ON
SCIRRHUS OF THE MALE BREAST.

BY
J. L. MILTON, ESQ.

COMMUNICATED BY
JOHN SIMON ESQ, F.R.S., &c.

Received Feb. 7th.—Read April 28th, 1857.

IN the following pages no attempt has been made to elucidate the pathology and causes of cancer; all that has been aimed at was to bring into a focus some few of the scattered rays of light which modern literature has thrown out. The subject of cancer in the male breast has hitherto not attracted much attention, owing possibly to the close resemblance the disease bears to scirrhus in the female, in whom opportunities abound for studying it in all its forms. I have consequently learned but little from books; and though more diligent search might have yielded more satisfactory results, yet when writings, professedly devoted to the subject, are so barren, the benefit likely to accrue from searching through the mass of general literature seems very doubtful.

The Transactions of this Society contain two cases. One was communicated by Mr. Lawrence,¹ which, from the

¹ 'Medico-Chirurgical Transactions,' vol. iii, p. 72.

description, can scarcely be pronounced genuine scirrhus, for we are told that, after ulceration was established, a fungus shot up, one considerable protuberance of which was nearly smooth and florid ; the rest was irregular and tuberculated, and covered mostly with an unhealthy cuticle. The discharge was not considerable, and rather offensive. The patient died from extension of the disease to the pleura, peritonæum, and other organs; the right pleura being so thickened and contracted as to have compressed the lung into a very small space. The patient was an Italian of the age of thirty-five, and about fifteen months elapsed between the first discovery of the disease and death.

The second¹ is a case which Mr. Travers met with, in a waggoner, æt. 58. The lump, which was in the left breast, was as large as an egg, of four years' standing, and never ulcerated, though a dark incrustation appeared on the breast within an areola of livid tubercles. Death occurred principally from extension of the disease to the lungs, which were found studded with hard tubercles, presenting on section a white medulla with a dark deposit in the centre. Of the appearance of the tumour, Mr. Travers says nothing ; for I presume that when he observes that the enlarged glands were of a gristly texture, he refers to those in the axilla and above the clavicle. The tumour had shrunk a good deal before death, and, at the same time, small detached tubercles formed in the neighbourhood.²

Mr. Travers, however, says, "The above, it will be observed, is not the scirrhus tubercle, such as we meet with it in the female breast : nor can any analogy of structure be cited to explain the locality of the disease when it appears in the male breast, which is rare, and its situation probably fortuitous."

In the Museum of the College of Surgeons of London is a specimen (numbered 2791) described thus : "Section of the breast of a man in which there is a large ulcer, which

¹ 'Medico-Chirurgical Transactions,' vol. xvii, p. 320.

² Also reported in the 'Lancet,' 1826 and 1827, vol. i, pp. 267, 751.

probably originated in a lens-shaped, hard, cancerous, tumour or degeneration of the skin and mammary gland. The outline of the ulcer is nearly circular, but somewhat sinuous. It is a smooth, slightly convex, elevated surface, with some hard nodules at its margin, which are round, slightly elevated, flattened, and depressed at their centres. The ulcerated surface is nearly five inches in diameter, and appears to have been very vascular. The substance immediately below it is soft; but that at a greater depth is compact and hard. The lower surface of the diseased structure adheres to the great pectoral muscle, in which some of the large and tortuous arteries are injected."

Mr. Quekett considers it doubtful whether this was a case of genuine scirrhus, and, if I am not mistaken, Mr. Paget coincides with him. Its extraordinary size and great vascularity seem to favour this view; but the form of its outline and the presence of nodules in its vicinity give it a strong resemblance to the case which forms the basis of this paper, and which was pronounced to be undoubtedly scirrhus by Mr. Quekett himself. Unless the college preparation be fungoid, I am at a loss to know what disease could have produced such an excavation. The history of the case is not given, and I cannot find any mention of it in Sir Astley Cooper's works, from whose museum it was taken.

As the preparation which is now before the Society has been presented to the College of Surgeons, it will, perhaps, harmonize best with the plan of this essay if the history of the case is given here.

The patient, Joseph W., applied to me, March 28th, 1856, with well-marked open cancer of the left breast. He was fifty-eight years of age, and so far as his recollection served him, he had never suffered from any illness. He had during great part of his life been very intemperate; but had never contracted any venereal disease. He had been married many years, and was the father of nine children, one of whom died of "water on the brain," the re-

maining eight were alive and healthy. He lived in a confined court in the City-Road, and was by trade a brass-finisher, which compelled him at times to bear with considerable force on the left side of the chest just below the nipple. To this circumstance he himself attributed his complaint, and he thought that from being obliged to continue his employment for some time after the affection showed itself, he had not enjoyed a fair chance of recovery, as pressure always produced some aching pain. He was a short, strongly-made man, but had of late begun to look haggard.

About ten months previous to his first visit to me, he had noticed a small, hard nodule like a pea, immediately under the left nipple. The skin over it neither projected, nor was discoloured. He told me it gave him no pain; but his wife always maintained that he used to complain at this time of a dull aching pain. About four months after, finding that the tumour steadily increased in size, he went to a "doctress," who gave him hemlock to take, hemlock poultices to apply, and hemlock leaves to lay on the swelling, under the use of which it slowly reached the size of a walnut. Then the nipple sloughed off, a little before Christmas, and a deep sore formed, which steadily increased in size up to the time of his coming to me.

On examination I found a large cup-shaped cavity, the base of which was covered with a thick, tenacious, greenish secretion dotted with black. From the boundaries of this to the edges, the surface was most delicately marked with numerous slender vessels, evidently carrying arterial blood, running parallel and converging towards a common centre. The edges were thick and livid, but not everted. Where the skin ceased, a delicate line of pale-blueish cuticle, such as is seen at the edge of an ulcer in the process of healing, was observed. The surrounding skin and cellular tissue were extremely hard. In the vicinity enlarged cutaneous veins were noticed.

Just below was a smaller but precisely similar kind of ulcer. To the right of this was seen a purple, flat, slightly

elevated sore, very like a condyloma, around which lay several scattered pea-like tubercles. The ulcer was not offensive and discharged a moderate amount of sanious fluid. It occasionally bled very slightly, which seemed chiefly attributable to the dressings having become dry and adherent. He complained little of pain, nor was any uneasiness felt when the lump was handled; the surface of the ulcer seemed almost callous. One gland in the axilla was a good deal enlarged; the opposite mammary gland was somewhat indurated. In both groins the lymphatic glands were a little larger and harder than they ought to have been.

The patient stated that he had of late lost flesh and strength, and had great difficulty of breathing, so that he could not lie down well at night. On examining by the stethoscope, nothing was noticed beyond extreme feebleness of the breathing sound, which was interrupted by very long pauses. The chest on the left side was almost universally dull on percussion—each respiratory movement was attended with a heaving of the whole trunk. There was no expectoration beyond a little mucus. The pulse in both arms was small, and felt as though the blood were with difficulty propelled into the arteries. Nothing abnormal could be detected in the abdomen, though this cavity, especially around the kidneys, was attentively explored. The urine, however, was always brown, and quickly became fetid. Mr. J. Z. Laurence examined a specimen of it, and found it loaded with urate of ammonia. The bowels were rather costive; the appetite was pretty good.

It did not seem justifiable to attempt any operation, and the treatment was confined principally to the use of sedatives with the view of procuring sleep, from the want of which he suffered greatly; of tonics to maintain his strength, and mild, stimulating dressings to keep the ulcerated surface in as healthy a condition as possible. The sedatives, however, never produced the effect intended and ether was tried, the action of which so far improved his condition, that it was found advisable to allow a very free use of it.

The breathlessness rapidly increased, so that for the last fortnight of his life he never lay down to sleep. A choking sensation was felt on attempting to eat, which grew steadily worse. The left arm became extremely swollen, the pulse grew more feeble, and the patient's strength declined daily. The open sores remained as at first, but the tubercles became a little more prominent, and a hard fissure began to extend from the principal sore towards the axilla. He died on the 3d of May, exactly five weeks and a day from his first visit; the breathlessness during the last day or two being most painful to witness.

No post-mortem examination could be procured, but the breast was removed and placed in spirit within eighteen hours after death. The tumour was very slightly adherent to the pectoral muscle.

In the museum of St. Bartholomew's Hospital are two specimens of occult scirrhus. Mr. Paget was kind enough to place at my disposal his notes on these and three other cases, and from them the following description has been drawn. The first was removed from the breast of a man under Mr. Paget's care. The patient was forty-eight years old and of healthy aspect; he had first observed the disease six months previously, it had increased quickly, and had been painful for two months. It was removed by operation, from which the patient recovered; but the result was not ascertained. He lived in a healthy suburb of London, and seems to have been in easy circumstances.

It is a fine specimen of occult cancer, forming "an irregular rounded mass, nearly two inches in diameter. It is extremely hard, pale greyish, with branching white lines, and small yellow spots. It has extended to that part of the skin which is stretched over it, and to the nipple, which is depressed and enlarged at the centre of this surface. At its deepest part fibres of the great pectoral muscle are included in its substance." It seems to have absorbed part of the skin, and to have spread uniformly from the mammary gland.

The second was taken from a patient under the care of Mr. Stanley and Dr. Burrows. He was a butcher, "forty-five years old, and the disease, which was seated in the right breast, had been observed in progress for about thirteen months before his death. Extensive cancerous formations were found in the vertebræ and other bones."

The diseased mass was not removed till after death, and was then found to consist of a scirrhus, smaller than that last described, but which had advanced a stage nearer to ulceration, the skin over the nipple being excoriated, and the nipple itself retracted.

Three more cases are recorded by Mr. Paget, two of which are spoken of in his work on 'Surgical Pathology.'¹

In the first of these the patient was forty years old when the disease, which had existed five years, was first noticed. He was a compositor by trade, and was under the care of Mr. Lloyd and Mr. Paget. The scirrhus had ulcerated, and there were numerous cutaneous tubercles around it. No operation was performed, and the patient died with cancer of the right ala of the sphenoid bone, and of other adjacent parts of the base of the skull.

In the first volume of the 'Lancet' for 1847 there is a full and interesting report of these two cases (the 3d and 4th) by Mr. Holmes Coote, who appears to have taken his notes of the latter case two years previous to the death of the patient. The man "applied aqua fortis to the swelling, which caused an immediate decrease in size," followed, however, by more rapid growth. No pain was noticed in either of these two cases.

The fourth case occurred in the practice of Mr. Hands, of Hornsey, and was seen in consultation by Mr. Paget and Mr. Skey. The patient was a teacher of languages, and was fifty-two years of age at the time when the disease was first noticed. No operation was performed, and the patient sank under cachexia and exhaustion. The scirrhus ulcerated towards the close, and seems to have taken on a fungoid

¹ 'Lectures on Surgical Pathology,' vol. ii, p. 328.

character, as it is stated that there was a protruding growth. Mr. Paget remarks that all these cases occurred "at a period of life at which the powers of nutrition and reproduction are commencing to decay."

In Mr. Paget's fifth case, the patient, a currier, was under the care of Mr. M'Nab, of Epping, where he lived. He was seen by Mr. Paget in consultation, and was then seventy-three years old. He had noticed the disease two years previously, was not operated on, and is presumed to be still living.

In University College Museum I found two preparations. In one the scirrhus mass is of an irregular form, and about the size of a common plum. It has apparently absorbed the mammary gland, and the nipple is spread out; ulceration has not begun, but the skin seems involved in the scirrhus through its whole thickness, as if its proper structure had disappeared. The other is a compact brownish mass, not larger than a small walnut. It neither extends to the skin nor down to the great pectoral muscle; the nipple seems unaffected.

No history of these two specimens was found, but it is exceedingly probable that neither of them corresponds with the case reported from this institution in the 'Lancet' (vol. ii, p. 489) 1838-9. The patient was under the care of Mr. Liston, and was a plasterer, forty-seven years of age. "The disease was seated in the right breast, and he had first noticed it six months previously. Iodine seemed to keep it in check at first, but when this was intermitted it advanced more quickly than before. It had reached the size of a hen's egg (including, I suppose, integuments), was hard, loose, and accompanied by deep lancinating pain; the nipple was retracted. On section, portions of a fungus-like character were found."

The museum of Middlesex Hospital does not contain any specimens of this disease, but a case is reported in the 'Lancet' (1841-2, vol. ii, p. 414) as occurring in the hospital

under Mr. Arnott. The patient was a shoemaker, aged 84. He was a tall, hearty countryman, from Chisholm. The disease, which occupied the left breast, was of eighteen months' standing, and ulceration had begun twelve months ago. The ulcer was excavated, with a foul surface and thickened, indurated edges; the discharge was copious and somewhat offensive; the skin healthy, except where adherent to the tumour; shooting pains were occasionally felt in the diseased mass, which was moveable on the chest. There was a small, indurated gland deep in the axilla.

Mr. Arnott removed the diseased structure without difficulty. On section, it presented the characters of true carcinoma. Cicatrization was soon effected, and at the end of eight weeks the man was discharged.

I met with two specimens in St. George's Hospital. In one the tumour was removed by Sir B. C. Brodie; the catalogue gives no history of the case. It is a flat, trapezoid mass about half an inch in thickness, and looks like thickened indurated skin; section shows it to be infiltrated with carcinoma. The other occurred in a gentleman, aged sixty-four, and was removed by Mr. Cæsar Hawkins. The patient had noticed it gradually increasing for the space of eight years previously; there was no pain, and none had ever been felt. He attributed the tumour, which was about the size of a walnut at the time of the operation, to a blow from a stone. It was adherent to the skin, but not to the muscle, and the axillary glands were not enlarged. It is a round, pale-yellow mass, imbedded in fat on all sides, and does not appear connected with any other structure. The patient recovered perfectly, and died without any return of the disease about six years after the operation. Mr. Prescott Hewett was so obliging as to inform me that, in addition to these, a second case was in the wards of St. George's Hospital, and that there is a specimen of the disease now in preparation for their museum, which was removed by Mr. Cutler from a patient in private practice.

In the first volume of the 'Lancet' for 1853 another

case is reported from this hospital. The patient was under the care of Mr. Johnson : the disease began at an unusually early period of life, for though the patient was only thirty years of age at the time this history was taken, yet he had been operated on fifteen months previously by Mr. Johnson, and at a still earlier period extirpation had been performed in the country.

The disease is said to have borne some resemblance to keloid, and seems to have been principally limited to the skin ; the third operation was confined to "shaving off the skin and tubercles." The patient, it was said, had done well since the operation.

Charing Cross, the London, and King's College, Westminster, and St. Thomas's Hospital Museums do not contain any preparations illustrating this disease, but a case occurred some years ago at St. Thomas's, under the care of Mr. South ; it also is reported in the 'Lancet.'¹ The patient was a seafaring man, aged 60 ; healthy, but of irregular habits ; the tumour acquired the size of the fist before it ulcerated ; the pain was very violent, the discharge foetid, but not considerable ; the sore, which was seated in the right breast, and apparently arose from a blow, was the size of the palm of the hand and did not appear to have spread much deeper than the skin ; his general health was up to this time unaffected, but he eventually sank. The affection had begun about four years previously. Two cases also occurred under the care of Mr. Simon, but in one of these the ravages of the disease seem to have been principally confined to the skin.

In Guy's Hospital are five specimens. In the first, which is very small, the areola is described as being not quite healthy, and the mammary gland, which is the seat of the disease, as "apparently" affected with scirrhus. In the second, the diseased mass is also very small, superficial,

¹ Vol. i, 1850, p. 570.

thin, and of a greyish colour ; ulceration seems impending. The mammary gland in the third preparation is somewhat enlarged, and is also described as supposed to be affected with scirrhus ; the nipple is entire. These three preparations exhibit but a feeble picture of the progress and violence of the disease, and all traces of their history are lost. They were, I believe, all purchased when the museum was first formed many years ago. But the fourth is a fine specimen of scirrhus, and is further illustrated by a drawing. The patient was under the care of the late Mr. Bransby Cooper. In the fifth case the effects of the morbid action are principally visible in the nipple, though the skin and subcutaneous textures are infiltrated with carcinoma. The growth was removed on account of the frequent bleeding and constant discharge, and the patient, a seaman, aged 41, recovered perfectly. He had suffered under it eight years, and during the last two years the axillary glands had been enlarged.

Through the kindness of Mr. Birkett, I have been informed that there is also, in this museum, a wax model of the male nipple, the surrounding integuments of which are infiltrated with carcinoma. The patient died in the hospital. In addition to these, Mr. Birkett has drawings of three other cases, and histories of four or five more. In Mr. Birkett's Prize Essay, on 'Diseases of the Breast,'¹ mention is made of one case in an unhealthy man, 44 years of age. It was removed by the late Mr. Callaway, and there was no return of the disease after fourteen months had elapsed. I am also permitted to state, that three cases of the disease in the male have been met with at the Cancer Hospital. Without exception, the surgeons and curators of these hospitals have lent me the most prompt and kind assistance, and I am happy in being able to thank them publicly for their courtesy.

The second volume of the 'Lancet' for 1848 contains a brief account of a case read before a meeting of the

¹ 1850, p. 258.

Provincial Medical and Surgical Association by Dr. Borham, of Truro, on behalf of Mr. Spry. "The disease presented itself as a hard tumour in the breast of a gentleman 71 years of age, in other respects apparently in good health. The tumour had existed four years, and as it did not seem to implicate the axillary glands it was removed," and at that date the patient was doing well.

The most extraordinary case that I have met with is one which occurred many years ago in Winchester Hospital, and is reported in the 'Lancet.'¹ The patient was only 25 years of age, yet the disease had already existed three years: within the last twelve months it had become more distinct and indurated; it was the size of a walnut, and adherent; there were severe lancinating pains, and a slight discharge from the nipple. The tumour was removed, and found, on examination, to be pure scirrhus; the patient made a rapid recovery.

Farr² reports a case of scirrhus of the left breast in a gentleman who was under his care; the patient was upwards of seventy years of age. With the exception of this brief account, and the cases referred to in Mr. Paget's work, I have been able to glean no further information from their writings or from those of the two Coopers, Bell, Carswell, Walshe, Simon, Home, Wardrop, Young, Johnson, and Lamb. I have likewise examined the Cyclopædias and most of the English periodicals for the last sixty years with no better result.

I have been assured by some most experienced surgeons, among others by Dr. Knox, that they never saw this disease in Scotland. Bennet, Lizars, Pirrie, Miller, and Syme do not speak of it, and the Scotch journals which I have examined do not contain a single case. Indeed, the possibility of such an occurrence can only have been generally known in Scotland within the last half century, as in the 'Edinburgh Medical Journal' for 1808, the question is put whether scirrhus "is ever seen in the breast of the

¹ 1826-7, vol. ii, p. 832.

² 'Essay on Occult Cancer.'

male, which performs no sexual function?" The question, however, had been answered in the affirmative by M. Le Dran thirty years previously.¹

On the other hand, Mr. Liston, in a clinical lecture on the case referred to as occurring at University College Hospital, told his class that he had not seen more than eight or ten cases of diseased mamma in man. He does not say, but from the context it would clearly appear that he meant scirrhus disease. Now at this time Mr. Liston had not long held his chair, so that we may fairly assume that many of these cases occurred in Scotland. In 1839, Mr. Robert Taylor was present when Mr. Syme removed a cancerous tumour from the breast of a young Scotchman; it had ulcerated rather extensively.

In the periodical literature of Ireland I have not been fortunate enough to find any notice of the subject. Mr. Carmichael does not allude to scirrhus in the male, either in his *Essay* or *Lectures* on this disease.

Nor have I been more successful with the German periodicals. Schmidt's *Jahrbuch* and Canstatt's *Jahresbericht*, generally such faithful mirrors of the progress of medicine, contain one solitary notice of a case occurring under M. Blandin. Neither Rokitansky nor Schuh, Siebold, Chelius nor Henle, say a word on this disease in male subjects. In an examination of 67 persons who died of this disease in Ratisbon, no instance was met with of its occurrence in the male breast.

The '*Annali di Omodei*' and Strambio's '*Journal*' and '*Annals*,' the works of Marjolini and other Italian writers I have consulted are silent, so that it must be rare or have attracted little attention in Italy.

I believe an impression exists that this disease is much more common in France than in England and Scotland. Such was my own conviction, but I am very doubtful if it be correct.

M. Lebert² says that he has only seen two cases of true

¹ '*Mémoire de l'Académie de Chirurgie*,' vol. iii.

² '*Traité Pratique des Maladies Cancéreuses*,' p. 355.

cancer of the breast in man, the others being referable rather to cutaneous cancer. In his work on 'Pathology,'¹ he gives a case of fungoid disease of the breast of a man aged forty-five, but none of scirrhus. M. Tanchon, in an abstract from the registers of Paris, extending over eleven years, from 1830 to 1840 inclusive, sets down the number of deaths from cancer at 9118, out of which 5 were cancers in the male breast.

M. Velpeau² has met with nine or ten examples of this form of cancer, one of which left him in some doubt as to whether the tumour was not rather fibro-plastic than scirrhus. He however seems to have only rarely met with general carcinomatous infection in the male; the following, at least, being the only example given. A patient who had been operated on for scirrhus by M. A. Berard, suffered from a return of the disease in the axilla; M. Velpeau operated for this, and the patient died from general cancerous infection. If all M. Velpeau's remaining cases were genuine scirrhus, we still find that his long and active career has scarcely furnished more than Mr. Liston met with in twenty years.

In the 'Ann. de Thérapeutique' a case is given where M. Blandin removed a cancer from the male breast. In the fifth volume of the 'Lancette Française,' we find a case of carcinoma of the breast, the size of a pullet's egg. On the 12th of December, 1850, M. Deguisé showed to the Société de Chirurgie the breast of a man, aged sixty-eight, affected with cancer, which he considered encephaloid,³ an opinion which was questioned in the subsequent discussion. The works of Lisfranc, Cruveilhier, Vidal de Cassis, &c., the French journals, dictionaries, and memoirs, especially those of the Academy of Surgery, have been searched carefully without my finding a single case.

Dr. Warren in his work on 'Tumours,'⁴ gives a case. The patient was a gentleman of Boston, thirty years old:

¹ 'Physiologie Pathologique,' tome ii, p. 317.

² 'Maladies du Sein,' par A. Velpeau, 1854, p. 112.

³ 'Lancette Française,' 1850.

⁴ P. 282-3.

"He had not enjoyed good health for three years, being dyspeptic, and he had also frequent pains in the chest. These pains at last concentrated in the right side." Here a tumour formed, the pain of which gradually became very severe; it ulcerated, and Dr. Warren excised the whole scirrhus mass. Eleven years after, the patient was still well. In addition to this, Dr. Warren has only seen one case.

With regard to the causes of this disease in the male, I will not venture any conjecture. Some writers consider it, as in the female, connected with the decay of the reproductive faculty, while Mr. Paget,¹ speaking of this disease in women, has thrown out the much bolder view that they are concomitant phenomena, both depending on decay of nutrition. It might be interesting to examine how far this view is borne out by the cases given, as those of Lyford and Warren rather prove that the disease may attack the male even before his growth is complete. Moreover, as its range of action extends over at least sixty years, it may be surmised that something more is requisite for the production of this disease, than those changes which we usually comprise under the name of decay of nutrition. Still this view, in a modified form, may be correct. A gland may turn prematurely old in the young subject, or retain its vigour till a late period of life. Just as we see the testicles, hair, eyes, and teeth decay at an early period in some persons, and remain strong in others at an advanced stage. Cancer, then, may be a result of local decay.

It has been frequently stated that the course and symptoms of this disease are the same as in the female; but in the cases of cancer which I have seen, the pain has been more violent, and the destruction of the breast much greater. Dr. Van der Byl informs me that some years ago he examined a case of this disease in the male, and found that the minute structure was exactly similar to that which is seen in cancer of the female breast.

¹ 'Lectures on Surgical Pathology,' vol. ii, p. 328.

Mr. Paget appears to take the same view of its tendency to a fatal termination in man as in the female. Mr. Holmes Coote does not think it more manageable than in woman. M. Blandin considers relapse after operation much more frequent in man than in woman ; he also thinks the disease much more seldom involves the whole gland in the male. In direct opposition to these authorities stands M. Velpeau, who has only of late years admitted the tendency of this disease in the male to return, or infect the system generally ; and he is still of opinion that extirpation or destruction by caustics offers a better chance than in the female.

Most of those authors whom I have consulted express no opinion on the subject, and hence it seemed a legitimate subject of pursuit to collect together whatever cases could be discovered, so that those interested in the subject might be able to find them in an available form.