

Original Articles.

EXCEPTIONAL FATTY TUMORS.¹

BY R. M. HODGES, M. D.

If an attempt were made to enumerate the mistakes of surgery the list would be a long one, especially if surgeons manifested as much alacrity to report their failures as they do to give an account of their successes. Such a catalogue of discomfites, however exhaustive, would not prevent errors from happening, but it might exhibit the difficulties of surgical art and inculcate that prudent reserve in the expression of opinions, want of which is a fault often condemned, and the possession of which is a virtue greatly respected by the profession, if not by the public. It might also help to repress a prevalent intellectual propensity which permits preconceived opinions to subvert deliberation of judgment.

I propose to report, in brief terms, four cases of erroneous diagnosis which have left an impression on my mind, not on account of their seriousness, as in each instance the mistake was to the patient's advantage, but because they are striking illustrations of misconception, all of them having reference to an affection usually counted one of the simplest and easiest for surgical recognition.

CASE I. A. M. C., female, aged five, well developed, and, except for some slight cerebral symptoms while teething, always perfectly healthy, is the subject of a tumor of the occiput, in the median line, over the tendons of the trapezii muscles. It was first noticed at the age of three months, and has gradually increased in size; ovoid in shape, two by three inches in its diameters, regular in outline, the superior border nearly reaches the occipital ridge and protuberance. The integument is natural and slides upon the growth, which is itself apparently movable upon the muscles beneath. It has the feel of a soft solid, and is translucent when examined through a hydrocele tube. It does not pulsate with the breathing or crying, nor has the patient suffered inconvenience from the tumor, or any apparent pain when it has been handled or bumped.

More than a year before my interview the mother was advised at the Massachusetts General Hospital that an operation had better not be performed. Subsequently she again received similar advice, with the added recommendation that a shield of gutta-percha should be worn; the opinion of those who saw it being that the tumor was a meningocele, having more or less direct communication with the serous membranes of the encephalon and spinal cord. Eventually, and with a full understanding of the danger, the parents decided that they would prefer to have an operation performed and take the chances of the child's death at present rather than suffer the tumor to remain.

After etherization a fine trocar was inserted into the tumor. No fluid came through the canula, not even blood. After consultation by the surgeons present it was thought advisable to determine the character of the growth by an incision. This being done a very beautiful specimen of fatty tumor was exposed and easily removed.²

This particular fatty tumor happened to present

features which, as a rule, do not belong to that class of growths. A lipoma, congenital, situated in the median line of an exceptional locality, and translucent, offers an assemblage of phenomena which might justify the blunder of taking it for a meningocele, properly belonging in the point described, which is of necessity congenital, and offers nothing irregular in being translucent; but the sequel proved that not enough importance was attached to the absence of fluctuation, of pulsation, or to the movableness of the tumor. I am not aware that fatty tumors are often translucent, but the delicacy of color and fineness of texture which they frequently present (as in the case under consideration), coupled with the fact of their oil-cells being much larger than those of ordinary fat, suggest that the transmission of light through their structure may not be a rare phenomenon.

CASE II. S. N., a thin and anæmic man, of indifferent health, aged fifty-eight, is the subject of a smooth and rounded tumor in the median line of the neck, between the hyoid bone and thyroid cartilage. It had slowly enlarged during the four or five years it had been observed, until it reached the size of a small egg, and became annoying from its prominence. Painless, not adherent to the skin, fixed to the deep tissues, and fluctuating, it was unhesitatingly diagnosed as a cystic tumor by more than one surgeon, and its removal recommended. By medical advice the tumor was unavailingly painted with tincture of iodine for a period of several months. Discouraged by the failure of this application, Mr. N. consented to an operation. As the growth was fixed and not small, it seemed that the dissection which would be required might present some difficulty, or at least open the way for subsequent burrowing of pus. The operation was consequently performed with careful antiseptic precautions; but the tumor was found to be an ordinary lipoma, easily removed. Rapid healing and an insignificant cicatrix followed.

Fatty tumors are always surrounded by a capsule of connective tissue which in its totality constitutes a more or less complete cystic envelope. The defined outline thus given to the one in question and its fluctuation contributed to the deception by which the diagnosis was entrapped. Its locality, moreover, is one particularly affected by cystic growths, and unusual for lipomata. Although fatty tumors may be found in any part of the body, in the bones, viscera, and beneath muscles, they are rare in certain places, and generally occur only in superficial positions abundantly provided with fat.

CASE III. H. R. S., aged twenty-three, has a somewhat flattened, round, subcutaneous tumor over the horizontal ramus of the jaw, alleged to be of but a few months' duration. It is about one inch in diameter, defined in outline, slightly movable, not tender, fluctuating. The skin is little, if at all, adherent to the tumor. In short, the appearances presented are those of an indolent abscess. On looking for an explanation it was found that the lower canine tooth of that side was dead and contained a large gold filling; but it was not, nor had been recently, tender or inflamed. To avoid a scar, and in the hope of emptying the abscess internally, I advised extraction of the tooth, even though subsequently an external incision should be required for drainage of the purulent cavity, believing if it were allowed to remain that a fistulous opening and disfiguring adhesions would be sure to follow. The

¹ Read before the Surgical Section of the Suffolk District Medical Society, June 17, 1884.

² M. G. H. Records, vol. lxxvi., p. 206.

tooth was pulled, and some time after the patient returned with the tumor unchanged. An incision, which was then made, proved the supposed abscess to be a fatty tumor, easily squeezed out from its bed through a small opening in the skin.

Blinded by the exceptional situation and the patient's statement of its duration, which in all probability had been for years rather than months, the mistake was made of attributing this tumor to an irritation which did not exist. Hasty generalization from a first and strong impression led to an erroneous diagnosis, which closer attention might have averted. The case is also an instance, not infrequent, of the fact that a well-developed tumor may pass unnoticed by its possessor for a period of time hardly conceivable.

Fluctuation is a phenomenon often believed to be present because the surgeon thinks it should be. The impression is in the brain and not at the fingers' tips. Many an old-fashioned surgeon, in the eyes of his students "great on deep-seated fluctuation," owed this reputation to his experience rather than to his *tactus eruditus*. Genuine fluctuation is, however, an acknowledged attribute of many fatty tumors, and is due to the presence of large numbers of oil-globules and a small amount of connective tissue. At the Académie de Médecine Lisfranc once placed on the table a number of tumors covered by their integuments, and submitted them to examination. The surgeons present all agreed that there was fluctuation, and yet the tumors were in each instance fatty.¹ Therefore, neither in the case just read nor in the preceding was the existence of fluctuation any justification of the errors which were made.

CASE IV. C. H., aged sixty-four, an educated man, of exceptional capacity, in perfect general health, two weeks before being seen fell on the ice, severely hurting himself about the hip. A week afterwards he first noticed a painless tumor about four inches in diameter, filling the space of Scarpa's triangle, defined, lobulated on the surface, and at its periphery slightly, if at all, movable, firm, and non-fluctuating in substance. The integument was adherent and traversed by conspicuous veins. There were no enlarged glands in its vicinity, or above Poupart's ligament. Although the patient had noticed this tumor but for one week, and only two weeks had elapsed since his fall, it plainly was not of an inflammatory character, and, from the appearances presented, it was equally obvious that the growth must have been of longer duration than supposed, and bore no relation to the accident which had befallen him.

Notwithstanding the absence of local or previous symptoms, and the patient's conviction that there had been no swelling in the region before his fall, the serious character of the growth could not be doubted. I expressed the opinion that it was a sarcoma, and gave a discouraging answer to inquiries in regard to the expediency of an operation for its removal.

During the succeeding twelve months the tumor underwent little or no change, and was examined by several surgeons, all of whom coincided in the diagnosis which had been given. C. H. finally entered the Massachusetts General Hospital, and, after much deliberation, an attempt to remove the tumor was decided upon. This was undertaken with every precaution to insure the success of what promised to be a long and dangerous operation. On exposing the growth it proved to be a lipoma, traversed by numerous fibrous bands, and closely adherent to all contiguous parts.

It was evidently an old inhabitant of the situation it occupied, and a still more curious illustration than the preceding one of the fact that a tumor will long remain undetected by its possessor, even when in a palpable location.

In this case the patient's self-deception contributed to the error of diagnosis, but the tumor, from intrinsic evidence, was so clearly of long standing that his statements to the contrary should have had no influence. Its actual age had led to changes which effaced some of the usual features of a lipoma, and its situation, as in the cases of supposed meningocele and thyro-hyoid cyst previously related, was deceptive, in that it is usually the habitat of a graver class of growths. The alleged association with an injury is one commonly made or sought for in all cases of tumors, but the great source of error was an assumed rapid development, and, in the absence of inflammatory phenomena, this could be occasioned only by a malignant growth. I doubt if, under the circumstances, it was possible to have formed a correct conception of the nature of this tumor. Any one diagnosing a lipoma would have made but a lucky guess.

I will briefly describe five other fatty tumors of which I have a few memoranda, and which were not diagnosed before operation, their character remaining in doubt until after removal, owing to the situation in which they were developed.

A seaman, aged twenty-three, seven years before admission to the Massachusetts General Hospital, first noticed a tumor, the size of a pea, in the middle of his right palm. This grew slowly until it was one and a half inches in diameter, ovoid in shape, soft, fluctuating, painless, immovable, apparently subcutaneous, not interfering with the motion of the fingers, and only troubling him in his occupation as a fisherman by the pressure of his fish-line. An incision being made, the growth was easily enucleated by the fingers, and found to be a fatty tumor composed of many compressed lobules. No arteries were tied.

A laborer, aged forty, presented himself at the Massachusetts General Hospital with a small tumor between the index finger and thumb, which, when first detected, two years previously, he attributed to the pressure of a wood-saw. At first painless, it subsequently became painful on pressure, or when the hand hung down, the pain streaming up the arm as if a nerve were involved. The tumor was most prominent on the dorsum of the hand, and at the time of operation was as large as an egg, ill-defined, partly concealed under the palmar fascia, soft, fluctuating. The integument covering it was natural in color, and in no way involved. Its removal, requiring an incision four inches long, was accomplished chiefly by the fingers. The first dorsal inter-osseous muscle was divided to give access to the tumor, which was an ordinary lipoma. No vessels were tied.

From a position similar to that in the preceding case, between the index finger and thumb of a man aged seventy-three, a fatty tumor, the size of a potato, and of thirty-five years' growth, was removed, or rather torn out, at the Massachusetts General Hospital, through an incision in the palm. One artery required a ligature.

A female, aged fifty-five, twenty-two years before operation, observed a tumor as large as a pea on the right side of her forehead, within the hair. During

¹ Compend. de Chir., vol. i., p. 605.

the last six years it had grown to the size of an apple. It was immovable, and not sensitive or uncomfortable, except from its position and dimensions. Its removal was easy, and unattended by bleeding. It proved to be an ordinary fatty tumor.

A man, aged fifty-six, twelve years before admission to the Massachusetts General Hospital, discovered a "bunch" in the lower part of his right scrotum, hard, unconnected with the testicle. Seven years afterwards there appeared a second "bunch," larger than the first, and situated above it. Both were movable, and not tender. Within fifteen months these had grown rapidly, until the scrotum reached the dimensions of an infant's head. The enlargement was confined wholly to the right side, and appeared to be made up of several distinct tumors; one, at the lower part, being equal to an orange in size, while another, above it, was still larger, but flattened in shape. They were just beneath the integuments, and the interval between them fluctuated, as if occupied by a fluid. Both testicles and cords were natural. A small hernia existed on the side of the tumors, for which the patient wore a truss. An operation removed a multilobular fatty tumor. One or two veins were tied, but no arteries. The recovery was interfered with by a secondary hæmorrhage, however, of considerable amount.

In this latter group of cases the record of apparent fluctuation, noted at the time of examination, presents itself again as a conspicuous peculiarity of fatty tumors, and justifies the comments already made.

Another feature, which may be remarked upon, is the statement, three times repeated, that the tumor was torn out, or enucleated, by the fingers; a procedure not unsurgical or exceptional, but which illustrates the loosely encapsuled character of these growths, and, while familiar as a method often adopted in their usually rapid removal, it is one not commonly alluded to by surgical authors.

The infrequency with which vessels call for ligature after the removal of lipomata prompts me to speak of the exudation of serum which usually takes place, to a large amount, in the space vacated by the tumor. This formerly occasioned trouble by distending the cavity, decomposing, and finally becoming purulent, and, at the expiration of a few days, obliging an opening to be made in the line of an incision which has usually united by first intention. Such a sequel of the operation is now happily prevented by aseptic dressings and the invariable practice of inserting a drainage tube in the wound.

ANTISEPTIC HERNIOTOMY WITH SUTURE OF THE PERITONEUM.¹

BY A. T. CABOT, M. D.

THE dangers of herniotomy have been greatly reduced, no doubt, by the introduction of modern antiseptic methods, but the correct appreciation of the properties of the peritoneum learned in abdominal surgery has done, perhaps, even more to limit the death-rate of this operation.

Formerly the surgeon, in closing the wound after the reduction of a strangulated loop of intestine, brought

¹ Read before the Surgical Section of the Suffolk District Medical Society, March 7, 1884.

the edges of the skin neatly together, and drained the cavity of the sac more or less perfectly with a seton or tube. If a wound treated in this manner supplicated the pus found easy access to the abdominal cavity, and fatal peritonitis was the frequent result, a result vastly more common at that time in umbilical than in inguinal hernia, as in the former the pus, naturally, gravitated directly into the abdomen, while in the latter it had to find its way up the inguinal canal, the walls of which, being held in apposition by a compressing pad, often closed by adhesive inflammation before suppuration commenced.

We now know that if the peritoneal surfaces at the ring are brought snugly together with deep stitches they quickly cohere and shut the wound off completely from the cavity of the abdomen. This cohesion of the peritoneum is very firm at the end of twelve hours, as has been frequently confirmed by autopsy after ovariectomy, and as suppuration does not commence inside of twelve hours the peritoneum is completely closed before any collection of pus and penetration of it into the abdomen can occur. After the peritoneum has thus united the outer wound may gape open, may suppurate, may even take on an unhealthy, sloughy character without implicating the abdominal cavity. Another advantage to be gained by the careful approximation of the peritoneal surfaces about the hernial ring is the very great probability of obtaining a radical cure by so doing. In order to place the stitches as advantageously as possible with this end in view the operator should draw down the hernial sac as far as possible, and place his stitches well within the ring, as in this way he brings the peritoneal side of the wound smoothly together, and avoids leaving a pocket in which a new hernial protrusion may commence. This remark applies especially to inguinal hernia, and the following case will serve as an illustration of this method of treatment:—

James H., thirty-eight years of age, entered the Massachusetts General Hospital July 9, 1882, with the following history:—

The patient has had a right inguinal hernia for many years, and has worn a truss for it, but although the truss is a good one the hernia often escapes from it. Five or six hours before entrance to the hospital he was seized with sudden pain while riding in his cart, and found that an unusually large protrusion had taken place. A physician whom he called upon tried taxis for two hours without effect.

The hernia at the time of entrance was about the size of a large fist, very hard, red, and tender. I saw the patient soon after his arrival in the hospital, and after trying taxis moderately under ether I proceeded to operation.

The sac contained about a foot and a half of deeply congested intestine. After incising the constricting portion of the ring there was still great difficulty in reducing the prolapsed intestine. This was finally accomplished by raising the pelvis and tucking it slowly in, beginning with the portion that came out last. The pillars of the ring were tightly sewn together with chromicized catgut, and the outer part of the wound brought together with silk.

The recovery after this operation was uninterrupted.

I have seen this man within the past six weeks (twenty months after the operation), and the hernia has never been down since. He still wears a truss as a precaution, but the impulse upon cough over the