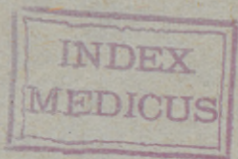


BERNAYS (A. C.)



THE COMPLETE METHOD
Of Operation in Cases of
CANCER OF THE BREAST,

By DR. A. C. BERNAYS,

SAINT LOUIS, MO.

Abstract of a Clinical Lecture delivered at the
Marion-Sims College of Medicine.

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XII





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UNION TRUST BUILDING, SAINT LOUIS, MO.

HOURS FROM 11 to 1.

REBEKEH HOSPITAL FROM 9 to 10.



COMPLETE METHOD OF OPERATION IN CASES OF CANCER OF THE BREAST.

By Prof. Augustus C. Bernays of St. Louis, Mo.

Abstract of a Clinical Lecture delivered at the Marion-Sims
College of Medicine.

In the wonderful progress made in surgery under the regime of antiseptis and asepsis, one department of the art has not made the progress which we originally expected to see. I refer to the treatment of malignant growths. Under the strictest antiseptic precautions it was a *PRIORI* expected that the surgeon would be enabled to get much better results than in former years, because the operator could dare to go much farther in his extirpations of malignant growths. The assurance which we felt that the healing process would be afebrile and aseptic would permit of the most radical removal of all the diseased tissues. We should reasonably expect a much reduced percentage of recurrences under these circumstances than ever before. Judging from recent articles in the medical and surgical literature this expectation has not been realized, and I am sorry to notice the most pessimistic views in the progress of cancer of the breast expressed by many surgeons. IT IS MY OBJECT TO COMBAT THIS VIEW AND TO URGE UPON THE PHYSICIAN AND GENERAL PRACTITIONERS THE NECESSITY OF A MOST AGGRESSIVE AND POSITIVE STAND WHEN CONFRONTED WITH A CASE OF MALIGNANT DISEASE, PARTICULARLY IN CASES OF CANCER OF THE BREAST.

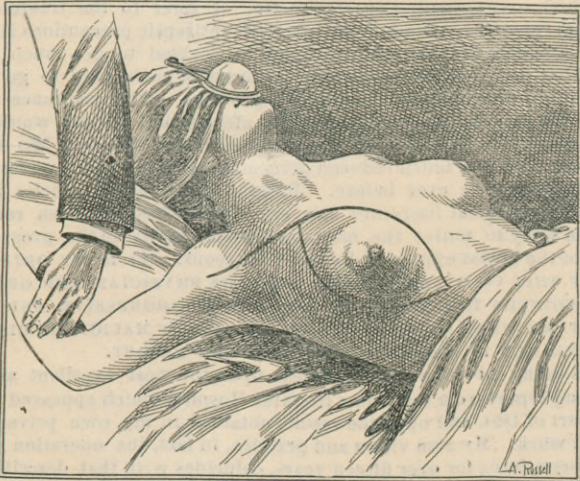
In doing this I am enabled to lean upon the most excellent and encouraging report from the Johns Hopkins Hospital which appeared in the latter part of 1894, and upon the results obtained in my own private and hospital work. My own views and practice, in fact, the operation which I have been doing for over fifteen years, coincides with that described by Dr. William S. Halsted in the report just mentioned, almost in every detail. This surgeon has, however, rendered us a most valuable service by the clear and concise description of the steps of the operation. I think that by following his rules implicitly, even a surgeon whose work and material are limited, will be enabled to get results which will be most satisfactory, as compared to those which are reported by operators who perform the old slipshod and much less painstaking methods of removing the cancerous breast.

The three engravings which accompany this article will serve better than a lengthy description of the method of operating to elucidate and as-

sist the busy practitioner of medicine.

I desire to quote two sentences from Dr. Halsted's report: "In fifty cases operated upon by the complete method we have been able to trace only three local recurrences." Again, "I have not had a local recurrence for more than three years," referring of course only to cases where the complete operation was done.

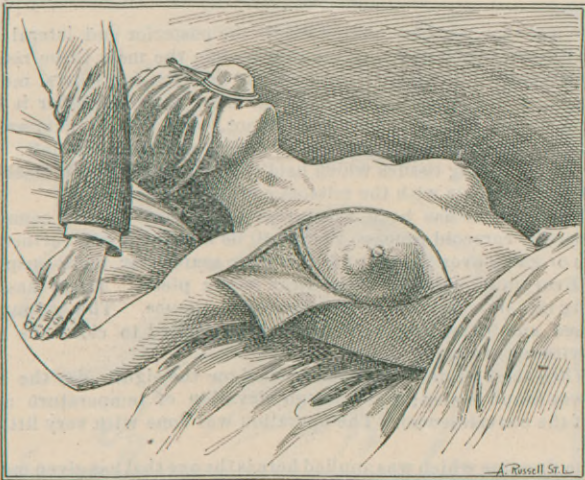
Now, let us see what we mean by the complete operation; in other words, what has been done in the operation which you have just witnessed? The lady is thirty-seven years of age, of a very nervous organization, is married, has one child. There is no history of cancer in any near



relation. Tumor of right breast observed for over three years. The tumor is not freely movable over the pectoralis muscle. The nipple is retracted and indurated, and there is, as you see, a nodule on its outer side. There were some shooting pains at long intervals, the patient has complained very little of pain at any time. The tumor is hard; size of a large orange, skin involved, but not broken. A chain of small, hard glands, evidently carcinomatous, extends to the top of the axilla.

The patient was prepared in the usual way with a view to sterilizing

the skin over the field of the operation. Chloroform administered and the patient put into position upon the edge of the table, the arm being held up and extended by an assistant, whose sole duty it is to keep the limb in such a position as will aid the operator in his dissection. The long skin incision is made with a sweep of the knife around the breast, and as far up on the arm as the lower border of the teres major tendon. The costal and clavicular insertions of the pectoralis major muscle are now carefully cut off and the muscle with the breast on its surface turned over under the arm. This is best done by the fingers and sometimes requires some force and tearing. The apex of the axilla is now exposed,



and we can determine whether the glandular and lymphatic involvement will require the removal of the pectoralis minor muscle or not. If the sheath of this muscle is thickened or shows any infiltration along the vessels entering it, it must be wholly or partially removed. At this stage of the operation the condition of the infraclavicular glands and also those lying just above the clavicle can be investigated. In our case here to-day, the pectoralis minor was only partially removed, and it was not necessary to saw through the clavicle. Beginning at the pectoralis minor, all the

connective tissue overlying the ribs and the intercostal and the serratus magnus muscles was dissected down in one single layer, the lateral part of which was left in continuity with the tumor and the pectoralis major. All along during this dissection, the vessels, veins as well as arteries, have been tied close to their origin from the axillary vein and artery. You saw these vessels and the cords of the brachial plexus clearly demonstrated, much more beautifully than is usually done in the dissecting room. The axillary vein was stripped of its sheath and lay there completely exposed in its entire course. One of the small branches was torn off so close to the vessel that a lateral ligature of the axillary vein was made.

We had then reached the line where the posterior and lateral walls of the axilla are joined and we have only to free the mass to be removed from its attachment to the subscapularis and the latissimus dorsi muscles. At this point of the operation the surgeon must decide whether it is expedient to save the subscapular nerves or not. I have cut them away in some cases, but to-day it was easy to save them and they were left. After putting the remaining tissues which held the now nearly loose mass upon the stretch, a few cuts with the scissors ended the operation.

If the operator has been careful to leave none of the connective tissue near the coracoid process, there will be no need of any further manipulation or going over the ground again to search for more suspicious tissue. Everything has been taken away in one piece. There has been no cutting into or laceration of the cancerous tissues. The wound was then closed, and by moving the skin we were enabled to close the entire wound without drainage.

(When the first dressing was removed on the eighth day the entire wound was found healed; there was no elevation of temperature at any period of the convalescence). The operation was done with very little loss of blood.

The dressing which was applied here is the one that has given me satisfaction in over one hundred similar cases. It insures rest to the parts, the entire extremity, including the fingers, is included in the crinoline bandages and a plaster of paris bandage over all insures immobilization. I consider rest of as much importance as asepsis in getting primary union.

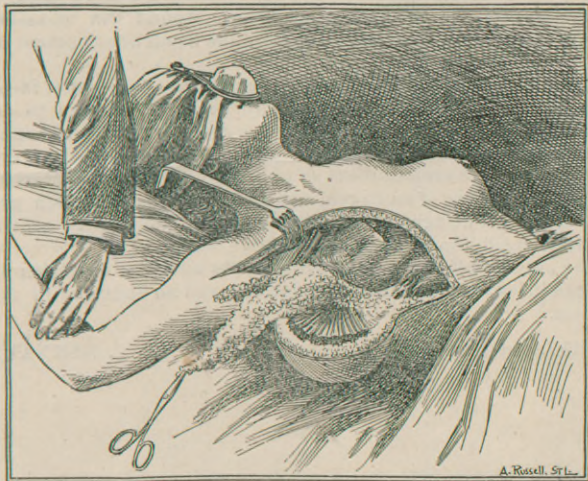
The essential points which should be understood and thoroughly practiced if local recurrence is to be avoided are:

I. The pectoralis major muscle should be exercised in every case, or, at least, all except the clavicular portion. The minor may be cut through, or partially removed, if it is infected, or if it is in the way so as to prevent complete excision of all suspected tissue.

II. By making use of this method all of the suspected tissues can be removed in one piece, together with the breast.

The reasons which make it desirable to remove the whole mass in one piece are based upon the observations of local recurrence after operations. Halsted, with whom I fully agree, thinks that there is great danger "lest the wound become infected by the division of tissues invaded by the disease or of the lymphatic vessels containing cancer cells, and because shreds or pieces of cancerous tissue might readily be overlooked in a piece-meal operation.

The division of tissues which are cancerous, or pinching them with forceps, is a thing that can be avoided by an operation such as you saw me do to-day, and this point is surely all-important. I have had the impression in operating for the removal of the cancerous uterus that local recurrence was due to the introduction of cancer juice, containing cells or



small particles of cancer tissue into the open lymph spaces of the fresh wound. There are other points which we can not mention to-day that argue in favor of this theory of inoculation.

The after treatment of these cases is very simple. The patients are allowed full diet after the second day. I usually give a tonic, and in recent cases I favor a preparation called Zumo Anana (pine-apple digestive wine), combined with tincture of iron. The former is a most efficient aid

to digestion, a pleasant-tasting vehicle, and I have ordered it as a tonic wine where patients are convalescent with very beneficial results.

There can be no doubt at the present day that cancer of the breast is a curable disease if operated on in time and by the complete method. I quote again from Halsted: "I can not emphasize too strongly the fact that internal metastases occur very early in cancer of the breast and this is an additional reason for not losing a day in discussing the propriety of an operation."

This complete operation is not an easy operation; it can not be done at any time, at any place, or by any surgeon. It is a capital operation, fraught with many difficulties, and should not be undertaken by a surgeon who has forgotten his anatomy. It should not be done unless the surroundings are such that an aseptic wound can be made with certainty, and that the after care will be in the hands of competent trained nurses.

Since we know that the result of a cancer case is found at the end of the broad and dreary road which leads to death, if allowed to run its course, I wish to enter my plea in favor of an early, COMPLETE OPERATION. The proportion of cases where the complete operation can not be done is about one-third, and even in these an operation will have a moral effect and palliate if it is not of much real benefit. Patients are often grateful for having a large, disfiguring and often offensive and putrid growth removed or changed into an aseptic inoffensive wound.

The patient left the hospital three weeks after the operation in excellent condition, with a soft and pliable scar and no disability in the use of her arm.

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