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*** START OF THE PROJECT GUTENBERG EBOOK REPORT ON SURGERY TO THE SANTA CLARA COUNTY MEDICAL SOCIETY ***

REPORT
ON
SURGERY
TO THE
SANTA CLARA COUNTY
Medical Society.

BY
J. BRADFORD COX, M. D.

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REPORT ON SURGERY.

In presenting this report I will not attempt to give any historical data connected with the subject of surgery, since that has been ably done in the report of last year.

I shall assume, and that without hesitation, that surgery is a science, properly so-called. That it is an art, is also true. But what is science? What is art? Science is knowledge. Art the application of that knowledge. To be more explicit, science is the knowledge we possess of nature and her laws; or, more properly speaking, God and His laws.

When we say that oxygen and iron unite and form ferric oxide, we express a law of matter: that is, that these elements have an *affinity* for each other. A collection of similar facts and their systematic arrangement, we call chemistry. Or we might say, chemistry is the science or knowledge of the elementary substances and their laws of combination.

When we say that about one-eighth of the entire weight of the human body is a fluid, and is continually in motion within certain channels called blood vessels, we express a law of life, or a vital process. When we say this fluid is composed of certain anatomical elements, as the plasma, red corpuscles, leucocytes and granules, we go a step further in the problem of vitality. When we say that certain nutritious principles are taken into this circulating fluid by means of digestion and absorption, and that by assimilation they are converted into the various tissues of the body, we think we have solved the problem, and know just the essence of life itself. But what makes the blood hold these nutritious principles in solution until the very instant they come in contact with the tissue they are designed to renovate, and then, as it were, precipitate them as new tissue? You say they are in chemical solution, and the substance of contact acts as a re-agent, and thus the deposit of new tissue is only in accordance with the laws of chemistry. Perhaps this is so. Let us see as to the proofs. In the analysis of the blood plasma, we find chlorides of sodium, potassium and ammonium, carbonates of potassa, soda, lime and magnesia, phosphates of lime, magnesia, potassa, and probably iron; also basic phosphates and neutral phosphates of soda, and sulphates of potassa and soda. Now in the analysis of those tissues composed principally of inorganic substances or compounds, it will be seen that these same salts are found in the tissues themselves.

So also the organic compounds lactate of soda, lactate of lime, pneumat of soda, margarate of soda, stearate of soda, butyrate of soda, oleine, margarine, stearine, lecethine, glucose, inosite, plasmine, serine, peptones, etc., are found alike in the tissues and in the blood plasma. That they are in solution in the plasma is well known,—that they are in a solid or precipitated form in the tissues is also true,—and that the tissues are supplied from the blood is also evident,—because the blood is the only part that receives supplies of material direct from the food taken and digested.

That carbonate of lime and phosphate of lime are precipitated or assimilated from the plasma to form bone, is admitted by all physiologists. That the carbonates and phosphates already deposited act as the re-agent to precipitate fresh supplies from the plasma is not a demonstrated fact, but may be inferred. So also with the other tissues. Should this be admitted without positive evidence we would not then be at the end of our problem;—for the question may be asked as to what causes the first or initial deposit. Here we must stop and acknowledge our ignorance.

But you may now ask what all this physiology and chemistry of the plasma has to do with a report on surgery. I propose to use it for the purpose of explaining some peculiarities in the process of repair in surgical cases.

A few months ago I had a case of delayed union in a fracture of the tibia, at the hospital, and spent more time in waiting for nature, unassisted, to accomplish a cure, than I should ever spend again. One week after putting the patient on the use of ten grain doses of hypophosphite of lime, I had the pleasure of seeing bony union commencing. And why? Simply because the quantity of phosphate of lime in solution in the plasma was not sufficient to supply the waste of bone tissue in all parts of the body, and at the same time furnish a supply for the provisional callus which is thrown out in the repair of fractures.

In September, 1878, August G—, aged 18 years, single, a native of Switzerland, was admitted to the Santa Clara County Hospital with incipient spinal disease. He was of that peculiar temperament which indicates a scrofulous cachexia. The fifth dorsal vertebra was sufficiently prominent to indicate the sight where the attack was being made by the enemy. There was considerable tenderness on pressure; slightly accelerated pulse, and elevated temperature;—in other words, a well defined case;—one which would have resulted in caries and deformity within a few months. By the administration of ten grain doses of hypophosphite of lime for several weeks, I had the pleasure of seeing recovery take place. Reasoning by analogy, I am led to conclude that the nature of the wound should, to a great extent, govern the kind of food given the patient during the treatment. In many cases of surgery, medicines are not necessary. But in some exceptional cases, as in similar ones to those above noticed, medicine is demanded. And in all cases of flesh wounds, I believe the patient will be benefited by a liberal diet of animal food; that is, after the first inflammatory condition has subsided.

Why this is so, is simply because those very materials are furnished to the system which are

required for the repair of the tissues injured, viz., the organic compounds. In flesh wounds of weak and debilitated persons which are slow in healing, a diet of beef tea, eggs, oysters, etc., will often bring about a rapid improvement. Thus, we see that chemistry, organic and inorganic, has something to do with surgery.

I will now present the following cases which have seemed of special interest to me:

CASE FIRST.—In 1874, while in the mountains on the Trinity river, Dr. — was kicked by a mule in such a manner as to rupture the ligamentum patellae. The tendon of the quadriceps femoris, at once drew the patella at least two inches above its normal position. Of course he was unable to walk, but was taken to a house near by. With some assistance from a brother physician the patella was brought down to its place, but it would not remain. I suggested the use of a gutta percha mould or covering for the knee. Without much difficulty, a piece one-fourth of an inch thick, softened in hot water, was applied, and kept in place by means of compresses and bandages until it hardened. This made a perfect and firm, splint fitting all the inequalities of the knee, covering all but the posterior part of the leg, and extending three or four inches above and below the patella. With this bound moderately tight to the leg by a roller bandage, it was simply an impossibility for the patella to move from its proper position. At the end of about a week the patient left the bed, and could walk about, but, of course, with a stiff leg. He wore this splint or cap for the knee for about four weeks, when I found he could leave it off at night without much pain. Continued to wear it during the day for perhaps a fortnight, when I found he could leave it off entirely.

I mention this case partly for the purpose of calling the attention of the members of the society to the use of gutta percha as a material for splints. It is not adapted to all cases of fracture; but in very many cases I find nothing else so satisfactory. I have thought that in fracture of the patella it would be peculiarly valuable, as it is so readily adjusted to all the inequalities of the knee joint.

CASE SECOND.—Jerome De—, aged fifty-four years, native of France, single, was admitted to the Santa Clara County Hospital, July 20th, 1878. He was suffering from rheumatism, or at least complained of pains in various parts of the body, more particularly the long bones of the arms and legs. These pains were worse at night, pulse varying between 80 and 90, temperature natural. Suspecting a specific origin for this malady, I put him on the use of iodide potassium, with increasing doses. He slowly improved with the exception of a pain in the left humerus, anteriorly, and in the upper part of the middle third. This became localized to a spot no larger than a twenty-five cent piece. At times the pain was intense and excruciating; and about a week from admission this spot seemed quite tender to the touch. After the use of a blister and tincture of iodine for a week, he was somewhat relieved. Not entirely, however, for at times the pain was very severe. On Aug. 7th, he left the hospital thinking he could do some work. The next day, while attempting to climb a fence, and while in the act of raising the body by the arms, the left humerus was fractured transversely at the exact point of his previous suffering.

He was again admitted to the hospital, and the fracture dressed in the usual manner. After five or six days a gutta percha splint was used which encircled the arm. Bony union was slow in taking place. However, on Oct. 3d, nearly two months from the date of the fracture, he left the hospital, the union being complete, and he being entirely relieved from his pain; in fact, he was relieved from the moment of the fracture.

This case presents a question in pathology which is of interest. Was there a localized periostitis at this point? If so, why was it not entirely relieved by the treatment which consisted of blisters and iodine, externally, and mercury and iodide potassium internally? Was there a deficiency of nutrition at this point? or anemia from some change in the nutrient artery,—the result of the periostitis of the long bones? Or was it incipient necrosis? Prof. Hamilton gives the record of a case of fracture of the humerus, from muscular action, taking place three several times in the same individual, each time in a different place.

CASE THIRD.—Dec. 29th, 1878, was called to see Mr. —, male, married, aged about 40 years. Has led an out-door, active life. Has always been healthy. No venereal taint. Nervous temperament, spare built, and weighs about 140 pounds. Present condition: Has been sick two or three days; the attack commenced with a chill, followed by fever; has had fever ever since the chill; complains of pains in the back and legs; has vomited considerable; bowels costive; tongue coated; severe pain in right side corresponding to lower part of the lung, which I found solidified; there is considerable cough.

Ordered a cathartic; to be followed by an anti-pyretic of acetate of ammonia and aconite, and a blister over the lower part of the right lung. Continued this treatment for three or four days, when the pneumonia began to subside, and at the end of about ten days I considered my patient convalescent. About this time I was sent for in great haste after night. The patient, who is a very intelligent man, said he had felt worse during the day, and in the evening, his knee, which had

been somewhat painful for two or three days, had become exceedingly painful. I gave morphine, hypodermically, and went home, leaving some morphine for the night.

The next day I saw him. The pain had been relieved by the morphine, still occasionally it was quite severe. There was no redness or heat, or even tenderness; nothing unnatural about the knee except pain, which was aggravated by any attempt to move the leg.

Ordered quinine as a tonic, and pill "C. C." as a cathartic. Bandaged the leg pretty tightly from the toes to above the knee. The urine was natural; pulse and temperature only slightly elevated. After six or seven days of these symptoms, the knee began to feel hot and became very slightly swollen. Ordered a small blister over the inside of the knee as the greatest amount of pain seemed to be here. Dressed it with tartar-emetic ointment until the skin was very sore; using iodine on other parts of the knee. Used iodide potassium and colchicum, internally. This treatment for five days seemed to do no good. On Jan. 17th, twenty-two days from the beginning of his illness, and about twelve days from the first appearance of symptoms denoting any local trouble at the knee, a consultation was held, the result of which was a blister over the whole of the knee, to be dressed with unguentum hydrargiri. The inflammation was but little influenced by this or any other treatment. The knee continued to slowly and surely enlarge. And this extended upward without first producing any great distention of the synovial sack under the patella. There seemed to be simply enlargement of all the tissues of the lower part of the thigh. This continued until about the 1st of Feb. when, from the general appearance of the patient, viz: a typhoid condition, feeble pulse, coated tongue, emaciation, loss of appetite, as well as from the local appearance of the inside of the knee, I suspected pus within the joint. Accordingly, I introduced an exploring needle into the inner part of the joint just above and anterior to the insertion of the tendon of the semimembranosus muscle. Finding pus, I made an incision only about half an inch long, and squeezed out perhaps an ounce of pus. Closed this up and again bandaged the leg. There was but very little pus discharged from this opening afterward, not, however, for want of drainage, since the cut was kept open by introducing the probe occasionally. About the 9th or 10th of Feb. fluctuation became quite apparent along the outer and lower part of the thigh. On Feb. 12th, consultation was again had, when fluctuation being very well marked over a considerable portion of the thigh in its lower and middle thirds, after giving the patient chloroform, an incision was made three inches long on the outer and posterior part of the thigh, from the junction of the lower with the middle third, downward through the posterior part of the vastus externus muscle. About two quarts of laudable pus was discharged. By introducing the finger upward and downward, the periosteum could be felt smooth except within the knee joint, for this could be distinctly felt, the finger passing readily between the ends of the femur and tibia, and beneath the patella; the crucial and lateral ligaments seemed to be gone, and the cartilages somewhat roughened. A drainage tube was put in, the leg bandaged from the toes to the trochanter major, with compresses so arranged as to obliterate the sack, if possible.

The patient, up to this time, had been slowly losing flesh, and was now very much emaciated. A general typhoid condition existed, the temperature ranging from 101 to 103.5; the pulse from 115 to 135, tongue coated, poor appetite, and in short, the patient in a very critical condition. The use of chloroform, and the shock from the evacuation of the pus, added to the gravity of all the symptoms, and for about two weeks the patient was in great danger of death from asthenia. However, by liberal use of whisky, quinia, beef tea, cod liver oil, etc., he slowly rallied. Two smaller abscesses formed below the knee, but those gave no great anxiety, not so much as some bed sores on the back and hips. The sack or pouch became gradually obliterated, down as far as the knee. The cavity of the joint, however, did not seem to be well drained from the opening in the thigh, notwithstanding it had been kept open freely by tents. About three weeks from this last operation, the sinus or pouch within the knee-joint being so imperfectly drained as above indicated, I made an opening directly into the joint at the outer and posterior part, one inch long, through which I could introduce the probe between the ends of the femur and tibia, without any difficulty, through all parts of the joint. However, I discovered no necrosed bone by so doing. Put a tent into this opening, and let the one above heal up, which it did in about two weeks. This latter opening into the joint I kept open by means of tents until the joint became ankylosed and ceased to discharge pus. The patient made a slow and steady recovery, and about the middle of April was able to get out doors again.

The special points of interest in this case seem to be the obscure and insidious mode of attack; the slow progress of the inflammation, it being rather sub-acute than acute; and the fact of its being a sequela of pneumonia.

Prof. Gross, in his excellent work on surgery, says, "synovitis, in the great majority of cases, arises from the effects of rheumatism, gout, eruptive fevers, syphilis, scrofula, and the inordinate use of mercury."

Prof. Hamilton, in "Principles and Practice of Surgery," says, "synovitis may be caused by exposure to cold, or may occur as a consequence of a rheumatic, strumous, or syphilitic cachexia, as a gonorrhœal complication, as a sequela of fevers, and from many other causes, whose relation to the disease in question may not always be easily determined."

Since there was no local injury to the knee in this case which could have caused the disease, we must seek some other cause for it.

I have thought that its origin might be accounted for on the principle of metastasis of morbid material. The patient had pneumonia which passed through its several stages somewhat rapidly, resolution taking place about the end of the second week. The symptoms of this were well

marked, viz: a chill followed by fever, cough, brick-dust sputa, delirium, pain over lower half of right lung, which was solidified, and afterward gave the crepitant and sub-crepitant roles. Could not the morbid material, which entered the circulation from the re-absorption of the deposit in the solidified lung, have been carried to the synovial membrane of the knee, and there found a lodgment, and set up the inflammation which resulted in the formation of so much pus? If not, Why not? Notwithstanding a tedious illness, and an anchylosed knee, was not this result better than to have had suppuration of the lung tissue and destruction of the whole of the right lung, and perhaps eventually the left also? However, we are not certain that such a result would have followed, although the patient's general appearance at the time of the attack, and the typhoid condition which followed, as also the low grade of inflammation bordering on the scrofulous, made such a thing probable.

CASE FOURTH.—On Jan. 31st, 1879, Mr. R—, Italian, aged 35 yrs., while chopping wood near Almaden mines, was injured by a falling tree. The lower part of the body was very much bruised, both posteriorly and anteriorly. The only place where the skin was broken was a smooth cut about four inches long and nearly half an inch deep, following the fold or crease between the right testicle and thigh, and extending from the anterior part of the testicle to the perineum in a straight line just where the scrotal integument joins that of the thigh.

The main injury was in the lumbar region over the upper lumbar vertebræ. The spinous process of the lower dorsal vertebra seemed to be unusually prominent, leading to the supposition that the spinous process of the upper lumbar vertebra might be fractured and depressed. However, I was unable to detect mobility or crepitus in any of the processes, spinous or transverse, either of the dorsal or lumbar vertebræ.

There was considerable tenderness over the lumbar region. I would here state that the examination was made about twenty hours after the receipt of the injury. There was but little discoloration of the skin, not very much pain, no paralysis of any part, the bladder evacuating itself naturally, and a cathartic producing its ordinary effect in the usual time.

The patient did well; complained of but little pain; did not use opiates. On Wednesday and Thursday following, the patient felt well enough to walk about the wards, eating well and having no constitutional disturbance, pulse never higher than eighty per minute, and the temperature not above 99 degrees F.

On Friday morning the nurse remarked that this patient had complained of pain in the back during the previous night, and that there seemed to be a soft spot on his rump. By examining, I found below the bandage which I had put around the patient, a fluctuating mass, immediately beneath the skin and superficial fascia, extending from the tenth dorsal vertebra above, to the coccyx below, and from the crest of the right ilium to that of the left.

I was at a loss to know how to account for this fluid, for there was at least a quart. I removed the bandage and examined more carefully. There was no inflammation to amount to anything, nor had there been. Here it is only the seventh day from the receipt of the injury, and it surely cannot be pus. However, to satisfy myself, I used an exploring needle; and not very much to my surprise, I discovered light colored arterial blood! Could I be mistaken? I twisted the needle about, pressed it to one side, until nearly a drachm of the blood had escaped. Fully convinced now that I had a secondary hemorrhage to deal with, the question arose what to do. I supposed that it came from one of the lumbar or inter-costal arteries that had been injured by the supposed fracture of the process of the vertebra. If so, it comes from an artery inclosed in a bony cavity, and one that cannot contract and close spontaneously, and since its origin is so close to the aorta, it will continue to bleed until the patient dies of hemorrhage.

While I was thus examining the fluctuating mass, and conjecturing as to origin and results, I fancied that the quantity of fluid was sensibly increasing. However, I will not be positive that my imagination did not assist in this accumulation.

But what shall I do? Cut down into this sinus, and hunt the bleeding artery, and tie it? Could I find it? And could I tie it if I did find it? Probably not; and more especially if it is a lumbar artery, and injured in the foramen through which it passes from the vertebra. But the man will probably bleed to death; and must I do nothing to prevent it? I concluded to use pressure with a bandage for the present, and ask for the advice of my brethren. Accordingly, compresses were placed along the spine, and the body bandaged snugly.

On returning to town, I stated the case to doctors Brown and Thorne, giving my theory for the hemorrhage,—that it was secondary, and probably from a lumbar artery. They were of opinion that it would be almost an impossibility to find the artery and tie it, and without seeing each other, concluded that pressure was the remedy to be used. I would state that at the last visit the pulse was 74, and temperature 99. This was at about 9 A.M. I visited him again about 5 P.M., and found the pulse and temperature the same. There was by this time considerable increase in the quantity of fluid. I re-adjusted my compresses and bandaged again. On Saturday morning I found the quantity of fluid about the same, perhaps slightly increased. There was now considerable inflammation of the integument, over a large part of the sinus, the skin appearing tense, and the small blood vessels distinct and purple. The patient had a slight chill last night, pulse 100, temp. 102; did not remove the compresses.

Saturday evening, Feb. 7th, condition worse, pulse 112, temp. 103, tongue furred ash-colored, countenance typhoid in expression, loss of appetite, no abdominal symptoms, mind clear. Sunday, Feb 8th. pulse 120, temp. 105.4, tongue same as yesterday, had a chill last night. The skin over the sinus is inflamed somewhat more than it was yesterday. With the advice and assistance of doctors Brown, Thorne, Benj. Cory and Kelly, sixty-eight ounces of blood was removed from the sinus, by aspiration. One hour after this operation, the pulse was 140 and the temp. 104. The specific gravity of the blood removed was 1030, and after standing for two or three hours, a grey or ash-colored sediment settled, the proportion of this being about 20 per cent. of the whole amount of the blood. This sediment consisted of corpuscles that seemed to be undergoing decomposition; they were a little larger than the red corpuscles; contained granules or spots, from three to four and seven and eight in each corpuscle. Some of them seemed to be simply swollen red blood corpuscles, ready to burst, or as it were, suppurate. If there be such a thing as inflammation of the blood,—and I believe there is,—then this change must effect the red corpuscles themselves, as to size, temperature and perhaps pain, thus supplying three of the well known characteristics of inflammation, expressed so tersely by the old latin formula, *rubor, tumor, calor cum dolore*. Owing to the color of the blood, the rubor, or redness, is not produced by inflammation here as it already exists.

But to return to the patient. After the blood was withdrawn, compresses were carefully applied, and the body bandaged from the lower ribs as low down as the bandage could be applied with the legs flexed at right angles to the body. The patient stood on all fours, as it is called, while the bandage was applied.

Monday, Feb. 9th, 9:30 A.M., pulse 100, temp. 103.8. There appeared to be about one-half a pint of fluid in the sack. Monday, Feb. 9th, 6:30 P.M., pulse 100, temp. 102. Tuesday, Feb. 10th, 9:30 A.M.,—the fluid in the sack has increased—perhaps a pint now in it, pulse 110, temp. 104. Wednesday, Feb 11th, 9:30 A.M.,—pulse 90, temp. not taken. Condition good. Ordered a laxative.

Friday, Feb 13th,—considerable inflammation over the left iliac crest, in the centre of which, a spot as large as the thumb nail, looks gangrenous. The inflammation extends over a surface as large as the two hands. Some bullae or blebs have formed in the vicinity of the gangrenous spot. Ordered a large flaxseed poultice applied, expecting an abscess would form at this place. The cathartic moved the bowels two or three times. I will here state that the patient, after the withdrawal of the blood on Sunday, was ordered iron, quinine and whisky; twenty minims of Tr. Ferri Muriat., three grs quinia, in a tablespoonful of glycerine and a little whisky. I afterward had the quinia made into pill and left off the iron, as the latter seemed to disagree with the stomach.

Saturday, Feb. 14th, 5 P.M.,—pulse 112, temp. 102.4. The inflammation over the left ilium is much better; but there is now as much inflammation over the right ilium as there was over the left. The fluid in the sinus has increased gradually since the evacuation of it with the aspirator. The inflammation that has now existed for two or three days over these parts of the sinus, led me to conclude that the blood which was left and that which had accumulated, had undergone decomposition and was now pus. I used an exploring needle and found this to be the case. I then introduced a trocar and canula, and drew off fifty ounces of pus, slightly tinged with blood. I re-adjusted the compresses and bandage over the sinus, hoping that a part of it at least would become obliterated before it became necessary to open it more freely.

Feb. 15th, 5 P.M.,—pulse 112, temp. 102.5. The inflammation over that part of the sinus to the right of the spine is still about the same as yesterday; also that over the left ilium. The fluid has increased during the last twenty-four hours so that there is now nearly as much as was drawn off through the canula yesterday. I concluded that further delay to a free opening was useless; consequently with the patient lying on his right side, and near the edge of the bed, I made an opening one inch long in the lower portion of the abscess,—for I now considered it one,—near the spot where the needle of the aspirator and the trocar had been previously introduced.

After the discharge of about a pint of bloody pus, the stream was checked by a clot of blood coming into the opening. I enlarged the opening, making it about two inches long, when a clot the size of a hen's egg came through, followed by about a pint more of bloody pus. After syringing the cavity with a five per cent. solution of carbolic acid in distilled water, and introducing a tent about four inches long, I applied compresses and bandages. Ordered the quinia continued, and whisky and beef tea.

Feb. 16th, 9 A.M.,—pulse 100, but feeble; temp. 97.8. Removed dressings which were saturated with pus and blood. The latter had excited the anxiety of the Superintendent during the night, and he applied an additional bandage. There was perhaps five or six ounces of thick, flaky, yellow pus discharged. No hemorrhage; syringed the cavity with a five per cent. solution as before, and introduced a clean tent.

On examining the inflamed spot over the left ilium, I detected fluctuation over the anterior part of the crest of the ilium, near the gangrenous spot, and extending down over the abdomen. However, it seemed to be superficial, at least, not deeper than the connective tissue between the external and internal oblique muscles, and not more than one inch by two in size. This I opened, and squeezed out about half a ounce of pus. Introduced a tent and applied oakum over both tents, for the purpose of absorbing the pus, and applied a compress over the main sinus or pouch, and a bandage over the whole lower part of the body.

Feb. 17th, 9 A.M.,—pulse 96, temp. 99. Ordered a laxative of carbonate of magnesia. Both openings discharging very freely. The gangrenous spot over the left ilium is separating from the

surrounding tissues. Removed considerable dead flesh from this spot, leaving an opening or pouch one inch in diameter, leading down to the pubis, just beneath the oblique muscles.

Feb. 19th, 9 A.M.,—pulse 106, temp. 99.5. Both sinuses discharging very freely. Made an opening in the lower part of the pouch to the left of the pubis for better drainage, as the patient usually lies on the right side. Laxative has operated. After washing out both sinuses with a five per cent. solution of carbolic acid, I inject the smaller sinus with liquid vasaline.

Feb. 20th, 9 A.M.,—pulse 112, temp. 103.5. There is a great amount of pus being discharged from the large sinus on the back, not so much from the small one. Patient had a chill last night. After the usual washing out of the sinuses with the carbolic solution, I inject both of them in with liquid vasaline. This I do, as well as the washing out, by means of a No. 10 catheter, attached to the end of a Davidson's syringe. The sinus on the back extends from the coccyx to the ribs, and from one ilium to the other. The skin and fascia of the external wall being so thin that the catheter can be seen over the entire extent, as I push it from one part to another for the purpose of washing out all parts of the sack. Patient has been complaining of pain and want of sleep; had a chill last night. He still takes beef tea twice a day, and eggs and other food twice a day, making four meals a day; also, continues the quinine and whisky.

Feb. 21st, 9:30 A.M.,—pulse 98, temp. 101. Feels more comfortable. Discharge of pus much less than yesterday. Wash out the sinuses and inject liquid vasaline.

Feb. 23d, 9:30 A.M.,—pulse 98, temp. 101. Complains of being "very sick." Speaks English but poorly. Considerable discharge of laudable pus, but not so much as before the use of the liquid vasaline. There is one point near the left hand side of the large sinus on the back, where the walls are adherent. I wash them out with a five per cent. solution of carbolic acid in water, and again inject the liquid vasaline. By gentle pressure made over the upper part of the pouch, I force everything out of it at the opening below, bringing the walls of the sack together over the greater part of the surface. Hoping that the adhesion between the walls, which has commenced, will continue, and soon obliterate, at least, all the upper part of the pouch. Put on the usual compresses; this time using oakum instead of folded cloths.

Feb. 24th, 9:30 A.M.,—pulse 108, temp. 101. Did not wash out the upper or left hand part of the pouch on the back, for fear of disturbing adhesions that are taking place. Washed out the lower part and injected vasaline. A small spot, as large as a ten cent piece, has sloughed, making a hole into the pouch over the lower lumbar vertebra. Another spot immediately above this, and about the same size, looks as if it would slough.

Feb. 25th, 9:30 A.M.,—pulse 100, temp. 100.

Feb. 27th, 9:30 A.M.,—pulse 115, temp. 99.2. Adhesion is taking place between the walls of the sinus, on the left of the vertebræ.

Feb. 29th, 9:30, A.M.,—pulse 104, temp. 100. The sacks, or sinuses, have been washed out regularly every day, and dressed with vasaline.

This case presents several features of interest. The first is the very large amount of secondary hemorrhage, and its location, there being sixty-eight ounces removed at one time and fifty at another, and perhaps thirty or forty at another, from just beneath the skin and superficial fascia of the lower part of the back. The second point of interest would be to know from what vessel this hemorrhage took place. The third interesting feature of the case is its progress and treatment.

At the time of the aspiration the patient was in a critical condition; temp. 105.4, pulse 120; the tongue and chill denoting danger of pyemia. This danger was avoided by drawing off the decomposing blood, and giving the patient a new lease of life. This was but temporary, for six days afterward the same danger presented itself again. This was also avoided by opening the sinus freely, by an incision two inches long, which could not have been done sooner for fear of adding to the hemorrhage.

At the end of six days from this last critical period, the temperature again went up to 103.5, and the pulse and condition of the patient indicated great danger of death from exhaustion—the result of the formation of so much pus. This was avoided by preventing the excessive formation of pus by washing out the sinus with liquid vasaline. The patient is still under treatment in the hospital now under the care of my esteemed friend, Dr. Benj. Cory.

The patient will probably recover. It will be simply a question of endurance with him. That is, if the supply of nourishment can be kept up, and the waste prevented, which must result from the formation of such a large quantity of pus, there is no reason why he should not recover. [A]

At the time of putting him under the care of Dr. Cory, he was taking nine grains of quinia daily, about six ounces of whisky, beef tea twice a day, and eggs twice, with such other food as he might relish; taking four meals a day.

Thus you see I was carrying out the theory mentioned in the first part of this paper:—that of supplying the system with all the flesh producing food the stomach would digest, and using whisky and quinia to prevent disassimilation or waste; also vasaline locally for a similar reason.

With this case I conclude my report; only adding that perhaps the thought of a poet, who evidently knows much of human nature, is applicable to this hastily written paper. This poet says:

“A fool will pass for such through one mistake,
While a philosopher will pass for such,
Through said mistakes being ventured in the gross
And heaped up to a system.”

Thus I, as one or the other of the personages here mentioned, offer this, my mite, to the literature of surgery, leaving you to decide which of the titles I deserve.

[A] On March 26th, date of publication of this report, the patient is considered convalescent.

*** END OF THE PROJECT GUTENBERG EBOOK REPORT ON SURGERY TO THE SANTA CLARA COUNTY MEDICAL SOCIETY ***

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