DIFFUSE LIPOMA.

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THE term diffuse lipoma is applied by the authors to certain cases in which there is a great local increase of the subcutaneous fat, without any distinct boundary or capsule such as is usual in the more common forms of circumscribed lipomata.

These growths are generally symmetrical, and are most common over the mastoid processes, in the nape of the neck, and in the submaxillary regions. As will be seen by reference to the cases about to be described they are, however, met with in other situations.

In the 'Transactions of the Pathological Society of London,' vol. xxx, 1879, p. 417, a case is recorded by one of the writers (Mr. Morrant Baker) in which the patient was the subject of these tumours which occupied the upper and back part of the neck and the submaxillary regions.

The tumours are thus described: "There are two tumours in the scalp, symmetrically situated, one on and behind each mastoid process; two, also symmetrical, in the neck—one in each anterior triangle—and a fifth at the back of the neck, in the median line. When the patient was first seen, about two months ago, the tumours over the mastoid processes were of about the size of a small Tangerine orange; those in the anterior triangle, less defined at their margins, occupied the upper two thirds of this space; and the post-cervical tumour, of a circular outline, and less prominent than either of the others, had a diameter of about three inches.

"All the tumours have the same general characters. They are soft, almost fluctuating, yet not tense; apparently seated in the subcutaneous tissue, yet not easily movable on subjacent parts. The skin over them, with which they seem continuous, is not altered in colour or texture, and they are not in the least degree tender. Their consistence seems to lie somewhere between that of a soft fatty tumour and a subcutaneous nævus; the tumours cannot, however, be obliterated so completely by pressure as the latter, nor are they lobulated like the former. Their texture feels most like that of the soft, semi-fluctuating, fatty lumps in the lower part of the neck which accompany the condition known as sporadic cretinism."

In a postscript, dated May 24th, 1879, it is noted that "the tumours have suddenly undergone a great alteration. The post-mastoid tumours now feel almost as tense as if they were distended by fluid, and the post-cervical median tumour, from a state in which it was scarcely distinguishable from the surrounding subcutaneous tissue, is now in all respects indistinguishable from an ordinary well-defined, firm and lobulated, fatty tumour. Were it the only tumour present, and were the history unknown, no surgeon could hesitate for a moment in diagnosing it as an ordinary fatty tumour."

From the great variations in size to which these

tumours were subject in this particular case, from their want of definition, and from the condition of the general health of the patient, it seemed probable that they were rather lymphadenomatous than fatty. A short time before the patient's death, which occurred from some obscure disease of the lungs, a year or two after his exhibition to the Pathological Society, the tumours were said to have almost completely disappeared. It seemed probable at the time that there might be some pathological connection between the tumours in the neck and the persistent bad health of the patient, which ended in death ; but examination of many subsequent cases of similar tumours, without accompanying general disease, suggests that in the first recorded case the connection may have been only accidental.

The description of the tumours quoted above is applicable to all the cases now to be recorded, but in no subsequent individual case have the variations in size and consistence been so noticeable. In no case, moreover, has the affection of the general health been so marked, with the exception of Case No. 6, in which the patient was the subject of advanced phthisis. In most of the cases, too, the tumours have been larger and more tense, and in some of the post-mastoid tumours the bases have been so hard as to suggest the presence of much fibrous tissue.

A glance at one of the drawings will give a much better idea of the general aspect of a case than any verbal description. (See Plates I and II.)

Although the disease is seen in its most typical form in the neck and occiput it is not confined to these regions. The tendency to the growth of adipose tissue is in many of the cases observable in the arms and forearms, the scrotum, abdominal wall, and the inguinal and hypogastric regions. In one case large masses of fat were found in the mammary regions (Plate II, fig. 2). This is the only case in the series in which the post-mastoid tumours were so small as to be scarcely noticeable.

The total number of cases observed by us is thirteen.

CASE 1.—N. D— (Jan. 25th, 1883), a strong, healthy looking man, æt. 45, says he has always enjoyed good health. He is employed as an ostler; has no visceral disease, but owns to drinking a great deal of beer, and some gin, and other spirits. He does not get drunk, but is often tippling; occasionally vomits in the morning, and more often simply retches. His tongue is tremulous, raw, and inflamed, a typical drunkard's tongue.

At the back of the neck and extending over each mastoid process are symmetrically-placed swellings, limited above by a line prolonged backwards from the zygoma, and below less distinctly limited. Their upper portion is firm, fixed, and resistant, and their outline smooth and rounded; below they are softer, and more inclined to be lobulated. The swelling is largest on the right side, and measures $5\frac{1}{4}$ inches in its transverse diameter, by $3\frac{1}{2}$ inches from above downwards. On the opposite side the measurements are respectively 5 inches and 3 inches. The submaxillary region is occupied by a soft pendulous mass, largest under the right side of the lower jaw, looking like a double chin (Plate I, fig. 2). Its consistence is irregular, and in some places hard masses like enlarged glands can be felt. The right groin presents a small swelling over the femoral glands; the left groin one about twice the size of its fellow; the glands themselves cannot be distinctly felt.

There are no tumours in any other parts of the body. Some of these masses have been noticed by the patient for about twelve months, but those in the groin had not attracted his attention. He says the swellings increase in size, but vary at different times.

Urine and blood normal.

March 8th.—The patient has been under Dr. Andrew, of Hendon, and has taken *Liquor Potassæ* without much change in the swellings. They are perhaps a little softer.

CASE 2.—J. C—, æt. 40, is in good health, works hard at a wine and spirit merchant's, mostly as a warehouse-

man, and says he can easily carry two hundredweight on his back. No visceral disease; says he drinks a great deal of gin. Urine normal. On the back of the neck, over the upper cervical vertebræ, is a large swelling occupying each side of the sub-occipital region, extending equally over the mastoid processes, and having a marked median groove along the line of the spine; the appearance indicates that the tumour commenced in two lateral growths, which subsequently met across the middle line. The upper limit of the swelling on each side is about on a level with the tip of the ear. The diameter transversely is $7\frac{1}{2}$ inches; from above downwards $4\frac{1}{2}$ inches.

The whole of the submaxillary region is occupied by a large, semi-fluctuating mass, which extends upward over each cheek, and presents no median division. Its measurement from one cheek to the other is 12 inches; the upper boundary is harder to the touch than is the lower part of the swelling; the skin over it is slightly red.

Masses similar to the above are found on the upper arms, more especially on the left, the circumference of which is 16 inches, that of the right being $14\frac{1}{2}$; the supra-clavicular regions are free.

In both groins, particularly the right, it seems as if the glands were embedded in swellings, which feel as if composed of tissue similar to that forming the growths in other parts. On the outer side of each thigh are tumours of a similar nature, though small; and below the umbilicus there is a collection of a like material.

The patient can give no very definite history, but says that the various lumps began to grow about four years ago. He thinks that some of them, especially those on the neck, are still increasing.

CASE 3.—J. M—, æt. 51, is in good health. Thoracic viscera normal. A little pale and pinched about the face, but has a good deal of subcutaneous fat about the body.

Urine acid, and contains a trace of albumen. Says he drinks a great deal of gin. Digestion bad.

In the centre of the back of the neck is a large tumour of a rounded shape (Plate I, fig. 1). It extends about an equal distance on each side of the middle line, the situation of which is marked by a barely perceptible groove. The transverse diameter measures 5 inches, and the thickness of the tumour is about 3 inches.

Higher up the neck on each side, behind the ears and over the mastoid process, are two swellings of a similar kind. That on the left side is the larger, and is about 5 inches in diameter; its outline is nearly circular, and the skin over it is red, and rather tender, though not in any way indicative of impending suppuration.

The tumour on the opposite side is about 3 inches in diameter, also of a rounded shape, and covered by normal skin. Neither tumour encroaches on the middle line of the neck.

The patient says that the large tumour has been growing for seven years, the smaller ones four or five years. In his opinion they are at some times smaller than at others. No similar swellings exist in other parts of the body.

CASE 4.—D. L—, æt. 38, car-driver, has suffered from chronic bronchitis for about four years, but is otherwise healthy. Drinks a great deal of beer and spirits. Appetite bad. Pain in loins. Urine acid; contains a good deal of albumen.

Symmetrically placed on each side of the upper part of the neck, and over the posterior portion of each mastoid process, are two lumps—each about twice the size of a small hen's egg—slightly crossing the middle line, along which is a deep longitudinal groove. The upper boundary of each lump is a line drawn backwards from the zygoma. Their measurements are 4 inches long by 3 wide.

Under the skin in the submaxillary region is a soft diffuse swelling, not extending into the cheeks. A small

swelling about the size of a walnut is placed on each zygomatic arch immediately in front of each ear, that on the right side being rather the larger. Lumps of similar size are found on each side of the spine in the lumbar region.

In each groin the glands appear hidden and involved in similar growths. The scrotum is enlarged by the presence of similar soft growths, and is pendulous. Both arms and forearms are very much enlarged and misshapen by diffuse soft masses in the subcutaneous tissue, feeling like fat. In the left arm the lumps are much more circumscribed below the elbow. The greatest circumferences of the arms and forearms are as follows :

R. arm . $12\frac{1}{4}$ inches ; R. forearm . $11\frac{1}{2}$ inches.

L. arm . 14 inches ; L. forearm . $12\frac{1}{2}$ inches.

The history the patient gives is that the mass on the right side of the nape of the neck began to grow three years ago, and was soon followed by the appearance of its fellow ; the submaxillary region, groins, and arms were then affected in order, the swellings in the latter being noticed eighteen months ago. He is not sure that the tumours are still growing, and says that they vary in size. This latter statement is certainly correct, for a week after the above description was written the tumours in the neck were distinctly smaller and less tense.

CASE 5.—J. C—, æt. 48, has been a healthy man, but owns to having drunk much spirits, chiefly rum, often as much as eight glasses a day ; has not drunk so much lately. No appetite for food ; suffers from nausea.

For two years he has noticed lumps on his neck, which have become much larger during the last six months, and which he thinks are still growing. He thinks they vary in size ; they cause no pain.

On the back of the neck on each side are two large masses very nearly equal in size—that on the right being rather the larger—and partly subdivided by a transverse groove. Their greatest diameters are in the long axis of

the body, and measure $4\frac{1}{2}$ inches each ; transverse diameter of the right $2\frac{3}{4}$ inches, of the left $2\frac{1}{2}$ inches. In front of each ear is a small swelling on the zygoma, that on the left side being the larger, and about as big as half a walnut.

Has no swellings in other parts of the body.

February 9th.—Has been taking Liq. Potassæ for the past month, with the result that the swelling over the right mastoid process is smaller and softer. No other change.

March 12th.—Has continued Liq. Potassæ. No improvement.

CASE 6.—C. S—, pig-slaughterer, æt. 33. Married, and has two children, aged five and four years. Says he has been a fairly healthy man, but has lately been troubled with cough. Has drunk much, chiefly beer and spirits. Hand tremulous; tongue glazed and superficially ulcerated. Phthisis at right apex. Liver enlarged. Urine acid, loaded with blood, which has been present for the past week. Pain in the loins. Fistula in ano of five months' duration.

On the upper part of the back of the neck are two symmetrically placed swellings, each $4\frac{1}{2}$ inches long by about $2\frac{3}{4}$ inches wide, limited above by a line prolonged backwards from the zygoma, and each partially subdivided into two equal portions by a transverse groove, which is most marked on the right side ; the portion of the tumour above the groove is firmer and more elastic than that below, which is softer and less defined. The left sub-maxillary region is occupied by a large, soft, pendulous mass, ill-defined in all directions, the right side of the neck being but slightly affected. The lymphatic glands in each groin are hidden by soft tumour-like masses of an apparently similar nature to those in the rest of the body, but of small size. There is a slight swelling on each side just above the pubes, about the size of a marble.

The patient thinks the lumps have been growing for about two years, but is not certain. He thinks they vary in size.

CASE 7.—W. H— (Nov., 1883), a healthy man, æt. 29, of healthy parents. Drinks about six quarts of beer daily, three quarts of milk, and half a pint of gin. Eats little meat, and is fond of sucking raw eggs to the amount of five or six a day. No visceral disease. Digestion and general health good. Has noticed swellings on the breast, abdomen, and in the groins for twelve months. They all appeared simultaneously and are increasing. They do not vary in size. A lump on the left side of the neck appeared at the same time as the others.

The pectoral regions are occupied by large globular swellings, leading one to suppose at first sight that the patient has unusually developed mammary glands. They are of equal size, each about as large as the average mamma of an unmarried woman (Plate II, fig. 2).

Over the middle line of the abdomen are large rounded swellings, limited laterally by the lineæ semilunares, and transversely constricted by the lineæ transversæ. There is a soft mass over the pubic bone. The glands in each groin and in the right axilla are embedded in soft swellings.

The upper and inner part of each arm is occupied by a soft pendulous outgrowth, the whole limb being in each case much enlarged, so that the greatest circumference of the right arm is $14\frac{3}{4}$ inches, that of the left $14\frac{1}{2}$ inches.

In the left submaxillary region is a swelling as large as an egg, irregular in outline, and pendulous. From the hyoid bone to the lobule of the left ear the measurement is $6\frac{1}{4}$ inches, a similar measurement on the right side being 5 inches. There are two symmetrical swellings in the scrotum, one behind each testis.

All the tumours have a soft doughy feel, and are evidently composed of fat. The skin over them is mostly

adherent, especially over those on the arms, and dimples when pinched up. There are symmetrically-placed swellings behind the mastoid processes, but of small size, and hardly noticeable.

February 16th, 1884.—All the swellings have greatly increased. In each pectoral region is a large rounded mass, as big as a full-sized female breast, and with the nipple in its centre. General health good. Says he has given up spirits, but drinks beer.

CASE 8.—F. B—, æt. 41 (September 29th, 1883), a weak, unhealthy-looking man. Is said to be of temperate habits. For two years has noticed swellings in his neck, and says that for the last year they have been very painful. In the middle line of the neck in the sub-maxillary region is a large, soft, pendulous swelling. Behind each mastoid process is a rounded swelling, extending from the superior curved line of the occipital bone to the sixth cervical vertebra. These swellings are united across the middle line in the lower half of their extent. Extending along the middle line, and on each side of it, from the first to the fourth dorsal vertebra, is a similar mass of soft tissue feeling like fat. At their upper boundary the tumours are of firm consistence.

The patient was treated with Liq. Arsen., but did not improve.

CASE 9.—W. P—, æt. 38, hairdresser, admitted into St. Bartholomew's Hospital under the care of Mr. Willett, March 2nd, 1885. A wasted, unhealthy-looking man. Family history of phthisis. Winter cough for some years past. No material pulmonary disease. Urine normal. Has lateral curvature of the spine.

For many years he has been in the habit of drinking large quantities of spirits, often as much as half a pint to a pint of brandy daily. He also drinks beer. The spirits are consumed at frequent intervals in small quantities, and he says he is never intoxicated.

Behind each mastoid process is a swelling the size of

half an egg, rounded and smooth to the touch, firm above, where it is limited by the superior curved line of the occipital bone, but more soft and less well defined at its lower border.

In each parotid region, immediately in front of the ear, is a small rounded swelling as big as a walnut, soft, painless, and compressible.

Symmetrical swellings of similar size to those in the parotid region are found in the upper part of the scrotum. They are freely movable.

In the perinæum is an irregular and very ill-defined soft mass, extending from the scrotum to the anus, symmetrically distributed on each side of the middle line, and with its long axis in an antero-posterior direction. It is distinctly lobulated, and though movable on the deeper structures is in parts adherent to the skin.

Over each external abdominal ring is a rounded softish swelling about an inch in diameter, the skin over which is partly adherent.

In the abdominal wall, on each side of the middle line, below the umbilicus, are symmetrical swellings each as large as half an orange.

The preceding cases, ten in number, including the one already described in the Pathological Society's 'Transactions,' have been observed by us at St. Bartholomew's Hospital. For the following we are indebted to Dr. Allchin, Dr. de Havilland Hall, and Mr. Henry Morris.

CASE 11. (From Mr. Henry Morris.)—R. R—, æt. 63, steward on board a steam-packet, is suffering from cancer of the mouth and tongue. For thirty-seven years has noticed the tumours about to be described. Twenty years since Mr. Cock removed two of the smaller ones from the neck; the others continued to grow until ten years ago.

There are now three tumours at the back of the neck, one on the right and two on the left side of the well-marked and easily felt ligamentum nuchæ. There is also an enormous, soft, pendulous, almost diffuent mass, which

extends from below the ear on one side, beneath the chin to the same point below the other ear. It hangs over the top of the chest.

CASE 12. (From Dr. de Havilland Hall.)—J. L—, æt. 44, has been a healthy man until the last three years. Since then he has suffered from cough, with much expectoration and occasional hæmoptysis. Has been a heavy drinker, taking large quantities of both beer and spirits, often half a pint to a pint of gin daily. Latterly he has not drunk so much spirits, but still consumes large quantities of beer. Is subject to headaches.

A year ago he noticed swellings in the neck; since then they have increased, but are sometimes smaller than at others.

Present condition.—Symmetrically placed behind the mastoid processes are two firm, rounded swellings, each as large as a Tangerine orange, similar to those already described in the previous cases. In the submaxillary region is a soft pendulous swelling not large enough to be very noticeable. In each groin is a soft, fatty mass, which apparently extends into the femoral canal, as it gives a distinct impulse on coughing.

Dr. Allchin has kindly forwarded the note of the following case.

CASE 13.—C. St. Q—, æt. 36, was for several months under my observation at the Westminster Hospital during 1884.

Has been a cavalry soldier, and was for some years in India, where he drank freely, chiefly brandy, rarely the native spirit. He has quite ceased drinking for the last few years. The tumours commenced whilst he was drinking.

Says he had syphilis in 1867, but it appears questionable whether it was an infecting chancre, for he states he had no secondary manifestations; was treated with Fowler's solution and iodide of potassium.

In June, 1875, tumours were first noticed behind the ear. Their appearance was attended with slight pain, and were at first small and hard, as if the bone were growing out. Says his mastoid processes were always prominent. These swellings continued to increase in size, and to become softer. They attained their present dimensions in December, 1879, since which time they have remained stationary.

The next tumour to appear was the one on the cervical spines four years ago. This reached its full development in two years, and has, like the preceding, remained stationary since that time. Patient's attention was drawn to this tumour by the chafing of his collar.

The fulness under his chin has existed eighteen months ; it is not increasing.

A year ago the swelling in front of the left ear just below the zygoma was pointed out to the patient, who had not previously been aware of its existence. It is not increasing in size.

A few weeks since (*i. e.* about last May), patient first noticed swelling in the right arm. This is more flabby, and not so circumscribed as the other tumours.

Patient was discharged from the army in October, 1879, on account, as he says, of the tumours in the neck, which were attributed to syphilis.

For some two or three years patient has noticed an impairment of general health, and a failing memory, with muscular weakness and loss of weight. But this may, in part, be attributed to bad circumstances and poor living, and in greater part to the effect of *tænia*, from which he was found to be suffering whilst in the Westminster Hospital.

No treatment was administered for the tumours, and patient left hospital in no way altered, so far as they were concerned.

In vol. xiii of 'St. Thomas's Hospital Reports' Sir William Mac Cormac has reported four cases similar to

those just described. In one of these he removed a portion of the post-mastoid fatty tumours with ultimate benefit to the patient, who was very pleased with the result. But Sir W. Mac Cormac remarks that the removal of the tumours was very tedious, the hæmorrhage copious, and the wound extensive.

At the meeting of the Pathological Society, March 20th, 1883 ('*Brit. Med. Journ.*, 1883, i, p. 623), "Mr. Jonathan Hutchinson showed a mass of fatty tissue removed from the back of the neck of a man, who had large masses in that situation quite symmetrically arranged. The patient also had tumours symmetrically placed on both arms, and he appeared to have symmetrical hypertrophy of the parotid glands, or the appearances might be due to small masses lying over the glands. On March 19th he had attempted to remove one of the masses, but had not found any distinct limit to the mass, which appeared to be a hypertrophy of the subcutaneous fat, not at all encapsuled, and not therefore to be removed. The mass consisted of very firm fatty tissue, with firm fibrous meshes."

At the meeting of the Ophthalmological Society, July 3rd, 1884,¹ Mr. Jonathan Hutchinson narrated the history of a patient, a Hindoo gentleman, in whom proptosis, first on one side and subsequently on the other, occurred in conjunction with a puffy condition of the face and submaxillary region. The proptosis appeared to be due to an increase of the orbital fat, but no symmetrical enlargements of the neck or elsewhere were noted. Mr. Hutchinson expressed his opinion that this case was analogous to that shown by Mr. Baker at the Pathological Society.

At the time that Mr. Morrant Baker exhibited his patient to the Pathological Society he was not aware that other cases had been recorded, but his attention has been since called to the fact that Sir Benjamin Brodie has placed on record examples of the same disease. His observations on the subject may be here quoted:—

"There is another kind of fatty tumor which occurs

Transactions of the Ophthalmological Society, vol. iv, p. 36.

occasionally, but which has not been, as far as I know, described by surgical writers. In the cases to which I allude the tumor is not well defined; in fact there is no distinct boundary to it, and you cannot say where the natural adipose structure ends and the morbid growth begins. I will relate to you the history of one of several cases of this kind that I have met with, and this will explain as much as I know of the matter. A man came to this hospital several years ago having a very grotesque appearance; there being an enormous double chin (as it is called) hanging down nearly to the sternum, and an immense swelling also on the back of his neck, formed by two large masses one behind each ear, as large as an orange, and connected by a smaller mass between them. He said that the enlargement had begun to show itself three or four years before, and had been increasing ever since. They gave him no pain; nevertheless they made him miserable, and in fact had ruined him. The poor fellow was by occupation a gentleman's servant, and having so strange an appearance no one would take him into his service. I gave him half a drachm of the *liquor potassæ* three times a day, and gradually increased the dose to a drachm, dissolved in small beer. When he had taken the medicine for about a month the tumors were sensibly diminished in size. He went on taking the alkali, and the tumors continued to decrease. It was just then that iodine began to have a reputation, much indeed beyond experience has proved it to deserve, for the cure of morbid growths, and I left off the *liquor potassæ*, and prescribed the tincture of iodine instead. The effect of this change of treatment was remarkable. The patient lost flesh, while the tumors increased in size. Of course I omitted the iodine and prescribed the *liquor potassæ* a second time. Altogether he took a very large quantity of the latter medicine, and left the hospital very much improved, with directions that he should continue to take it, with occasional intermissions. I had lost sight of him for some time when it happened that I was requested to visit a

patient in Mortimer Street. I did not observe the servant who opened the door, but as I was leaving the house he stopped me, saying that he wished to thank me for what I had done for him. It was this very patient. He was so much improved in appearance that he was enabled to obtain a situation as footman. There were still some remains of the tumours, but nothing that was very remarkable. I have seen some other cases of the same kind in which the exhibition of very large doses of *liquor potassæ* appeared to be of great service. But I have not had the opportunity of trying it, or of knowing the results in every case; and I am informed that in some cases it has been given to a considerable extent without manifest advantage." (Lectures on Pathology and Surgery, 1846, p. 275.)

Remarks.—All the cases hitherto observed have been males, the ages varying from twenty-nine to sixty-three years; the majority of the patients being between thirty-five and forty-five years of age at the time the tumours commenced to grow. We believe that all these swellings have a similar structure, being composed simply of adipose tissue; for in the cases in which the tumours were submitted to operation by Mr. Hutchinson and Sir William Mac Cormac, the growths removed consisted of fat. And in several of our own cases the diagnosis has been confirmed by the microscopical examination of portions of the growth removed by Dr. Charcot's "*emporte pièce histologique*."

The development of these tumours is somewhat rapid. Thus, in case No. 7 they had attained a considerable size within twelve months. The rate of growth, however, varies much in individual cases. Another noticeable fact is that in some instances the swelling varies in size from time to time. Of this fact several of the patients were very certain, and in some we were able to verify their statements. Whether the tumours ever entirely disappear in the absence of any wasting disease we cannot certainly affirm.

With regard to the anatomical position of the swellings we have no doubt that they are situated in the subcutaneous cellular tissue, and we cannot agree with Sir W. Mac Cormac that in the neck they are beneath the fascia of the trapezius muscle.

In support of our opinion we would point out firstly, that in Mr. Hutchinson's case the fatty mass is specially mentioned as being found to be subcutaneous at the time of operation; and secondly that the entirely analogous fatty masses in the submaxillary regions, in the forearms, abdominal wall, &c., are evidently entirely independent of fascial attachments in their growth, being essentially diffuse, absolutely unlimited in any direction and occasionally distinctly attached to the skin.

The manner in which the growths in the post-mastoid regions are limited may also be readily explained without reference to the attachments of the fascia of the trapezius. They are limited above by the superior curved line of the occipital bone, because beyond this limit there is no subcutaneous cellular tissue in which the fat can be developed. In a downward direction these growths are not definitely limited, but in the middle line of the neck there is a more or less well-marked depression, simply due to the fact, which is easily demonstrable, that in this situation the skin is closely bound by strong fibrous bands to the subjacent aponeurosis, and that the subcutaneous tissue is very dense and tough. Nevertheless, the growths may certainly pass across the middle line (see, amongst others, Case No. 2), a condition which would be impossible if they were subfascial.

Sir W. Mac Cormac, indeed, in another part of his paper—possibly by an oversight—says, whilst speaking of the operation, “The mass appeared to consist simply of diffuse subcutaneous fat.”

Another point to which we would direct attention is the fact that these fatty masses are prone to develop in the regions occupied by lymphatic glands. Thus they are found behind the ear, in front of the pinna, in the sub-

maxillary and inguinal regions ; although they are also frequently present in other situations which have no special connection with the lymphatic glands. Whether the latter glands are ever involved in the growth we are not in a position to state with certainty ; but we have not felt them to be definitely enlarged.

Beyond the discomfort produced by the deformity, no symptoms specially referable to these fatty tumours have been observed ; and the expression of a wish on the part of one or two of the patients to have an operation performed has arisen only from the unsightliness of the disease.

Internal remedies have apparently little or no effect. In one or two cases, however, the administration of arsenic with steel seemed slightly beneficial. In accordance with Brodie's suggestion we have tried the effect of Liq. Potassæ, but have not hitherto found it beneficial in reducing the size of the growths. We have administered the above-mentioned drugs, as well as iodide of potassium and mercury, in several cases for some months.

As the cases accumulated we had hoped to find some definite conditions which might help in determining the nature or cause of the disease. But the only circumstance which seems to give any clue to its cause is (so far as we have been able to observe) that, with one or two possible exceptions, the patients have been hard drinkers.

Of course this may be an accidental concomitant and even if connected with the disease may be only one element in its further development. But, as will be seen in reading the notes of the individual cases, the fact is too marked a feature to be overlooked. In Sir William Mac Cormac's cases no statement is made with regard to sobriety, but we may remark that the two patients whose occupations were recorded, were, the one a butler, the other a waiter.

The value of alcohol as a fat-forming food is too well known to need much emphasis, but is worthy of notice. It, however, affords no explanation of the great tendency

seen in these cases towards the development of fat in certain regions and not in others.

Appended is a table of the cases to which reference has been made.

(For report of the discussion on this paper, see 'Proceedings of the Royal Medical and Chirurgical Society,' New Series, vol. ii, p. 5.)

No.	Initials.	Age.	Occupation.	Site of tumour.	Duration.	Remarks.
1	N. D.	41	Ostler	Post-mastoid, submaxillary region, and groins	12 mos.	(1) Hard drinker.
2	J. C.	40	Warehouseman at a wine and spirit merchant's	Post-mastoid and back of neck, submaxillary region, arms, and groins	4 years	(1) Hard drinker.
3	J. M.	51	—	Middle of neck at back, post-mastoid regions	7 years	(1) Hard drinker. (2) Albuminuria.
4	D. L.	38	Car-driver	Post-mastoid regions and back of neck, submaxillary region, parotid regions, loins, groins, scrotum, arms, and fore-arms	18 mos.	(1) Hard drinker. (2) Albuminuria. (3) Bronchitis.
5	J. C.	48	Cheesemonger	Post-mastoid regions. Over zygoma on each side	2 years	(1) Hard drinker.
6	C. S.	33	Slaughterer	Post-mastoid and submaxillary regions, groins	2 years	(1) Hard drinker. (2) Phthisis. (3) Hæmaturia.
7	W. H.	29	Cowkeeper	Pectoral regions, abdomen, scrotum, groins, arms, forearms, submaxillary region, and small swellings in post-mastoid regions	1 year	(1) Hard drinker. Also drinks large quantities of milk.
8	F. B.	41	Tailor	Post-mastoid and submaxillary regions	2 years	(1) A temperate man.
9	W. P.	38	Hair-dresser	Post-mastoid regions, scrotum, perineum, abdominal wall	5 mos.	Very intemperate.

10	J. R.	30	Carman	Post-mastoid and submaxillary regions, nape, and anterior triangles of neck	9 mos.	Died of some obscure lung disease. Case recorded in 'Path. Soc. Trans.,' 1879
11	R. R.	63	Ship's steward (Mr. Henry Morris's case)	Post-mastoid and submaxillary regions	30 years	Died with epithelioma of the tongue. Tumours were operated on by Mr. Cock.
12	J. L.	44	— (Dr. De Havilland Hall's case)	Post-mastoid, submaxillary regions, and groin	1 year	(1) Hard drinker. (2) Phthisis. ?
13	C. St. G.	36	Soldier (Dr. Allchin's case)	Post-mastoid regions, back of neck in middle line, submaxillary and parotid regions, arm	9 years	Formerly of intemperate habits.
<i>Sir William Mac Cormac's Cases.</i>						
1	W. G.	42	Butler	Post-mastoid, back of neck, and submaxillary region	16 years	Partially removed.
2	F. E. W.	63	—	Post-mastoid and back of neck	5 years	—
3	W. S.	44	Waiter	Post-mastoid and back of neck, submaxillary region, abdominal wall, arms	?	Post-mastoid tumours removed.
4	—	60	—	Post-mastoid	3 years	—

DESCRIPTION OF PLATES I AND II.

(Diffuse Lipoma, by W. MORRANT BAKER and A. A. BOWLBY.)

PLATE I.

FIG. 1.—J. M—, Case 3, see p. 45.

FIG. 2.—N. D—, Case 1 see p. 44.

PLATE II.

FIG. 1.—C. S—, Case 6, see p. 48.

FIG. 2.—W. H—, Case 7, see p. 49.