point of excessive tenderness near the umbilicus was selected for the insertion of the needle. About one ounce of bloody fluid of an urinous odor was drawn and saved for examination. No ether was given, and the operation was well borne.

The next day, April 24th, Mrs. G. seemed none the worse, and in some respects better; she had passed a fair night, and, for the first time for many months, did not urinate from bed-time until morning. The nausea, which has been constant for three weeks, has entirely left her. She reports that after the operation yesterday, she passed from the bladder about a half cup of clear blood. The fluid drawn by the aspirator was examined and found to contain blood, pus, and albumen, and had a strong smell of urine.

The evening of April 24th was called in great haste. Found Mrs. G. suffering paroxysms of intense pain, which she said seemed like a cramp; it came on about noon in the small of her back, went through to her stomach, and then down into her pelvis; during the intervals, which last from three to ten minutes, she is perfectly free from pain. Large doses of opium and hot applications relieved her by midnight.

May 2d. Since the use of the aspirator the patient, with the exceptions mentioned, has been quite comfortable; has had little pain, little if any nausea, less frequent micturition, more sleep, and a better relish for food. The tumor seems to have decreased somewhat in size and is less tender. She averages about three pints of urine a day, in which there is from one drachm to one ounce of pus. She has taken tonics and a decoction of dog-grass. Large and hot flaxseed poultices have been applied, and the daily washing out the bladder with carbolized water continued. The capacity of the bladder is eight ounces.

Saturday, May 3d. Patient has had a bad night. No sleep on account of increased pain; her skin is sallow, her eyes dull and sunken, her face drawn and pinched, and her whole appearance indicates serious internal disease. Her pulse 72, weak and small, and her hands and feet are cold and clammy. The whole abdomen is swollen and tender, but especially over the tumor.

Sunday morning, May 4th. Dr. Ingalls in consultation. No improvement. When freely etherized an exploring trocar was pushed into the lumbar region between the eleventh rib and the crest of the ilium; a small quantity of bloody fluid followed. An incision about an inch long was then made into the cavity, from which escaped about four ounces of blood and pus. On passing the finger into this cavity, a considerable portion of the surface of the kidney could be felt; on the upper anterior part there was a small depression, in other respects it was natural to the touch. The operation was at ten o'clock; at noon she had a severe chill, with paroxysms of severe pain, such as followed the use of the aspirator; by three o'clock P. M. reaction was fully established. At eleven P. M. pulse 120; temperature 102° F. Tongue red and dry,

and face flushed. The pain is controlled by morphia, and a hot flaxseed poultice covers the entire abdomen.

Monday morning, May 5th. Had a bad night; in spite of the opium the pain is severe; it shoots from the side into the stomach and then into the pelvis. Pulse 118; temperature 102° F. Tongue red, dry, cracked, and centre covered with a brown coat. Abdomen much distended with gas. No indications of peritonitis. Takes beef tea, brandy, and morphia. Eleven o'clock P. M. Perhaps less pain this afternoon; has made and signed her will. Thirteen ounces of urine were drawn, pinkish in color, no odor, and no pus apparent. Pulse 130; temperature 102° F. The whole side is very sore, and she moves with great difficulty.

Tuesday morning, May 6th. Dr. Ingalls saw the patient with me. Had a better night, seems brighter and more hopeful. Pulse 110; temperature 102° F. Tongue red, but moist. Suffers from tympanitis. The region of the wound is very tender, and there is a small discharge of pus. Washed out the bladder, changed her clothes, and moved her to the other side of the bed, all of which she bore well. A portion of her urine taken yesterday was examined with the following result:—

Reaction acid. Sediment one fourth inch, pink, and consisting of urates. Albumen present in considerable quantities.

By microscope—Granular casts and pus in small quantities.

Tuesday evening. Pulse 118; temperature 100.7° F. Drew ten ounces urine free from pus, and natural in appearance.

Wednesday morning, May 7th. Looks bright and cheerful; her face has lost its sallow hue. Pulse 110; temperature 100° F. Tongue red, but quite moist. There is a discharge from the opening of a thin, colorless, and odorless fluid which keeps her constantly wet. The discharge of pus does not amount to more than one ounce in twenty-four hours.

Thursday, May 8th. Not so well this morning; had more pain last night. I drew six ounces of urine. The discharge of fluid from the opening is profuse.

Friday, May 9th. A decided improvement. Pulse 96, of fair strength; temperature 98.75° F. Tongue more healthy, and she has more appetite. Less tympanitis.

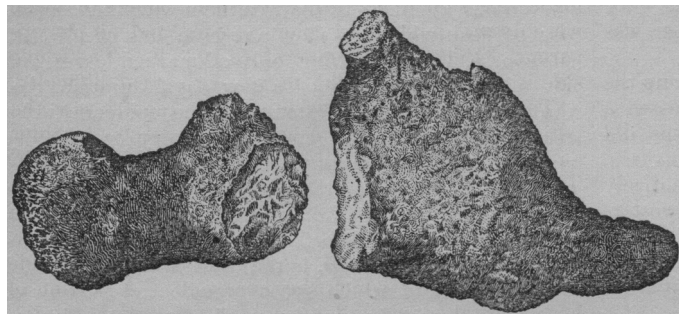
Saturday, May 10th. Had a good night. Pulse 76; temperature 98.75° F. Was moved into a large room.

May 18th. Mrs. G. has been slowly, but surely, gaining; she sits up in bed, has been moved to a lounge, and says she feels strong enough to walk; she takes a fair quantity of food with good relish. The appearance of the abdomen is natural, and the region of the kidney still somewhat tender on pressure. The average amount of urine passed for the twenty-four hours has been until to-day seven ounces; to-day she passed sixteen ounces, and with the exception of a little pus, it looked natural. The discharge of pus from the cavity has increased, and the amount of fluid is so profuse as to cause great annoyance, frequently wetting through two large folded sheets, and often at night wetting her clothes, her pillows, and even her hair.

From the last date, May 18th, to October 1st there accrued in the progress of the case nothing of importance. She spent her time between the bed and lounge, was able to take a few steps about the room,

and twice rode out. The amount of urine passed was variable, depending, as it seemed, on the quantity of discharge from the side. On two occasions she had retention of urine for twenty-four hours, relieved, as she expressed it, by something giving way, and followed by a large quantity of blood.

On September 17th I gave to Dr. Clement four ounces of the discharge from the cavity, and the same amount of urine, for examination, which he kindly made, and gave me the following report: "The specimen of urine contains albumen, pus, and blood cor-



puscles. The other specimen contains albumen, pus, blood, crystals of triple phosphate, and, with nitric acid, a few crystals of nitrate of urea."

October 1st. Drs. Cheever, Ingalls, and Blake in consultation. For several days the discharge from the cavity has been gradually decreasing; the abdomen is much distended, and the region of the right kidney painful and tender. After consultation it was decided that removal of the kidney should be advised, or, the patient not consenting to this operation, a free incision should be made, allowing a more ready escape of the discharge.

October 8th. There being no improvement in her condition, and Mrs. G. refusing to submit to the grave operation of removal of the kidney, it was decided to make a free opening.

The operation was done by Dr. Ingalls, who furnished, in a few days after, the following description:—

"The sinus being narrow, barely admitted the director, which entered a distance of one and a half inches. With a scalpel upon the director, an opening was made large enough to admit the forefinger, which passed downwards, and a little forwards, into a sac or cavity, which was smooth to the touch, and of the length, nearly, of the finger, and otherwise a little larger. No fluid escaped through the incision other than a small quantity of blood. As, evidently, the purpose for which the operation was made was not accomplished, the finger searched for and found a narrow opening at the upper end of the inner side of the cavity mentioned, and nearly opposite to the point of entrance of the director within it. Introducing the director into this newly-found orifice, it was passed onwards, easily, its whole length, and upon this the scalpel was plunged to the end, and a little beyond, when there gushed forth a quantity of the same kind of fluid which had been flowing for so long a time through the sinus. There were six measured ounces, and at least two ounces more which were not caught. The finger was now introduced as far as possible, and entered a cavity with ragged walls, the size of which I venture to compare to that of a full-grown horse-chestnut. Searching this, at the posterior wall, the finger came in contact

with what seemed to be a calculus, and which proved to be one. Little by little the soft substance embracing the stone was loosened by the finger, and finally the larger fragment was withdrawn by the aid of forceps, and in a few moments, by the same process, the smaller piece; two small fragments broke off at the first touch of the finger.

"The stone, with its fragments, weighs ten drachms and four grains."

This operation was followed, as the other had been, by days of severe illness, attended with high fever and great pain. The patient gradually improved, and in eight weeks was able to be moved to her reclining chair.

January 28, 1874. The discharge having again diminished, owing to a closing up of the sinus, followed by increased pain, swelling, and tenderness, another operation was made by Dr. Ingalls. The original sinus was enlarged to the bottom of the cavity. The probe entered four and one half inches. At a point two inches to the right, and a little above, another opening was made, and the two connected by rubber tubing.

April 15, 1882. The history of this case for the last eight years can be condensed into a few lines.

The rubber drainage tube was retained for three days, and then escaped, and all subsequent attempts to replace it or to assist nature in keeping the cavity well drained were futile on account of the great tenderness of the sinus. In October, 1874, after two or three days of diminished discharge, Mrs. G. was seized with a severe chill, which lasted several hours, during which time she was unconscious. I was sent for, but being out of town another physician was called. On my return I learned that after the chill she had several copious evacuations from the bowels, which resembled in appearance and odor the discharge from the side. I am unable to say positively, but my opinion is that the over-distended cavity found a vent through the intestine. This chill was similar to though more severe than several which she has had since 1874; the last occurred about six months ago.

In June, 1876, she was able, with the aid of crutches, to take a few steps about her room; since then she has been constantly improving, and is now able to walk and ride without discomfort, and says that, with the exception of the soreness in her side, she feels perfectly well.

When the sinus is discharging freely the right side is smaller than the left, but if the flow is hindered the right lumbar region becomes swollen and tender. She is unable to lie down, and sleeps sitting up in bed, any attempt to lie down bringing on severe cramps in her side. Her urine is natural in appearance and quantity.

The greatest annoyance has arisen from the profuse discharge from the sinus; until two years ago she used large quantities of cloth, wads of tow, or a sponge, to absorb this fluid; at that time, at my suggestion, Dr. Green, of Leach & Green, undertook to contrive something for her relief, and the result is all that could be asked for. The apparatus consists of a silver plated reservoir and shield, concave on its inner surface, and convex on the outer. The plate forming the inner surface only covers the lower half, and its upper edge forms a flange, which fits so accurately to the body just below the sinus that all discharges must drain into

the receptacle below. The outer plate extends high enough to completely cover and protect the opening from contact with the clothing. It is held in position by a suspender from the opposite shoulder, and a belt around the hips. To the lower extremity of the reservoir is attached a short rubber tube leading to a rubber bag, holding a pint. The inlet to this bag is provided with a valve, to prevent reflow, and also a stop-cock at its lower extremity, by which its contents can be drawn off. This bag she is obliged to empty, on an average, twelve times during the twenty-four hours.

OBSERVATIONS ON CATARRHAL FEVER.¹

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THOSE engaged in active medical practice must have been struck with the widespread prevalence of an epidemic of catarrhal fever presenting many curious features. As it is only by a study of all such epidemics that we shall ever learn fully to understand this dissimilar malady, I trust it may not prove without value to record before the College my individual experience with it.

The disorder begins almost invariably in a sudden manner, sometimes with a chill, quite as often without it. I have known persons well in the afternoon, and in the evening with a decided fever, and suffering all the discomforts of the catarrhal malady. Among the first signs of this are pain in the throat, and a feeling as if it were filled up, yet looking at it nothing is seen but redness and some relaxation. Fever is by this time developed, at first of only moderate intensity, and with a quick but very compressible pulse. Dry cough soon becomes a feature, occurring not infrequently in paroxysms, and now and then combined with loss of voice, and with difficulty in swallowing. The chest walls are sore, and the cough is painful. Frequent, rather difficult breathing, not associated with any marked physical signs except feebleness of respiratory murmur, is a common symptom. As the malady progresses, more obvious signs of bronchial catarrh may happen, and harsh breathing and dry râles be found on listening to the chest. But here and there will be a spot still marked by feeble breathing, a spot of seeming congestion of the lung and of impaired expansion. Scanty tenacious sputum, blood streaked, is perhaps noticed, to become more copious and purulent only in cases in which the bronchial catarrh is prominent. The eyes are, as a rule, injected or watery, but nasal catarrh does not exist. Yet late in the disease it may come on, and the malady pass off, in the language of the patient, by a bad cold in the head. Besides these catarrhal symptoms, are pains, — chest pains, pains in the neck and scalp, pains in the loins and limbs. The chest pains are most peculiar and severe. They are sharp and like pleurisy, indeed they are so regarded. But only impaired respiration exists, friction does not, save in the rarest instances; and the character of the pain, its having its seat in the chest walls, is shown by its transferring itself with rapidity from one side to the other.

As regards the nervous symptoms, great lassitude, restless nights, and marked hebetude strike us most.

¹ Read before the College of Physicians of Philadelphia.

With reference to the drowsiness, it is often so decided that it is difficult to believe that the patient has not taken opium. Delirium I did not once encounter, nor were the cutaneous hyperæsthesiæ as common as I have noticed them in other epidemics. In truth, on the whole, the nervous phenomena, except the hebetude, were less pronounced.

The duration of the disease is a short one. It does not, unless kept up by complications, exceed a week; nor did I see a fatal case unless from complications. During the rather tardy convalescence, what forces itself on our attention is the weakness with the decided loss of flesh which so short a disease has occasioned. Of course, I am speaking only of marked cases, and not of the slight ones of a few days' duration that abound as a light manifestation of the epidemic influence. Glandular enlargements are very occasionally met with during the convalescence; more often did I notice inflammation of the antrum with its distracting headache and sense of fullness and pain.

I have just alluded to the complications. Pneumonia, catarrhal and lobar, is the most common. And I am quite clear that the great prevalence just now of pneumonia must be mainly ascribed to the influence of the poison of the catarrhal fever. But this is too large a question to enter into here, as it would equally lead me too far to inquire whether there are any clinical differences which separate these pneumonias of epidemic origin from those originating from other causes.

Besides pneumonia, I have met with overwhelming attacks of pulmonary congestion. One, for instance, seen with a medical friend in which a bright lad of sixteen perished who had not been ill forty-eight hours; perished with bloody tenacious sputum, temperature of 104.8° F., intense dyspnoea, heavily congested lungs, terminating in œdema, and amid vanishing pulse, wild struggles for life, and signs of non-aerated blood, in whom, nevertheless, there were no spots of dullness or bronchial breathing or other evidences of consolidation to be detected. Then I saw, with Dr. Herbert Norris, in a previously healthy, although rather delicate, young woman, who was seized with catarrhal fever just as her little girl was fairly convalescent from it, rapid phthisis develop itself, primarily in the lung which, three or four days after the acute setting in of the catarrhal malady, had slowly advanced to imperfect consolidation at its lower part, then more rapidly in the right. On the side first affected a large cavity formed in the lower lobe, and became manifest on about the twelfth day of the disease. The whole duration of the case was just three weeks; the only instance of tubercular affection to be traced in the family was that of an aunt.

The state of the skin is at first dry and harsh. It becomes soft and clammy as the disorder advances, and copious sweats, especially at night, are common. The face at the outset is apt to be flushed, and what has particularly struck me in this epidemic as a feature which I cannot recall to have noticed so strikingly before, is a curious irregular mottling of the surface. This is very marked on the neck and breast, and might easily cause the case to be mistaken for scarlet fever or for German measles. But when closely looked at, it is seen that the capillary injection is really quite unlike the eruption of either.

As temperature observations on catarrhal fever are very imperfect, I recorded whenever a good opportu-