

MEDICAL TIMES

Aug. 12, 1882

PHILADELPHIA ACADEMY OF SURGERY.
Stated Meeting, June 6, 1882.

The President, Dr. S. D. Gross, in the
Chair.

Abstract of Dr. Nancrede's paper, opening THE DISCUSSION ON ANTISEPTIC SURGERY before THE ACADEMY OF SURGERY.

The paper being too long for full publication, the following abstract contains merely the main propositions and conclusions, without the support of any arguments or facts.

The claims of the Listerians were first examined, and the results of the treatment of a large number of cases by various surgeons were compared with similar records of patients treated by the older methods of dressing. It was contended that Listerians do not maintain that similar results to those obtained by aseptic surgeons were not secured by other methods of dressing under the most favorable surroundings, but that, under the most adverse circumstances, the best results are obtainable as the rule, and not as the exception; that traumatic fever, suppuration, pain, etc., were entirely prevented in many cases, and reduced to a minimum in all. They maintain that all cases of septic diseases were done away with, except those arising from other than the wound itself. It was demonstrated that Listerism and the Listerian method of dressing were two separate things, — i.e., the former being the principle of attempting to prevent putrefaction of, and consequent infection by, the wound-fluids, and, as a resultant, the prevention or summarizing of suppuration, prolonged healing, etc., while the latter is a mere set of procedures by which these indications are carried out. Suppuration is not necessary for the healing of wounds, and is dependent not only upon the presence of germs in the air, but upon tension

of tissues and the presence of intra-traumatic causes of irritation. These first indications might be carried out in various ways: e.g., the germs might be destroyed before reaching the wound, or after free access to it by them rendered incapable of mischief by various germicidal applications. Listerians insist that free drainage is as essential for preventing suppuration, by relieving tension and the removal of intra-traumatic irritation, as the destruction of germs; that perfect cleanliness, perfect coaptation, perfect drainage, and quiet are essential parts of both the theory and the method. The spray is the least essential part, success having been attained in the past without it, and it is merely a convenience, obviating the necessity for rapidity in operating, and for the deluging of wounds with an irritant like carbolic acid. It was contended that the use of this latter agent did not constitute, as had been lately stated, Listerism, but that many other similar agents had been used successfully. The argument that germs were found under the dressings, and that therefore the system was a failure, was absurd, since the fungi still remained, however incorrect the explanation of the good attained might be. He showed that only certain forms of organisms were found which did not favor putrefaction, and they were only discoverable after the dressings were left on for many days, and that they increased from without inward. Their destruction was shown not to be absolutely essential, since the substance produced by their development had been found by experiment neutralizable by minute portions of various agents, and that the danger of organisms was dependent upon their quantity, and whether the surrounding tissues were in contact with them, were inflamed, or the reverse. For those who could not accept the germ theory, he showed that all the proved good attained by Listerism and other modern wound-dressings would be explained upon other hypotheses. In support of all the foregoing, he adduced a large number of facts upon both sides of the question, reviewed the objections, real and alleged, and insisted that it was unfair and unscientific to ignore the vast accumulation of facts and the opinions expressed by so many distinguished men,

either upon the ground of the results of imperfect attempts at Listerism, or, as is vastly more common, on pure a priori arguments, without a particle of personal observation or experience. He had himself tried Listerism for some years, had then purposely tried various other wound-dressings, and had come to the conclusion that he would return to Listerism. Many other than the above points were freely discussed, but for them the reader must be referred to the original paper, which will be published in extenso at some future time.

Dr. Hunt was unable to speak from personal experience of the positive advantages of Listerism over the general plan. Listerism, to a certain extent, had been introduced into the Pennsylvania Hospital, but the observations as yet are too few for any reliable data. The general plan of treatment is antiseptic, but not Listerism in detail. The results are satisfactory, although of late there has been some pyaemia. The hospital has been remarkably free from this trouble of late years. Whether any atmospheric or other conditions favor its reappearance we cannot say.

Dr. Willard said that while statistics could be and often were manipulated to suit the views of a particular individual, yet that, when taken in large numbers and from opposing sides of a question, they should certainly weigh strongly in arriving at a decision. Few have an experience sufficiently large to warrant a positive opinion upon this subject, but the most valuable statistics are from those who have tested thoroughly both the old and the new systems of wound-dressing.

Those who have conscientiously and exactly followed the practice of Mr. Lister have almost universally given it their unqualified approval, and but few have been willing to return to their old methods. Many there are who but half fulfill the requirements, and that only in a few cases, and then denounce the system because they do not obtain the brilliant results secured by Mr. Lister. They are like the surgeons who decry rest in the treatment

of joint-disease, because by resting the limb for only a few hours, and then permitting the child to run and fall and play during the remaining hours, they do not secure good results. The reason of failure is obvious. If those who are so ready to detract from Mr. Lister's services will, however, but calmly consider their present practice and that of their colleagues, they will see that the English surgeon has compelled the recognition by the surgical world of the great doctrines of absolute cleanliness, thorough drainage, and the shutting out of all irritating influences. As to the means to be employed for carrying out these principles, opinions will ever differ, and must change from time to time. A decade hence will probably see us all treating wounds more successfully than we do to-day, yet the general plan must be in accordance with the rules at present in vogue. In his own practice he had found that the nearer he approached to the enforcement of these principles, the better had been his results. In a recent hospital case, the removal of the entire breast from a feeble woman past sixty, and a sufferer from chronic diarrhea, although antisepticism was but imperfectly carried out, yet the whole wound healed by first intention, even the drainage-track falling in and closing as soon as the tube was removed. The shortening of the time of the healing process to ten days was certainly worth striving after. In joint-surgery the system had certainly accomplished wonders; and if it was capable of standing this severe test, it was worthy of confidence in lesser dangers.

Dr. Mears said that he had had some experience in antiseptic surgery, both in public and private practice, and he was satisfied that his results had been better since his adoption of antiseptic methods. In St. Mary's Hospital, where he is surgeon, antiseptic surgery had been practised for the past four years with the most decided benefit. The hospital labors under the disadvantage of occupying a building which was constructed for commercial uses and had been converted subsequently to hospital purposes. Naturally many defects in hygienic conditions would exist in such a building under the most favorable cir-

cumstances. The hospital is in the midst of railroads and mills, and receives into its surgical wards some of the severest forms of injuries. It is the experience of the surgeons in attendance that much more favorable results have occurred in these cases since the introduction of antiseptic methods. In ovariectomy he has had most positive evidence of the value of antiseptic precautions, and performs all of these operations in accordance with antiseptic methods. He felt that Mr. Lister had made a valuable contribution to surgery, and that surgeons all over the world had learned much from him. On the continent of Europe, especially in Germany and Italy, surgical procedures had undergone, as it were, a revolution, and the best results were obtained in operations under antiseptic methods which before had been attended with the most unfavorable results. The theory of Mr. Lister may be faulty ; the practice is good, and has done much for mankind.

Dr. Nancrede said that if additional statistics were needed to prove that the positions he had taken were correct, he could quote the results of Listerism as published by many prominent surgeons. He simply asked that the method be tried, and that those who founded their opposition upon their long-successful experience with other dressings would at least be consistent, and not condemn that of which they had no personal knowledge upon mere theoretical grounds. His own statistics were certainly too small to bring forward as proof, but, so far as they go, the operation-books of the hospital will show that his amputation death-rate was lower than that obtained by his colleagues, notwithstanding that his cases — amounting to precisely one-half as many in six terms as those performed by the other surgeons during twenty-three terms— comprised a much larger proportion of severe cases, including two hip joint and two shoulder-joint amputations.

The speaker remarked upon the peculiar unfairness with which Listerians were treated, saying that any other statements made by them as to matters of fact were implicitly believed, yet when anything relating to aseptic

surgery was brought forward, profound doubt or absolute skepticism was felt and expressed ; yet their statistics are brought forward with the full knowledge that their sources are open to others who can disprove the alleged facts if false. We have no right to shut our eyes to the result of such statistics, not selected, but of all the operations performed by many prominent surgeons. When Paget, after his more than forty years' experience of all methods of treatment, after stating that from sixty to seventy per cent, of patients were not obnoxious to septic disease, can say that there are several classes of cases where it would be " absolutely wrong not to adopt all the precautions of antiseptic surgery," we should certainly acknowledge the great weight of such a judicial decision.

In considering the subject, it must be remembered that much which passes for aseptic surgery is not in any sense such, whence, of course, failure results, with consequent denial of the value of the method. Drainage-tubes, instead of doing good, as they are usually disposed, do harm. They are much too small, and are commonly passed across the deeper parts of the wound like a seton, and like a seton they act. They should be large, merely reach the parts to be drained, and be cut flush with the surface ; for it must be remembered that one of the cardinal points of Listerism is the removal of intra-traumatic irritation, and, if carelessly used, tubes are an efficient cause of this.

In reply to the objections regarding a dragging stitch, he had been misunderstood. What was meant and said was that when Mr. Lister had shown that a single such suture could produce the suppuration of tension, yet that in face of this statement some surgeons will almost hermetically seal a wound, providing no efficient drainage, and yet exclaim when profuse, although aseptic, suppuration ensues. As all surgeons use the thermometer, he denied that keeping a wound undressed for long periods was dangerous, as this instrument will indicate anything wrong.

In the late discussion on aseptic surgery

before the American Surgical Association, Dr. Cole had advanced one case of free incision into the knee-joint as a disproof of aseptic surgery ; but he certainly did not and could not do any such operation over and over again, as Sartorple did in a hospital where amputation of a finger would at times result in death from pyemia.

Pyemia and septaemia occur in private practice, as every surgeon, the speaker included, could prove; so that even apparent cleanliness and good hygiene were not all-sufficient.

Dr. Nancrede doubted if any operation had been performed in this city precisely as Lister has directed. He places stitches of relaxation as well as stitches of coaptation, which insure no dragging on the healing parts, and button-sutures, which obliterate almost all the cavities which could accumulate discharges, thus fulfilling the indication of free drainage and perfect coaptation in a way which would almost compel primary healing. When cases are dressed precisely as Lister directs, and failure constantly results, then, but not before, it will be time to condemn his method.

He must refer the debaters to the body of his paper for more extended facts and arguments, but he would again deny that the spray or any kind of dressing was Listerism, but that it was only the Listerian method, which could be altered or changed in any way so long as the indications were complied with, and that, as he had pointed out, many sur-

geons really profited by the principles of Listerism while deriding Lister's method of dressing.

He denied that the use of carbolic acid was necessary for Listerism, and that when properly used it was so dangerous. As far as his memory served him, most, if not all, of the poisoning cases following the deluging of the wound with solutions of the agent, or where injections into the loose cellular tissue, as in that around the rectum, were forcibly made, acetate of ammonia, oil of eucalyptus, salicylic acid, etc, could be, and are, successfully used. If Listerism will, under the most unfavorable circumstances, incontestably prevent septic trouble, as in the continental hospitals, it will also, under the most favorable circumstances, do away with all septic diseases, except those rare cases which arise from some other source than the traumatism under treatment.

The scientific point now under discussion is not whether our results are very good, — much better than those of twenty years back, — but whether they are the best attainable. The argument that Listerism is troublesome is too puerile to need reply when life or a limb is at stake.

Dr. Nancrede advanced other facts and arguments in support of his position, for which space fails.

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Recorder