AN ACCOUNT OF A SINGULAR CASE,
IN WHICH THERE WAS A
BLACK SECRETION FROM THE SKIN OF
THE FOREHEAD,
AND UPPER PART OF THE FACE

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Communicated by Sir B. C. BRODIE, Bart.

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ON the 25th of February 1845, I was consulted by Mr. —, respecting his daughter, ætat. 15 years, who was afflicted with a singular black discoloration of the forehead, and upper part of the face, in the manner represented in the accompanying drawing.* The discoloration was first observed about the middle of last January, on the left under eyelid, near the internal angle of the eye; appearing at the commencement as a brownish spot, which in the course of four or five days assumed a jet black colour, and gradually extended to the entire forehead and eyelids of both eyes. The discoloration never appeared on any other part of the body, and on the forehead was accurately limited by the hair. The patient stated, that on her attempting to wash

* See Plate VI.

the black matter off, it caused her so much pain, owing to the sensitiveness of the skin, that she desisted, and, until I removed it by the application of soap and water, was not aware that it could be removed by ordinary means. The quantity of matter removed from the skin was sufficient to darken four basins of water as black as Indian ink. I was informed that about the time when this singular affection first made its appearance, Miss —— was at Belfast, under the care of Dr. Read, for a severe pain in the chest, from which she still suffers. She subsequently came to London, and was first seen by Mr. White, and afterwards by Dr. Chambers, whom she consulted a few times previous to her coming under my care. With the exception of occasional headache, and the severe pain in the chest, above mentioned, Miss —— appeared in good health; the bowels were generally confined, the catamenia regular, but scanty; her complexion fair, and the hair of a light brown colour.

Dr. A. T. Thomson saw the patient with me at this time, and as we found that the black matter could be removed from the affected parts by ablution, leaving the skin underneath of its natural appearance, we were inclined to suspect some imposition on the part of the young lady. Having made her father acquainted with our opinions, he immediately agreed to watch the case, with a view of ascertaining whether there was any ground for these suspicions. Accordingly, on the 28th of February, having myself washed off the black mat-

ter, Mr. — and three of his friends remained with the young lady, and were present when the discoloration made its appearance on the skin, about four hours after I had removed it. Mr. — assured me, that during the investigation he never allowed his daughter to leave his presence, and that it was utterly impossible for her to have practised any imposition on him or his friends.

Still, I confess, I was somewhat sceptical. With a view, therefore, of removing every doubt from my mind, I was requested by Mr. — to fix a day to investigate the matter for myself, which I accordingly did on the 31st of March.

On this day (the patient having no knowledge of my visit), I washed the black matter from the right under eyelid, at one o'clock, and never allowed her to leave my presence until five o'clock, up to which hour no discoloration or alteration in the appearance of the affected part had occurred. Being now, more than ever satisfied, that the patient was imposing, I left her in the drawing-room, and proceeded as far as the door, with the intention of returning home, when her father requested me to remain until seven or eight o'clock, assuring me, that previous to that hour I should be perfectly satisfied respecting the truth of his statement, as the discoloration, according to his observations, did not appear sooner than from four to six hours after ablution. In compliance with this request, I returned to my patient, who, during the few minutes I was absent, had not left the drawing-room. Miss

— told me that she now began to feel a pricking and burning heat in the affected parts, which invariably preceded, from about a quarter to half an hour, the appearance of the discoloration, and that she was confident the blackness would very soon show itself. At half-past five o'clock, I was astonished at seeing a small dark spot appear upon the right under eyelid, near the inner angle of the eye, which kept gradually extending towards the right temple, so that, in half an hour from its first appearance, the eyelid had become quite black, the forehead, at the same time, assuming the same intense discoloration. I remained with the patient until eight o'clock, and felt perfectly satisfied respecting the truth of the alleged phenomena.

On the 4th of April, I requested Mr. Perry to take a drawing of the case. The right half of the forehead represents the discoloration of two days' duration, and the opposite side of five, showing a very great difference in the quantity of the black matter secreted during the longer interval, when contrasted with the shorter period.*

April 8th.—The patient complained of pains in the bones, was feverish, and the tongue coated with a white fur, pulse quick; the forehead and left cheek were covered with an erysipelatous eruption, which, in the course of a few days, gradually extended down to the sternum, and along the opposite side of the neck and face.

* See Plate VI.

14th.—The erysipelas is declining, the discoloration continuing exactly the same.

26th.—The black matter being washed off at one o'clock, Dr. Hodgkin and myself closely watched the patient, and at half-past six o'clock he was as much surprised as I was on the former occasion, on seeing the black secretion appear on the right under eyelid, in precisely the same manner as I had previously witnessed, with this difference, that to-day the discoloration was an hour later in making its appearance, than it was on the former occasion. We remained with the patient until after seven o'clock. The result of this investigation was in accordance with a statement made to me by the lady's father, a few days previously, to the effect, that the intervals between the re-appearance of the discoloration, after the removal of the black secretion, were now of longer duration than formerly.

29th.—The pulse being rather quick and hard, the patient was bled from the arm, but in consequence of the supervention of syncope, four ounces of blood were only abstracted. The blood presented no abnormal appearance, but there was great difficulty in arresting the bleeding, which rendered it necessary to re-apply the bandage three or four times.

May 1st.—The erysipelatous eruption has re-appeared on the forehead and face, tongue coated with a thick white fur in the centre, bowels regular, loss of appetite; the patient has taken little nourishment the two last days; urine natural.

4th.—This day there were vomited two large basins-

ful of fluid, containing an immense quantity of black matter, which subsided to the bottom of the vessels. This black matter, when examined under the microscope, as well as by analysis, was found by Dr. Rees to be identical with the specimens of black matter with which I supplied him from the patient's face; the vomited matter, and a specimen taken from the patient's face, were both examined under the microscope, by Dr. Hodgkin and myself, and found to be analogous. Both appeared and smelt exactly like soot. The vomiting lasted from the 4th to the 6th, during which period the black matter was passed by the bowels, as well as by urine, the face remaining free from any discoloration during this time. On the evening of the 6th (no matter being ejected from the stomach, or secreted from the face since the morning), the patient was seized with the most agonising pain in the stomach and bowels I ever witnessed. When called to see Miss —— I found her doubled up in bed, her head resting on her knees, and screaming out on account of the violence of the pain; 150 drops of laudanum were given, in divided doses, in the course of three or four hours, when the pain subsided, and did not return until the following evening, when it recurred again in a milder form. On the 7th, the morning after the attack of pain, the black secretion reappeared, as usual, on the forehead and face, and continued up to the 23rd of May, when it entirely ceased, having, for two or three days previous to its entire cessation, appeared in less quantity than usual.

June 17th.—Up to the present date the patient has had no return of the disease, and with the exception of occasional headache and pain in the chest, she appears in tolerably good health. It may be worthy of remark that the pain of the chest commenced about three weeks previous to the appearance of the black secretion; and notwithstanding the repeated application of leeches and blisters it still continues unmitigated. The internal treatment consisted in the administration of extract of colocynth, blue pill and James's powder, the infusion of roses and sulphate of magnesia, and occasionally the nitro-muriatic acid. Externally the decoction of oak bark with sulphate of alum was used, and to parts of the forehead a solution of the nitrate of silver, in the proportion of a scruple to an ounce of distilled water, was applied, but none of these applications had the smallest effect in checking the black secretion.

I believe there is no case on record similar to the present one; and respecting the physiological cause of the disease, I have no clear conception; but I believe the secretion to be analogous to what occurs in melanosis. The cessation of the secretion of the black matter by the cutaneous exhalants of the forehead during the period it was ejected from the stomach, bowels, and kidneys, although singular, is not unaccountable; the latter organs probably becoming a substitute for the former. The patient had no tendency whatever to hysteria. The secretion was always more abundant during the

night than the day, so much so, that when the patient washed her face at bed-time, the affected parts were invariably covered the subsequent morning with a large quantity of the black matter in a solid but moist condition.

The present case appears to me to bear no analogy to the disease designated *melasma*, by Linnæus, Vogel, and Plenck, which is manifestly a disease of debility dependent on a cachectic state of the constitution; neither had it any resemblance to those cases of coloured perspiration described by various authors, but more particularly by Professor Frank—*“Color nunc pallide flavescens, nunc lacteus, vel croceus, sanguineus, ac interdum subviridis, cœruleus aut ater.”**

I may mention, that the patient was seen by Sir B. Brodie, Dr. Bright, Dr. Roupell, and Dr. G. O. Rees, by all of whom the case was considered novel, and such as they had never before witnessed. To the last gentleman I am indebted for the subjoined analysis.

“We may regard the black matter, scraped from the face, as composed of,

Carbon.

Iron (in some unknown form of combination).

Lime.

Animal matter (albuminous).

Fatty matter.

Alkaline phosphate and chloride.

* De Curand. Homin. Morb. Epitome, tom. v., p. 27. Mannh. 1792.

“ Its re-actions were as follows :—

“ It was insoluble in water ; it yielded fatty matter to alcohol ; the black colour was not changed by the action either of caustic potassa or strong nitric acid ; on burning it, a strong odour of decomposing animal matter was perceived. When moistened with distilled water it reddened litmus paper. The ashes obtained by its combustion were very alkaline.

“ Under the microscope was seen a confused mass apparently made up of short hairs, epithelial scales, granules, and globules of fat.

“ I must remark, that the ashes obtained from the second specimen you sent me, as scraped from the face, were not so alkaline as those from the first specimen ; nor did the black matter show an acid re-action. This may have been produced, however, as a difference consequent on less of the ordinary cutaneous secretion having become mixed with the carbon. The black matter vomited by the patient, when viewed under the microscope, had much the appearance of broken down animal structure. It was very acid, but contained scarcely any hydrochloric acid. It burned away easily, leaving an ash possessing an alkaline re-action. The carbon from the face was so finely divided that it burned with a vivid combustion, almost having the appearance of deflagration. Carbon is certainly the colouring principle of this black material, which, in other respects (that is, with the exception of this uncombined element being present), gives all

the re-actions of a common form of animal matter.

(Signed) " G. OWEN REES."

" Guildford Street, June 16th, 1845."

P.S.—Sept. 29.—Miss —— remains perfectly free from any return of the disease, and is in every respect quite well, being now free from headache and pain of the chest.

Note by the Editor.—From the unusual character of the above case, and the doubts entertained by some persons as to its genuineness, I was desired by the council to ascertain further particulars respecting it, from Dr. Read, of Belfast, who saw the case at its commencement, and also from Dr. Hodgkin, who (as is mentioned in the paper) was present on one occasion when the peculiar secretion made its appearance. In a letter which Dr. Read was so good as to favour me with, in answer to my enquiries, he states :—" The prominent object of Miss ——'s visit to me was, that she might undergo a proper examination of her chest, on account of a fixed and intractable pain somewhere about the superior mammary region, on the sternal aspect, and left side of the sternum, which had induced serious alarm, lest, at her particular age, it might be connected with a phthisical diathesis. It appeared that previous to my being consulted, there had been an outbreak of this peculiar secretion above

the brow, which had subsided, or was removed, but had just recurred, and occupied a larger surface exactly prior to her journey, and on her arrival at Belfast. Her father being an intimate friend of mine, I had the young lady removed from the hotel to my own house, for a more convenient and perfect examination of the chest, so that while with me, the malady of the skin was of subordinate or secondary importance, but I did not neglect its scrutiny. I classed it, and called it 'Pityriasis nigra,' though I had never seen that disease; a moderate magnifying power strengthened this opinion. I found that I could easily remove the black furfuraceous matter by friction, in minute laminae or scales, leaving the subjacent cuticle very nearly normal; and I then had no doubt that the action of air and light, in a few hours, changed the exposed cuticle into the same appearance as prior to the friction and removal of the scaly surface. It is quite true it might not be a change in the cuticle itself, from the chemical action of air and light, but a palpable transudation through the exhalent vessels; in fact, a true excretion. In the note of the case I sent to London, with the patient, both suggestions were contained: the former assimilating to the name I gave the disease; the latter, conforming to the theory I proposed of its cause, which I supposed to be connected with an imperfect elimination of the uterine function."

In a second letter which I addressed to Dr. Read, I mentioned that suspicions had been enter-

tained by some, as to the genuineness of the disease, and requesting him to be so good as to inform me whether he had any doubts on the matter. Dr. Read immediately replied to the following effect :—

“ I understand doubts have been entertained, and suspicions cast, on the genuineness and unsophisticated nature of the disease, from the unexampled appearance in this case, and its being unprecedented in the experience of several eminent physicians and surgeons. I saw the case very early after its commencement, and it at once attracted the most rigid observation and scrutiny I was capable of using, and the young lady, while at Belfast, resided in my own house. I have therefore no hesitation whatever in saying, that my opportunity of observation during her residence under my own eye, rendered it impossible that imposition could have been practised in this instance. I am fully conversant with the strange manœuvres occasionally practised by hysterical girls, from which no rank is exempt, but I know the father is a military gentleman of unblemished honour and truth.”

From Dr. Hodgkin I received the following communication in reply to my enquiry :—

“ I have perused my friend Teevan's account of his very remarkable case. It is an accurate narrative of what I either saw myself, or heard described. On the occasion alluded to, when I was present, though the coloured deposit progressively increased during upwards of half an hour (in which time I

was opposite to the young lady at dinner), absolute blackness was not produced, but the very remarkable character of the deposit, which could hardly be imitated by any artificial process, was to my mind satisfactory proof of the genuineness of the case. I noticed an extremely faint blush on the part which became subsequently discoloured."

GEO. CURSHAM, M.D.