Original Articles.

A CASE OF DIFFUSE FIBROMA WITH A TENDENCY TO INTRACANILICULAR GROWTH OF BOTH BREASTS; OPERATION ON EACH WITH AN INTERVAL OF THREE WEEKS; RECOVERY.¹

THE SMALLER WEIGHED, AFTER REMOVAL, SEVENTEEN POUNDS, THE LARGER FORTY-THREE; COMBINED WEIGHT, SIXTY POUNDS.

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I SHOULD not think of asking the attention of such a distinguished gathering of surgeons to the report of a single case, were it not that it falls to the lot of but few surgeons to see such a case, and still fewer to operate upon one.

My patient, Mrs. M., aged thirty-seven, was born and has lived in Nova Scotia. She entered the Massachusetts General Hospital just at the close of the service of Dr. A. T. Cabot, who did not think her at that time in a condition to undergo such serious operations, and she became a patient of mine in the service following his. Her family history is of no importance. Her personal history is that of ordinary health up to three years ago. Has borne two children, the youngest ten years old. Her catamenia have been regular and normal up to three months ago, when they ceased.

Three years ago she discovered a hard lump in the upper part of right breast, which gradually increased in size, and with it the whole breast. Three months after the right breast commenced to enlarge, the left breast became similarly affected, and at the end of six months the right was the size of a baby's head, and the left a little smaller. For sometime, then, the growth was very gradual; but three months ago a rapid increase took place, and they became so burdensome by their size and weight that she could not work and could stand only for a short time. She is most comfortable sitting with the breasts resting on a pillow in her lap. In the recumbent posture the pressure of the weight and the dragging upon the chest walls embarrass her respiration: so much so, that after her entrance to the hospital a frame was made upon which the breasts could be suspended. Never any pain: appetite good, and sleeps well. Pulse, 96; temperature, 97.8°.

Physical examination shows she is pale, emaciated, with ovarian facies. Both breasts enormously enlarged. Right breast: largest circumference, thirty-eight inches; length from chest wall to nipple, seventeen inches; circumference at base, twenty-three inches. Left breast: largest circumference, twenty-eight inches; length from chest wall to nipple, fourteen inches; circumference at base, twenty-three inches. Skin œdematous, thickened and porky. Throughout both are to be felt movable, hardened masses of irregular outline, varying in size from an orange to a closed fist. No tenderness. For two weeks every attention was given to building up her strength for an operation, which in size of wound would equal a hip-joint amputation. At the end of that time she was brought to operation. I decided to remove the left and smaller breast first.

Feeling that loss of blood was one of the dangers, I had made two large skewers; with these I transfixed the breast vertically and horizontally close to the chest wall, and behind them placed a tightly-drawn rubber tourniquet. An anterior and posterior flap was made and the breast removed. All vessels large enough to be recognized were tied with sterilized silk before the tourniquet was removed, and little blood was lost. The operation so far was done in the sitting position; she was then placed upon a table and a few remaining pieces of the breast tissues removed. Continuous silk suture closed the wound, with bone drainage. Six days after the stitches were removed, and there was a slight oozing at two points. Four days later wound solid, and dressed with collodion dressing for support. Three weeks after first operation I removed the remaining breast in the same manner. This was followed by more marked shock than the first, but six hours after she had reacted well and was in good condition. Temperature, 98°; pulse, 80.

In ten days the dressings and sutures were removed, and there were two small stitch-hole abscesses. Convalescence rapid; and in ten days she was strong enough to desire to leave the hospital and visit some friends. There remained two very small granulating spots, and she was advised to report at the hospital soon, in case all did not go well. The sequel of this seems to have been decided by the irony of Fate, for the woman, instead of visiting her friends in the near vicinity of Boston and reporting in two weeks at the hospital, decided in a few days to return home, and took, in the middle of winter, a cold and perilous sea-voyage. She arrived home the day before Christmas, and called her physician to dress two small spots where the cicatrix had given away since she left the hospital. From a letter from her physician, Dr. C. A. Foster, of Bridgewater, N. S., I obtained the following history: At the time he first saw her, temperature and pulse were normal, but she was much exhausted by her sea-voyage and the attendant seasickness, which was violent during her whole passage, and she had suffered much from cold. For about a week she seemed to improve, when she developed erysipelas, first in the region of right breast, and then extending over back and abdomen. This in four days had faded markedly when she suddenly aborted a five to six months' foetus, and died three hours afterwards in collapse.

It should now be stated that before she left the hospital my senior house-surgeon called my attention to an enlargement of the uterus, and her history stated that her catamenia had been absent three months before entrance. I told him as she knew nothing about it to let the matter drop. She might be pregnant, and that time would determine; she might have a uterine fibroid, but had better be left to find it out later, for after two such severe operations I was content that she was well. Her condition was not suspected until her convalescence after the second operation.

HISTOLOGICAL EXAMINATION.

The histological report is by Dr. W. F. Whitney, Pathologist to the Hospital.

"The section surface of the growth, which was irregularly divided into lobules, was of a slightly translucent, grayish color, and traversed by numerous irregularly branching chinks or fissures lined with a softer and more grayish opaque substance than the intervening tissue.

¹ Read before the American Surgical Association, September, 91.

TABLE OF CASES.

No.	Reference.	Social Condition.	Age.	Breasts.	Duration.	Treatment.
1	Deutsche Chirurgie Lieferung, xli, § 43, p. 29. 1880. Billroth.	Domestic, single, virgo.	16 years.	Both. Left 23 in., right 19½ in. circumference.	2½ months.	Unoperated.
2	Billroth, 1880.	Domestic, pregnant.	22 years.	Both. Left 65 cm., right 68 cm. circumf.	5 months.	Unoperated.
3	Volpeau, 1867. Traité des Maladies du Sein. Paris, 1859.	Married, two sons.	43 years.	One. Left.	1 year.	Removed. Microscope.
4	Domarquay. Gazette Medicale. Paris, 1859, p. 818.	Married.	40 years.	One. Left, 66 cm. 4 kilog. Began during pregnancy.	7 years.	Removed.
5	Gazette du Hôpital, p. 45. 1859. Manec.	Single.	17 years.	Both. Left 7.5 kilog., right 8 kilog.	1½ years.	Removed at 1 mo. interval.
6	Schmidt's Jahrbücher, cvi, p. 51. 1860. Lotzbeck.		26 years.	One. Left. After two pregnancies. 16½ lbs., 2 litres of milk.	8 years.	Removed.
7	Marjolin. Bulletin de la Société de Chir. Paris. Vol. ix, p. 342.	Single.	15 years.	Both. Right, 1,510 gms.		Removed R. Microscope.
8	Riche. Labarraque: Etude sur l'hyp. gla. Paris, 1875.	Single.	15 years.	Both. 1,985 gms., one weighed.	1 year.	Removed. Microscope.
9	Rosati and F. Calzi. Archivio della scuola d'Anat. pathol. Vol. ii.	Virgin.	14½ years.	Both. Right 109 cm. 7.2 kilo., left 84 cm. 3.3 kilo.	2 years.	Removed.
10	Humbert, 1885. Lancette Française, Gazette des Hôpitaux. Paris.		22 years.	Both.	1 year.	Unoperated.
11	T. J. Crofford. The Triennial State Medical Society, Little Rock, Arkansas. Vol. i, No. 12. June, 1891.	Virgo.	15 years.	Both. Right 27½ in., left 31 in. circumference.	1 year.	Removed.
12	Dr. Roy. Indian Med. Gazette. Vol. xvi. Calcutta. 1881.	Married, children, 8½ mos. pregnant.	30 years.	Right only; 14 in. long, 12 in. pedicle, 12 lbs.		Removed.
13	Le progrès Médical, 14th year, 2d Series. 1886. Dr. Desenne.	Virgo.	15 years.	Both. Left 3 kilo., right 3.825 gms.	1 year.	Left operated, right operated later.
14	Prof. Baldassar. Gazzetta Medica Torino, xxxv. 1884.		35 years.	Left, 53 cm. circumf.		Operated. Died on 14th day with fever.
15	Hoy. Practical Observations in Surgery. London. 1834.		14 years.	Both very large.		Left operated, right then diminished and etc. appeared.
16	Hess. Correspondenzblatt des Vereins Nassauischer Aerzte, vol. 49, p. 17. 1859.			Both.		Operated at an interval.
17	Glück. Amtlicher Bericht über die 39 Versammlung Deutscher Naturforscher und Aerzte in Gießen in Sept., 1864. Gießen, p. 219, 1865.			Both.		Operated at an interval. Microscope. Cysto-sarcoma.
18	Texas State Medical Association. Nelson.	Married, one child.	26 years.	One. 8½ lbs.		Operated.
19	Western Medical Reporter. Chicago, 1884. Dr. Owen.	Married.	42 years.	Both. Right 22 lbs., left 23½ lbs.		Operated.

"Microscopic examination showed the bulk of the growth to be made up of a fibrous tissue rich in cells, and holding in its interstices considerable thin serous fluid. Imbedded in this were gland acini and ducts widely separated, and into the openings of which the fibrous tissue had forced its way. These could be directly traced into the fissures seen with the eye, the lining of which proved to be flattened epithelial cells. In structure, therefore, the growth is essentially a diffuse intracanalicular fibroma, and is not to be regarded in the sense of a true hypertrophy of the breast; which is suggested by the bilateral and external, somewhat symmetrical shape."

Billroth, in the *Deutsche Chirurgie*, on "Diseases of the Breast," says that diffuse hypertrophy develops usually at the time of, or soon after, the first menstruation; most frequently it is noticed from the fourteenth to the sixteenth year. It begins, however, in some cases two or three years after the first menstruation. The development of the hypertrophy then goes on very rapidly for two to four months, and then, as a rule, maintains comparatively the same size, or increases still more with the first pregnancy, then to remain unchanged. In the cases I have been able to collect—nineteen in all—the time of life at which the disease commences varies much more than Billroth states—one being forty-three and another forty-two years old,

and with those who were married, of which there were six, the ages varied from twenty-two to forty-three years. Of the unmarried, of which there were eight, the age varied from fourteen to seventeen years. There were three in which it was not stated whether married or single, and the ages were twenty-two, twenty-six, thirty-five, and there were two in which no age was mentioned, nor whether single or not. In thirteen cases both breasts were affected. Billroth says, in regard to the course of the disease, it alone is established that through the weight of the tumor the ability to do work is most altered, and that, as a rule, the nourishment of the subject of such affliction is bad. Any further constitutional influence does not seem to exist. He considers no constitutional or local treatment except amputation of any avail, and cites three cases, one each by Hanec, Hess and Gluck, where both breasts were removed at separate times with success. Billroth also states that within his knowledge no observations have been made as to whether such hypertrophied glands return to their former shape and size if the person becomes pregnant and nurses her offspring after birth.

In sixteen cases operated upon, nine had both breasts removed, and one, aged only fourteen, had both breasts very large; one was removed and the other diminished in size after her catamenia were established. Six who had only one breast affected had that removed. All

the operations were successful except one in which the patient died on the fourteenth day with fever.

In conclusion, it would seem from this analysis that this disease develops mostly at the age of puberty, that nothing short of removal is of avail, and that only one case in sixteen died.

THE TREATMENT OF GANGRENOUS HERNIA.¹

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THE cases of gangrenous hernia which will receive attention in this paper illustrate four modes of treatment, to wit: The expectant, or do-nothing method, a very good one in its place; returning the bowel, and closing or leaving the wound open; making an artificial anus; and resection of the intestine. Which of these, or of other methods, shall be selected in any given instance depends upon many circumstances, such as the kind and condition of the hernia, the age and state of the patient, and various other matters, which need not detain us at present. What to do with a bowel of doubtful vitality is one of those difficult questions which the surgeon is not infrequently called upon to decide at short notice. Individual judgment must determine whether it shall be returned to the abdominal cavity, or left in the ring, or excised; whether the wound shall be left open or closed. Written directions upon this subject are not quite satisfactory. Actual experience is the great teacher. The black, roughened, ash-colored, or ulcerated bowel of undoubted gangrene, is readily recognized. The very dark brown, or mahogany-colored ruptures are the doubtful ones. In cases of doubt it is good practice to reduce the hernia and keep the wound open with gauze, or some form of drainage, thus giving a ready exit to the intestinal contents, should one be required.

Time, and handling of the bowels, are very important elements in these operations, and are to be borne in mind, when deciding whether to make an artificial anus, or to resect the sphacelated structures. Most surgeons will require from forty-five to ninety minutes to excise the intestine, while an artificial anus can be established in a few moments. The ultimate result of the former method is infinitely preferable to the latter, but the immediate risk is greater. If the patient be *in extremis*, it would probably be better to save time by making an artificial anus, and trusting to the future for a closure of the same by nature or art.

The cases suitable for the expectant or let-alone treatment are limited to those, who are in the last stages of collapse. A patient with a cold, clammy, dusky skin; feeble, flickering pulse, or none at all; dull or stupid intellect, will hardly survive any operative treatment. While crossing the ocean some years ago the writer was asked by the ship's surgeon to see a man, who had a strangulated femoral hernia of several days' duration.

To look at the man one would not think that there was much the matter with him. He was quiet, conscious and comfortable. No pain, nor vomiting. All active symptoms had ceased. But he had no pulse at the wrists, and his extremities were cold. In other words, he was in a fatal collapse. Herniotomy was done and a recent, gangrenous knuckle of small intestine

was found imbedded in a mass of old, thickened, adherent omentum. Death took place in a few hours.

Several years since I was called out of town to see a man, who had a large, irreducible, scrotal hernia of many years' standing, which had become strangulated three days before. The lower part of the tumor was purple and cold, indicating that mortification had set in. Vomiting and pain had ceased, and the pulse was weak. He was calm, conscious and desired an operation. It was decided to make an effort to relieve the strangulation. The patient took the ether slowly and quietly, but before he was fully under its influence the bronchial tubes filled with mucus or serum from a rapid œdema, and death took place at once.

It cannot be questioned that the fatal result in both of these instances was hastened by the operation, and that it would have been better to let them alone, as was done in the following case. An old woman was admitted to the City Hospital last year in a state of collapse from a gangrenous umbilical hernia of two days' duration. Vomiting, pain, delirium, dusky, clammy skin, followed by death in thirteen hours. It did not seem possible for any treatment to do her any good.

It is difficult to indicate upon paper, or even to determine at the bedside, in all cases, the degree of collapse that precludes an operation. My own experience would incline me to take pretty large risks under these circumstances. Much, very much, depends upon the manner in which these patients are managed. Time, animal heat, blood, the anæsthetic, moving the patient, and manipulating the parts involved are important factors in the treatment. Briefly, it may be said that the patient should be warmly covered, moved as little as possible, in fact, when practicable, it is better that the operation should be done in bed. Only sufficient anæsthetic should be given to deaden, rather than entirely remove sensibility to pain. The operation should be done as quickly as possible. Stimulants are to be given by the skin and rectum unless the stomach can be relied upon, which is seldom the fact during shock, however quiet it may seem to be. Absorption and assimilation are slow and unsatisfactory. Experience justifies the assertion, that, managed in this way, many desperate cases can be carried through an operation in safety. The following instance illustrates the fact.

Mrs. M., aged forty-seven, was admitted to the City Hospital in May, 1891. She was a large, fat woman with an umbilical hernia of five years' duration. Symptoms of strangulation had existed for sixty hours. Skin cold and clammy; pulse rapid and weak. She was restless, respiration was sighing, in short the collapse was very marked. The tumor was black at the apex and as large as the fist. A few whiffs of ether were given, and an incision was made directly into the bowel. The ring was enlarged, and the intestine secured *in situ* by sutures. The patient rallied fairly well, and although she had an attack of acute nephritis, yet she was much relieved by the operation, and lived seventeen days. She died from inanition, apparently due to the high location of the opening in the small intestine. About eight inches of the gut were gangrenous. At no time did the patient's condition justify any attempt at resection of the diseased tissues.

About a year ago I operated upon an old lady, a

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