HISTORY
OF
A FUNGOUS ERUPTION,
CURABLE BY MERCURY,

BUT
NOT OF VENEREAL ORIGIN,
BY
WILLIAM WALLACE, M.R.S.A.

SURGEON TO THE CHARITABLE INFIRMARY OF DUBLIN, TO THE INFIRMARY
FOR THE TREATMENT OF DISEASES OF THE SKIN, ETC. ETC.

COMMUNICATED BY
MR. TRAVERS.

Read December 26, 1826.

CASE I.

MARTIN LAVIN, aged forty years, of a tall and slender figure, with a pallid countenance, a poor man, earning a livelihood by a traffic in old clothes, broken glass, &c. applied at the Skin Infirmary, on the 16th of October, 1819, to obtain relief for a disease, of which the following is a description.

A number of tumours, some about the diameter and elevation of a filbert, others as large as a small

walnut. On an accurate examination, they were observed to be crusted, or covered with a yellow-brown scab, and to be surrounded, to the extent of about two lines, by an areola of livid-coloured skin, which was rough, in consequence of desquamation of its cuticle. On removing the scab or crust, it was found to form a covering or cap to a fungus or excrescence, of a pale or dirty pink colour, having but little sensibility when handled, and exactly resembling in figure a small mulberry or raspberry. There were also, on many parts of the surface of the skin, marks or stains of a rounded form and livid colour, of the same diameter in general as the fungi, scarcely elevated above the surrounding skin, wrinkled, and in some situations with the cuticle covering their surface in a state of furfuration.

Each of the existing fungi, and several others, which he says have been cured, commenced, according to his description, in an itchy pimple, which gradually increased without much soreness or itching; and having existed for some time, many imperceptibly shrunk away, leaving behind them the livid marks above mentioned. Nevertheless, it does not appear that they spontaneously subsided, but in consequence of unguents, which he applied to them.

The fungi, at present in existence, are five in number, and are seated, one in each of the follow-

ing situations, viz. in the nape of the neck, close to the hairy scalp; on the left of the anterior part of the abdomen, a little above the umbilicus; on the anterior fold of the right axilla; on the corresponding arm, immediately above the internal condyle of the humerus; and on the upper and outer part of the right thigh.

There is no pain in any of his joints or bones, no soreness of his throat, no perceptible derangement of his general health.

He attributes the origin of these fungi, which he says commenced in last April (six months previous to his application at the Skin Infirmary), to lying in dirty beds. Has a wife, with whom he cohabits, and has not communicated the disease to her. He never saw any person labour under a similar disease. Denies having ever had gonorrhœa or chancre. Has not had his health deranged in any way, either immediately before the appearance of the fungi, or at any time since.

He observes that, in July, he procured some mercurial pills, and having taken them, so as to make his mouth sore, the fungi disappeared almost entirely; but, being obliged at this period to leave the city, he had no means of persisting in the use of the medicine, and shortly after leaving it off, those which had shrunk gradually became larger, and others appeared.

The above patient was admitted into the Charitable Infirmary, and having taken ten grains of the blue pill for a few nights, his mouth became tender, all the fungi quickly shrunk, and, at the end of about six weeks, they had entirely disappeared, when he eloped from the hospital, without my knowledge or permission, and I have never since heard of him.

C A S E II.

James Walsh, a labourer, residing in the country, aged 23 years, of a sanguineous complexion, and of a short and strong stature, applied at the Skin Infirmary, April 8, 1820, on account of a fungous disease of the skin, of the following characters.

On the head, trunk, and lower limbs, there are several fungi, varying in size from that of a pea to that of a walnut. Those which are on the scalp are by much the smallest; the largest is seated on the front of the right thigh, a few inches above the patella, surrounded by a deep seated and extensive hardness, and has in some points become an excavated ulcer. All the fungi, with the exception of the large one just alluded to, are covered by a yellowish brown scab, which must be removed to see their fungous character. Each fungus is surrounded by a livid ring or border, the cuticle of which is in a state of furfuration. They are attended by a very troublesome itching, particularly

at night, and are very sore after being handled or rubbed.

On being asked to describe the manner in which these fungi make their appearance, he pointed out to me, by way of illustration, on the occipital region of the scalp, a very minute yellow scab, not larger than a pin's point, covering a little fungus, perceptible with the assistance of a lens, and obviously surrounded by an erythematous colour of the scalp, and attended by an itchy sensation, which appeared to direct his attention to the part. He added that they begin by small pimples, which corrupt, and become covered with a crust. There are on several parts of his body circular livid spots, about the same diameter as the fungi. Some of these spots, particularly one which is on his forehead, have their surface slightly elevated above the surrounding skin, the cuticle in the state of desquamation. The redness of these spots disappears almost entirely on pressure, and they are not attended by any morbid sensation. These are the marks that have been left after some of the fungi, which have shrunk away on the application of unguents.

The general surface of the skin feels dry and harsh, and exhibits here and there a branny appearance with minute papulæ in the state of desquamation. His sleep is much interrupted by a general itching of the skin, which becomes par-

ticularly severe upon being heated in bed. He says he has a bad stomach, and very often becomes sick after eating. He has laboured under disorder of his stomach, and the general pruriginous affection of his skin for several years; but the fungous disease is not of longer standing than four months.

No pains in the articulations or in any other parts of the osseous or fibrous textures,—no soreness of his throat,—does not know any cause to which he can attribute the disease,—has slept with others and never gave it to them, and at present sleeps with a lad, aged sixteen years, who is free from any cutaneous disease.

This patient took ten grains of blue pill every night from the date of his application for relief to the fourteenth of May following, a period of thirty-six days. It scarcely affected his mouth, yet he had only taken it a few days when almost all the soreness attendant on the fungi subsided, and the marks left by the old fungi sunk to a level with the surrounding surface. On the fourteenth of May, when he ceased to attend at the dispensary, all the fungi were covered with skin; the surface upon which they had been seated remained, however, slightly higher than the surrounding skin, and in a state of desquamation.

“11

It may perhaps be worthy of remark, that although he was so rapidly relieved from the fungous

disease by the use of the blue pill, the pruriginous eruption was considerably aggravated during its administration, and several of the minute papulæ became pustules.

C A S E III.

John Moor, a labourer, aged nineteen years, slender stature, fair hair, light-blue eyes, presented himself as a patient at the Skin Infirmary, on the 27th of April, 1820, labouring under a cutaneous disease of the following nature : a number of tumours situated in the groins, at the root of the scrotum and penis, and at the superior and anterior part of the thigh, arranged as in the drawing, varying in magnitude from the size of the end of a finger to that of a walnut, covered by a dirty yellow-brown scab, and surrounded by a livid red border, in the state of desquamation. On removing the scabs covering these tumours, a granulated surface very considerably elevated above the level of the surrounding skin is exposed. The scabs do not appear to have lain in close contact with the fungi ; but there is observed to be interposed between them a small quantity of matter, which adheres to the excrescence, so that the granulations of the surface of the fungus are seen only at certain distances, raising their heads as it were, through this matter. When they are deprived of the scab, and left uncovered for a few minutes, a

fluid of an amber colour, and perfectly transparent, exudes and collects into drops on their surface. These fungi are remarkably sore and itchy when rubbed or irritated.

There are situated on the front of his thighs, and in some measure intermixed with the tumours already described, dark red spots or stains, of a rounded form, in diameter less than the fungi, their surface a little elevated, and their cuticle in a state of desquamation. Some of these spots are, according to the patient's account, marks left by excrescences similar to those still existing; but others, he asserts, have never had any appearance different from that which they now present. There are also on his hams, on his nates, and on the outside of his arms, similar spots or stains, which, he says, never exhibited the fungous appearance. His account, however, of these stains is not very satisfactory. He also complains of a general itching in his skin. The first of the excrescences commenced about three months ago. He has no soreness of his throat, although the mucous membrane of the soft palate and fauces appears to have its vessels a little more enlarged and tortuous than natural. He has no pains, nor does he feel in any way unwell in his general health, although he is much thinner and paler, he says, than is natural to him. He does not attribute the disease to any cause. About two years ago he had a gonorrhœa, and never any other venereal disease.

On the 28th of April he was admitted into the Charitable Infirmary, and from the day of his admission to the 8th of May following I avoided giving this patient any medicine, wishing to watch the progress of the disease. Two of the fungi were kept covered by a poultice. During this period I could not observe the slightest alteration, unless it might be said that those which were covered by the cataplasm became somewhat paler and flatter, and, although much above the surrounding level, they shewed some tendency to cicatrize. He now became impatient, and having ordered him ten grains of blue pill every night, he was discharged in the middle of June perfectly well, the medicine not having, during this period, affected his system farther than to produce a very slight tenderness of his gums.

It may be observed that the largest of the fungi in this patient was seated at the root of the penis, among the hair of the pubes, that the hair grew up in the substance of the fungus, and that when the latter subsided the hair was left uninjured.

The disease which I have exemplified by the relation of the three foregoing cases, I would venture to denominate "Morula", from *morus*, a mulberry. This term marks its most prominent feature, a fungus of a rounded and granulated form.

Although the appearances of this disease are very remarkable and peculiar, and the phenomena which it exhibits during its progress regular and determinate, it has not, so far as I can learn, been described by any author*. In its appearance and mode of growth, it may be said to resemble somewhat the yaws; they differ however in so many respects, judging from the descriptions which we have of the latter, that I do not consider myself warranted to describe it as a variety or a species of this affection.

It is to be observed that I have not had occasion to see or treat this disease, except among hospital patients, and although the avocations of those whom I have observed to labour under it, have been various, it is nevertheless also remarkable that the majority of them have been either males or females who got their livelihood by a traffic in

* Mr. Carmichael has alluded to a disease in his late publication on Venereal Affections, which appears to resemble this. He does not, however, consider it of venereal origin; and if the disease to which he has alluded be the same as the one here described, he is evidently unacquainted with the remarkable influence of mercury over it, as his mode of treatment consists in the administration of pitch pills to such an extent as the stomach will bear; a remedy, from which I have never observed, in this disease, the slightest advantage to arise. It is therefore probable, that the removal of the disease, when the patients were under the employment of these pills, must be attributed to some topical application which had been made to the fungi, or to the patients inhabiting wards in which much mercury was employed.

old clothes, rags, and such like merchandize ; but some of my medical friends, resident in the country parts of Ireland, from whom I have made inquiry on the subject of this disease, inform me that they have frequently observed it among the peasantry. I have never remarked the disease in very young or very old subjects. I should therefore say that it occurs most frequently in the middle periods of life ; and although I have seen both males and females afflicted with it, yet I have no hesitation in saying that it occurs much more frequently in the former than the latter*.

Often as it exists in connexion with a state of the system more or less unhealthy, and along with a more or less remarkable pruriginous affection of the skin, I cannot say that it has, with these states, any necessary relation. I have never seen the subjects of it labour under any of those affections of the mucous surfaces, or of the osseous or fibrous systems, or of the eye, which mark the progress of syphilitic diseases ; nor am I acquainted with a single fact which could cause the slightest suspicion that it is a disease of venereal origin. On some occasions there has been reason to suppose that it was propagated by immediate contact, (an opinion which would ap-

* I find, from the registry of the Infirmary for the treatment of cutaneous diseases, that from its foundation in 1818 up to the present time (June 1826), eighty-one cases of the disease have been treated at this Institution.

pear to be strengthened by a consideration of the habits and circumstances of those who generally labour under it,) nevertheless, the instances in which it appeared to be void of all contagious qualities have been so numerous, that I should hesitate before I would say that it was capable of being propagated by its secretions. This is however; in general, the opinion of the patients themselves; but when the source of their opinion is investigated, they are not able to give a satisfactory reason for it. I have certainly observed several members of the same family to labour under the disease at the same time, but it has also occurred to me to observe it in an individual of a family, and this upon occasions when the affected person occupied the same bed with others who were free from the disease: the husband has had the disease when the wife was free from it, and vice versâ.

There is scarcely a part of the cutaneous surface, except the palms of the hands and soles of the feet, upon which I have not observed these fungi. They uniformly commence, as far as my observation goes, in minute pimples, which become quickly covered on their apex by a very small scab, upon the removal of which may be observed the germ of the future fungus, consisting of a single granulation, and so minute as to require for its discovery the assistance of a lens. At this period the spot is itchy, and is surrounded by a slight

erythematous redness. Its size gradually but progressively increases. In the course of some days, a scab of several lines in breadth, of a brownish yellow colour, and considerably elevated, will be found to cover a fungus of a rounded figure and granulated surface, of a yellowish red colour, sore to the touch, and surrounded by a slight livid redness. The size to which these spots are capable of increasing as fungi is, I believe, limited. I have never observed them larger than about one inch and a quarter in diameter, and I have generally remarked that when the spot acquired about an inch in diameter, the action of the vessels of the part changed, and the fungus becoming absorbed, an ulcer was produced. If credit could be given to the observation and reports of the patients themselves, it would appear that many of the fungi, upon arriving at a certain magnitude, shrink and fade away; but whether a fungus, after it has been once decidedly formed, ever disappears, except by the formation of an ulcer, without the interference of art, is a point upon which I cannot speak decidedly from my own observation.

Although those fungi which occur on the hairy scalp are in general smaller than those in any other situation, I have on several occasions observed the largest fungi to exist on the scalp, and in one case among the hair of the pubes. When a fungus grows on a part covered with hair, the growth of

the hair of the spot affected has not appeared to be interrupted, for the hairs have grown up through the fungus. The fungi are uniformly larger, fuller, redder, and altogether better developed in young, healthy, and sanguineous subjects. The scab may with care be taken off any of the fungi, however large they may be, without causing any bleeding, apparently from there being interposed a stratum of fluid between the fungus and the scab. When the fungus has been deprived of its covering, and allowed to remain a few minutes exposed to the air, there is observed to exude from it a transparent amber-coloured fluid, which concretes after a time into a scab, and thus forms for the fungus a new covering; but, if the fungus be covered with any unguent or cataplasm, the surface of the granulations pours forth, in small quantity, a puriform fluid, so long as it is protected by these artificial coverings.

One of the most remarkable circumstances connected with the growth of these fungi, is the power which the part, upon which they are seated, possesses of healing, without the formation of any permanent cicatrix: demonstrating that these fungi grow from the *surface* of the cutis, and that the texture of this covering is not permanently injured. Indeed, if the fungus be healed *before the process of ulceration has commenced*, no mark whatever, except a temporary redness, with a disposition to furfurate, remains; but if ulceration has

taken place, a permanent cicatrix is necessarily produced. I have, however, on many occasions remarked a fungus to heal without either ulceration or a permanent cicatrix, after it had arrived at the magnitude of a walnut. While observing the progress of cicatrization, I have remarked that although it generally advanced from the circumference towards the centre, sometimes this was not the case. The large fungus, which was seated on the thigh of Walsh, (Case II.) and which was at first without any crust, in the course of a few days became covered by two scabs, one on the upper and another on the lower part, and these separated by an interval which corresponded to the centre, and which healed first. In some cases the semidiameter of a fungus will heal entirely, before the process of cicatrization has commenced in the other half.

The number of fungi, which are capable of existing on the same individual at the same time, is subject to great variety. I have seen cases when there was only one, and it is remarkable that on these occasions the fungus was, I believe, always extremely sensible. Sometimes I have seen as many as fifty on one patient, and I think it may be said that their magnitude is in general inversely as their number. Whether the fungi be great or small, few or numerous, they are, if not constantly, at least very uniformly of a,

circular figure. Sometimes two coalesce, and form the figure 8.

What the progress or termination of the disease would ultimately be, if left to itself, I cannot pretend to say, farther than to testify that it would be extremely tedious. Whether it would wear itself out or not, I cannot decide. On several occasions I have made efforts to watch its progress, uninfluenced by treatment, but its course has been uniformly so slow that the patient has become discontented, and I have been obliged to enter on its cure and removal, before I could arrive at any satisfactory result. On other occasions patients who had been treated for this disease have returned with the same affection ; but whether this arose from any tendency which the disease has to relapse, or to the patient not having remained a sufficient length of time under treatment, I cannot determine, although I believe the latter to be the fact. I have not remarked that the disease becomes more intractable by long standing, or that it is more difficult to remove when it re-appears, after having been imperfectly treated.

In the whole catalogue of maladies which are capable of being cured or relieved by mercury, I do not know any which exhibits the value of this mineral more remarkably than the disease in question. I believe it matters nought whether this va-

luable agent be employed internally or externally. If internally, whether it be used as an oxide or salt ; if externally, whether it be employed in the form of an unguent, vapour, or fluid, for the disease immediately shrinks, *as soon as the slightest mercurial action in the system is manifested.* I generally retain the patients under care five or six weeks, and use the remedy to such an extent as to cause its gentle but marked influence on the system ; and the form in which I employ it is varied according to the peculiar circumstances or convenience of each case.

Although mercury in some form or other, so as to affect the system gently, is the remedy which I now uniformly employ, and with which I always succeed, it is proper to remark, that local applications to the fungi, which cannot be supposed to act on the general system, appear to have the power not only of controlling their growth, but also of causing their removal. The operation or influence of these topical remedies is however uniformly slow, frequently uncertain, and often causes the fungi to become extremely painful ; and although they may clear the surface of all the fungi, which exist at the time of their application, the impression on my mind is that they do not destroy the disposition to the formation of new ones. Of the local means which I have found most serviceable, I may mention solutions of the sulphate of copper, of the nitrate of silver, and ointments of the sub-

acetate of copper, of tar, and above all, those unguents into which mercury enters as an ingredient.

P. S. Since the period at which this essay was first written, some facts have come to my notice, which lead me to the conclusion that the fungous disease, described in it, is infectious, upon which point I had then a doubt.

A child at the breast contracted the disease from its nurse (not its mother). There were fungi on the breast of the nurse, and it was the face of the child which was affected. I have had a second case of the disease in an infant under one year old. In this instance the mother was affected by the fungi. I find that when the disease occurs at this early period of life, the fungi are surrounded by an areola, resembling the vaccine areola. Both these children were cured by administering mercury to their nurses.

I have also had a case, which proves the possibility of the disease attacking the hand. There was a fungus, in this instance, on the ball of the thumb.