RICKETTS (B.M.)

REPORT OF TWELVE CASES OF HERNIOTOMY.

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BY

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I have selected for my subject this evening herniotomy. It is a subject that has been before the profession during the last ten years for consideration, and one that largely merits the consideration of not only surgeons but practitioners in general. I don't know of any deformity in which there can be so much done; in a deformity in which an operation will take a man that is a non-producer and make him self-supporting, and take him from the care and charity of our alms-houses.

The per cent. of persons who are ruptured is something like 15, I think; something in that proportion of the males, and about 9 to 11 per cent. of the females.

It is not worth while to enter into the different kinds of hernias this evening, because the treatment is about the same with them all. However, those with which I have to deal are the complete and incomplete hernias and the strangulated hernias, and also the direct. I have read the literature upon this subject pretty thoroughly, and, while we have not many years to judge this operation—the result of it—I am thoroughly satisfied that the per cent. of cures justifies us in operating for all of these hernias. I even include the ventral hernia.

There are numerous operators, and each one has *his* peculiar mode of operating. In the few I have made—I have made the various operations, almost all I have seen described—I commenced with my first operation, for strangulated hernia, by sewing up the hernia. Formerly, the mortality of strangulated hernia was the discouraging feature of operating upon the cases of election. The number of herniotomies I have made is twelve, having operated on ten different patients.

My first case was that of a young man nineteen years of age, and was a direct hernia on the left side. It was returned to the channel, sewed up with silk, and the wound allowed to heal by granulation.

The second was a strangulated hernia, patient æt. twenty-two, and was on the left side.

My next case was of the same character, and the operation the same.

The fourth case was a traumatic one, which was reported by myself, the report being written up by Dr. Murphy. It was that of a boy caught on the whiffletree, which passed up and tore the flesh, so that the intestine protruded. The tissue was much lacerated, and after sewing up the wound with silk I allowed it to heal by granulation. There was inflammation to contend with in the scrotum, and a severe abscess in the scrotum also which I had to open. He was a long time recovering. This was on the left side.

The next herniotomy was performed on a negro boy eighteen months old. It was on the left side, and was a case referred to me by Dr. J. S. Caldwell. He had an extensive hernia, and it was a question whether or not to operate. A

few months after the operation the hernia returned. As I stated before the Ohio State Medical Society, I would rather think this was my fault than to condemn the operation. There were many peculiar circumstances connected with this case. It was a poor family, etc.

The next was a double operation on a boy with extravasation of the bladder. He was aged nine years, and the rupture a single one on both sides, because there was no pelvic arch. I didn't know whether I could bring the arch together and prevent the protruding of the intestine or not, but I tried and succeeded. I made an incision, returned the intestine, and sewed it up with silk.

My next case was a man fifty-two years of age, and on the left side. I found a complete scrotal hernia, and a rather extensive one, that had existed about nine years. The gut was returned and the sac cut off, and then sewed up.

The next herniotomy was on a patient aged forty-four years, and was on the right side. It was one of the cases in which the sac was returned and the canal closed. The sac being a short one, it was cut off.

The next case was aged twenty-three years, and on the right side; the next four years, and on the left side; and the last one a patient twenty years of age, and was on both the right and left sides. It was operated on about the 6th of January, having been strangulated the day before. It made an uninterrupted recovery, and I left the silk in that I might have granulation, and the ligature that was applied the highest did not come out until about the ninth or tenth week. After he had gone to his home and had been there about two weeks, he noticed a hernia on the left side. I found that, although it had not been noticed, it probably had existed for some time. I made the same operation I had made before, and in this case incorporated the sac in the canal and sewed it up with the hernia. The second or third day we had erysipelas to contend with. The temperature was 101.5°, and there were abscesses in the scrotum. He remained in the house four or five weeks and was then sent to his home.

I find that my patients have ranged in age from eighteen months to fifty-two years. Catgut was used in six cases, and in Nos. 6 and 8 catgut was used and we had primary union. As to primary union, I find some author recently is advising us to secure primary union, so that if the rupture should ever return, that he can the better wear a truss. This gentleman claims to have collected a great number of herniotomies, and he states that there have been quite a percentage of them return, and, where it has been necessary to use the truss, that where the cicatrix is large it is not borne well, and if we get primary union we are more apt to have the truss worn without difficulty. In No. 10 I used silk sutures, and where the silk sutures were used the union was by granulations. In five the abdominal cavity was entered. The temperature in three went over 100°. Had pus and abscess in two cases and erysipelas in No. 10. No. 4 returned within a few months. Of the twelve operations that I have made, there has been but this one return—that of a boy eighteen months of age—so far as I am able to determine. There is one case out of my reach, which I have not heard from for the last six months, but if there has been any recurrence it has taken place within that time.

As to the mode of operating, I have adopted the plan of cleaning the patient as thoroughly as possible and shaving the hair off the pubes to make the parts as clean as possible. This is done with soap and filtered water, and in two or three cases I used turpentine. I did not use antiseptics in the work at all, and believe that asepsis is the basis upon which we are to work. There is one thing I would most emphatically condemn as to the habits of operators, and that is, being about the dead-rooms, dissecting and holding autopsies, and being about contagious diseases, erysipelas and septicæmia, and the various things that will affect these wounds. I do not think an operator has

a right to hold dissections, etc., and then deal with herniotomies.

The statement was made before the State Society last week that it was impossible to have pus if methylene blue were used. I think this is a very broad statement for a man to make, for we know the possibilities of having pus even if methylene blue is used. My idea as to autopsies is for our counties, cities and States to employ men and give them a living salary—pay them well for their services—and have them to hold autopsies, but keep out of other surgery.

As to drainage, I believe it saves more lives than antiseptics. My experience, though rather small, has taught me that it is best to provide for drainage, even though not necessary. In operations we can provide for drainage, and if, after twenty-four or forty-eight hours it is not necessary, we can remove the tube, and thus have all the advantages it would give us without delay from union.

I did not expect to come before you this evening with anything very extensive, but merely to report these cases that I might in some way bring about a discussion and see what the experience of other operators has been in this work.

I have for some time advocated the operation in our county infirmaries. There are a great many men well along in age who are disabled by hernia—single or double—who, if they were operated on, could be made self-supporting, as I stated in the beginning of my remarks.

During the last two weeks I have had a case which illustrates the dangers of wearing a truss. The patient had worn a truss for fifteen years, but it finally, by a jar or something, got down too far, and it was strangulated. It was not until the next afternoon that it was reduced. He is about sixty-four years of age, wears a double truss, and is almost incapacitated for work. If he is not relieved in two or three weeks he expects to be operated on.

I will be very glad to hear from the gentlemen here as to their experience and mode of operating.

DISCUSSION.

DR. G. W. RYAN:

I would like to ask the doctor a few questions. Tell me exactly when the operation was performed; how long since in the first case.

DR. RICKETTS:

Five years.

Q. How lately have you seen it?

A. Last summer.

Q. Is it entirely cured?

A. Yes, sir.

Q. What is the average time you have seen them after the operation?

A. The time has extended over the last five years. There have been three operated on within the last six months.

Q. You have seen all of the cases, then?

A. All but the one.

Q. I do not quite understand what you have reference to when you speak of "incomplete" scrotal hernia. Do you mean that the intestines are but half way down the scrotum?

A. Yes, sir.

DR. RYAN:

The doctor ought to be congratulated on his success. About two years ago Dr. Bull, of New York, reported 134 herniotomies upon which he had operated. His percentage was about 36 per cent. of cures; that is, after a year or a year and a half there was no return of the hernia. I think one relapse out of twelve operations is quite remarkable; and I believe that in two years hence the essayist will see a considerpercentage relapse. Dr. Bull has, in a very exhaustive paper, tabulated all the cases; this appeared in the *Medical News*, I think. The point which Dr. Bull urges is that, after having gone through the injection cure, in which he reported a large percentage of cures, and afterwards found many relapses, a great deal depends on the size of the hernia, and the question as to the result of the operation as regards cure. He does not believe that it is advisable to operate on the old, for he thinks they are very likely to die of shock, and the result is not so satisfactory as in the young and middle-aged. He only operates on children in cases of strangulation.

This subject interests us a great deal. The question is whether it is better to wear a truss, in which there is no danger if well applied and well fitting. There are a great many cases of hernia in which herniotomy would not satisfy the individual doctor, if he happened to have an individual case of hernia on his own person. I have my doubts if my friend, if he were affected with hernia, even if incomplete—that is, not past the external ring—if he would not prefer to wear a truss. The cases that have been cured by trusses are almost all among children. It is my recollection that the men upon whom I have had an opportunity to apply trusses in the hospital, where they were put on gratuitously, notice a strangulation very quickly. I think of 134 something like 77 were reducible, and the remainder irreducible, or strangulated. If the operation is justifiable by the condition of the patient, it should be performed, except under the conditions I have mentioned. I think, however, the matter of operation is for the patient to decide, and not for the surgeon to urge, for the results have not been as good as we might wish. I think the cases brought before us are perfectly honest, but I think that my friend has not waited long enough.

Dr. Bull believes in simply tying the sac by putting the ligature high up.

The question of the after-treatment is very interesting. I believe it is best to wear a truss, and a truss is very generally advised, but a great many operators drop this and advise the wearing of only a pad.

I think primary union should be hoped for and attempted, for it is certainly very desirable, for a wound that heals by granulation is very likely to be tender.

I think the statistics quoted regarding the number of individuals suffering from hernia is rather large. The London Truss Society reported, some years ago, the percentage as about 10 per cent., but that is believed by those in the larger cities who have experience in the hospitals to be much too large, considering the population. I think in our practice we seldom see the ruptured, except incidentally, and I believe the percentage of females is not anything like 7 per cent. Of course, this is only an opinion, and I haven't any facts to sustain it.

DR. LEONARD FREEMAN:

The statistics which have been given us are indeed surprising, and I congratulate the doctor upon them. Some of the best surgeons give about 60 per cent. relapses and 40 per cent. cures. I am, however, surprised to hear his statements about asepsis and antisepsis, which show that he has not as thoroughly considered the subject as one might suppose. He says that there is no object in using antiseptics, that asepsis should alone be striven for. He seems to forget that we use antiseptics for the purpose only of obtaining asepsis. If we could get asepsis with nothing but soap and water and a nail-brush, we would use soap and water and a nail-brush alone. It is true, there are places where one should not use antiseptics, as in the abdominal cavity, or, perhaps, after opening a hernial sac, etc., but they should be used in cleaning the hands, the skin of the patient, etc. We all admit that pus is due to micro-organisms. The object, then, is to get rid of as many of these micro-organisms as we can; for instance, by attending to the hands. It has been proven, however, that the hands may be scrubbed very clean with soap and water, but when put into sterilized gelatine, germs will grow. If the hands be washed with an antiseptic, however, and this removed with sterilized water, there will be no growth whatever in the gelatine. Even if we were to admit that there was some doubt about micro-organisms and suppuration, which there is not, that very doubt should make us more careful about our hands and instruments, etc. The antiseptics, when properly used, certainly do no harm to the skin. I heartily agree that it better not to use antiseptics in aseptic wounds, such as have been made under all precaution by the operator himself; but if the wound is contaminated, or thought to be so, they should always be employed.

The doctor makes the usual popular objection, which is not true, that path-

ologists are more apt to carry infection than any one else, and that any one who works in pathology should never do any surgery. The germs which we fear most are those of suppuration and erysipelas. The doctor admits that he himself has been treating a case of erysipelas—then should he not quit surgery? Again, a surgeon is always working in pus—has he any business, then, according to the doctor's reasoning, to be a surgeon? In the human body the various pathogenic microorganisms are crowded out after death, so that experienced pathologists insist on waiting a length of time before holding an autopsy, as the virulence of the poison decreases with time. Yet a surgeon is always working in cases where germs are not only very numerous, but at the height of their virulence. Hence, if we follow out the doctor's idea, there should be a new surgeon for nearly every operation performed. We younger men have all done more or less post-mortem work, and also considerable operative surgery between us, and yet we have had practically no suppuration in wounds which we have made ourselves. I can easily understand the writer's fear of post-mortems, as he is one who does not use antiseptics; but I should be more afraid of his contempt for antiseptics than I should of any amount of work in the dead-room.

I came across a statement the other day, made by a prominent Swiss surgeon, in regard to the danger of ether as an anæsthetic in cases of strangulated hernia. I had occasion, not long ago, to operate on a case of strangulated hernia in which the man was almost pulseless. He died after the first few whiffs of ether. Whether this statement has any foundation or not, I should like to know.

DR. SETH EVANS:

I would like to add a few words. I agree with Dr. Ryan and Dr. Freeman. I have not been so fortunate myself. I operated on one case, which relapsed. At the autopsy, the patient dying of measles, almost the same condition was found: a hernia of the cæcum, and the vermiform appendix sticking down.

The results he has had would go to prove that it is not from post-mortems alone that the suppuration comes. As a matter of fact with bacteriologists, we know that touching the body of a dead person would have done his patients less harm than some other things. But, that is the popular idea: it is a dead body. But should these popular ideas find their way into the minds of medical men, and not be confined to the laity? If you take a case of peritonitis, purulent peritonitis, you would not get my friend, Dr. Kebler, to cut into it for twenty-four hours. Why? Because the germs of decomposition would destroy the other germs. If one will but remember how, in foreign clinics, the operators, who are busily engaged in teaching their classes in operative surgery upon the cadaver, are also much of the time at work on the living subject, their results in herniotomies would, I am sure, compare most favorably with those reported by Dr. Ricketts. One can but exclude the cadaver as a very dangerous pus producer.

DR. FRANK HENDLEY:

I was somewhat surprised at the statement of there being so many working men suffering from this disease. For several years I did work for the Metropolitan Life Insurance Company, and examined on an average twenty-five or thirty cases a week for about two years, and I am sure that there were not more than two or three cases of rupture per month out of that number, and hernia was an extreme rarity. Out of every hundred cases I do not think there was an average of more than three or four, and do not think there were that many.

DR. WILLIAM JUDKINS:

Dr. Ricketts was emphatic in the per cent., 15 per cent., and in reference to this will I say that those of us who have done much work for life insurance companies have certainly had *some* experience with hernia. In my experience, however, I have only seen three cases which were rejected on account of rupture, which is a *very* small per cent. in comparison with 15 per cent.

DR. RYAN:

Well, a man is not usually rejected

by the life insurance companies for rupture, is he?

DR. JUDKINS:

If he does not wear a truss.

DR. RYAN:

Yes, but a man usually wears a truss when he gets his life insured. Dr. Bull, who was one of the first to introduce asepsis in this country, and who will compare very well with others, says that in only two or three cases was there suppuration to any extent, although he has found suppuration present in a slight degree in many cases.

DR. A. N. ELLIS:

I do not know when anything has interested me more than Dr. Ricketts' paper. It is upon a subject which brings up recollections of a case that I once had myself, that burnt a hole in my heart, cast a shadow across my soul, and did not help my practice nor my pocket in the least. The man died! I was not to blame, for he would not let me operate until it was too late, and when I did cut down on the strangulated parts I found the omentum wedged in tight all along the spermatic canal and as black as eternal despair and as dead as the Southern Confederacy! It was that form of oblique inguinal hernia known as the congenital, and had given its possessor lots of trouble. No one could persuade him to wear a truss. At the latter part of the war he went into the service as a hundred-day man, and during the few marches he made with his regiment the gut often became prolapsed and compelled him to lie down by the side of the road, where he suffered in great agony until relief came. Like a great many other men who have worn the blue, he knew too much for his own good. You could tell him nothing new. He would not allow me to use the knife until all hope had gone glimmering along that path that runs out into the unknown dark. His widow is now trying to get a pension. I do not know what the widows of our country would do just now if it were not for Uncle Sam, especially the war widows who have got too old and ugly to get married again.

I have heard that about 5 per cent. of men have rupture. I do not think it is that great. During the last two years I have examined fifty men for the Berkshire Life Insurance Company, and only found one case. My experience and observation do not imbue me with rosy-hued hopes of complete cure through an operation. When a medical man has a hernia on his own person, he lingers a long time before he lets another "saw-bones" stick a knife into him.

Dr. Ricketts is a gentleman whom I esteem very highly, and the next case of rupture I get I'll "tote" right over to his office and then stand around when he goes to operate and see if I can't learn something.

DR. G. A. FACKLER:

I put the question to Dr. Judkins because I knew he had some experience with the insurance company. I suppose I have examined some two hundred among the working classes. Of this number I made it a point to follow out the several features in insurance, and there were but three that had any hernia of any kind. The question was put in these cases, but, of course, an examination was not made every time; but, if we take their statements, there were but three.

DR. RICKETTS:

I was not exact when I said 15 per cent. I saw a statement somewhere of 10 to 15 per cent. However, I am glad I have brought out the discussion on this point, and got the opinion of men who have made examinations among the different classes. As to the age of the patients, I am pretty well satisfied that children who are very young should not be operated on for hernia. My own experience, except in one case, has not been favorable, so that I think it is not best to operate on children under five years of age. The most desirable age is from fifteen to twenty-five years. I have seen no statement concerning this, but I rather believe this would bear investigation. As Dr. Ryan said, the operation on older men is not generally satisfactory. I would hesitate to operate on a man of sixty years.

DR. RYAN:

What would you do with the inmates

of the infirmaries? A great many of them are old.

DR. RICKETTS:

A man of sixty years is usually not self-supporting anyway. It is usually the ones who are forty or forty-five years of age who would be benefited.

As to asepsis: Dr. Freeman says he would wash the hands and keep his instruments aseptic and antiseptic, but not use them in the abdominal cavity. However, I cannot see how he can help getting them into the abdominal cavity. In all my experience in hospital and private work I have never seen a case of surgical erysipelas until I saw this one. How it came I don't know, although I understand there was a great deal in the Cincinnati and Betts Street Hospitals. So that it does not matter what precautions we take in these operations, we will now and then have one infected. We are not able to say when a patient is going to be infected and when he is not going to be infected.

In the operations I have made in the last six years I have not had a death. Only in two cases of tracheotomy have I had a death. I have made about all the capital operations and many of the minor ones, and I will say that I have had pus—for no man can have granulations and not pus; he may have primary union without pus, but if he has granulated tissue he will have pus. He can not help it. A temperature of 100° is not anything in surgery. Although there are some who consider it as dangerous, it should not be considered so. Men differ on these subjects, and I will admit that there are men who would take up the other side.

As to the ether Dr. Freeman has spoken of, I have not used ether at all, but have used chloroform altogether. I only have used ether as a spray on a tumor to reduce it. In this case I reduced the strangulation, but I do not know what effect the ether produced. All but two of the herniotomies were made within the last three and a half years, and since that time the other operations have been made.

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