## **OBSERVATIONS**

ON A

## CHANGE OF COLOUR IN THE SKIN,

PRODUCED BY

THE INTERNAL USE

OF THE

## NITRATE OF SILVER.

BY I. A. ALBERS, M.D. OF BREMEN.

Read Nov. 14, 1815.

THE skin of a woman, the history of whose distemper I shall communicate in the sequel, had contracted a blue colour all over the body. As there was not the least appearance of any disease in the heart, and as neither the circulation nor respiration were in the least affected, I was unable to trace the cause of this phænomenon; and I probably might have laboured in vain to discover it, had not my attention been drawn to it by a letter from the late Dr. Reimarus of Hamburgh, who informed me, that in his town two patients had exhibited a blue tinged skin, after the use of the nitrate of silver. Soon after I learned the same fact from Professor Rudolphi of Berlin, who

was at that time still residing at Greifswalde, where a physician of the place had made the same discovery. I shall now state the history of the case, which I have myself treated, and in which there can be no doubt, but that the change of the complexion was to be attributed to the use of the above-mentioned remedy.

A fat woman, aged 30 years, of a relaxed habit of body, but otherwise healthy, and the mother of four blooming children, in 1801 was seized, during the night, with epileptic fits, without there existing any cause that could be assigned for them: these fits returned four times in the interval of from four till six o'clock. I prescribed the nitrate of silver, in the form of pills, and in the following dose.

R Argenti nitrici gran. iv:

Micæ panis albi q. s. f. pilulæ ponderis granorum duorum no: 84. Obduc. fol. argenti.

Dosis mane et vespere quatuor.

Although after the use of these pills the spasms did not return, the patient continued them without my knowledge, near three years and a half without intermission; in the latter part of this period, however, she took them only in the evening. Towards the end of the last year, she being then

pregnant of her fourth child, the change of her complexion became first observable, and particularly so in her face. The tinge was at first bluish; it then grew gradually darker, till at last it became, as it has since continued, quite dark and almost black. This blue colour has spread all over the body, yet is most intense on the face, on the forepart of the neck as far as the middle of her bosom, and on the hands and nails. Whenever the patient holds her arms in an erect posture, the blue colour is considerably lessened, and even disappears almost entirely. The sclerotica is likewise considerably coloured. The patient has on the arm a large scar, the result of a former issue, which appears quite white; at least I can discover no bluish hue in it. The blue colour is not of the same depth at all times, but often changes several times in one and the same day, without there being any determinate reason for it. At one particular time, however, it appears strongest, namely, at the epoch of menstruation, after the accomplishment of which it again vanishes.

The patient's blood looks altogether like that of a person in perfect health. The woman is, besides, quite well, and does not experience the least impediment in breathing, and since the use of the nitrate of silver, has only once had a relapse of her epileptic fits. A variety of remedies, for example, sulphuric acid, nitric acid, chalybeates, baths of different kinds, &c. have hitherto been exhibited to no purpose whatever. The colour has for these ten years remained the same.

The three following cases were communicated to me by Dr. Schleiden of Hamburgh; the two former of which, however, were observed by Dr. Chaufepié, who is resident there, and only the latter one by himself.

A lady, 35 years old, employed this remedy eight years ago, and her sister, 38 years old, ten years back, against epileptic fits; no cure, however, was effected by it; but merely a less frequent return of the paroxysms. In both the blue colour is visible at this very time, and more particularly in those parts which are exposed to the light, as the face, hands, neck, and articulations; the colour is less strong on the body. The latter patient is coloured deeper than the former.

The third patient was a young man of 20 years, the son of a merchant of this town, born of an epileptic mother, and from his infancy afflicted with the same disorder. In this case there exists besides, from his early youth, an unconquerable propensity to onanism. All the remedies administered proved unsuccessful, and very frequently he was affected with three and four fits in one day. When I treated him five years ago, I exhibited the

nitrate of silver, the only remedy that had not yet been used. He made use of it during a quarter of a year with the only effect, that at the end of this period the paroxysms returned only once in a fortnight. But as the efficient cause of the disorder still continued to operate, under which circumstances no cure could be expected, I thought it incumbent on me, to rest contented with seeing the frequency of the fits lessened, fearing lest the continued use, in large doses, of this corrosive remedy might injure the stomach of so weak an individual.

Although I do not recollect to have read any observation made by an English physician on this effect of the nitrate of silver, yet a hint given by Professor Autenrieth, at Tubingen, induces me to think that they are known in England. This respectable gentleman told me when I was at Tubingen last year, that he was almost sure to have met with some such observation in an English work, but he could not find it afterwards. sor Reuss of Gottingen, who is so eminent for literary erudition, likewise hunted for it, but with-Professor Autenrieth's out any better success. assertion struck me the more, as many physicians of Geneva, with whom I conversed on the subject, and who are so deeply read in English literature, did not know of any observation of this kind made by English physicians. If, however, I have

been anticipated, I hope the learned members of the Society will pardon me for communicating to them these remarks, and those of my two friends Dr. Chaufepié and Dr. Schleiden. I am anxious to collect information from all quarters on this subject, and shall be most thankful to any of the members of this highly respectable Society, for any information they may please to communicate to me; for which purpose I take the liberty of subjoining the following questions.

1st. As the blood in these patients is of the natural hue, can it be doubted, but that the blue colour must be looked for in the reticula Malpighiana, in which it is produced by the nitrate of silver?

2nd. Why does this effect of the remedy occur so seldom? and why does it often not take place at all, when exhibited in very copious doses, but not long continued, as is proved by an essay lately published by Dr. Powell\*?

3rd. Is there any probability that this change of the cutaneous colour is produced by the protracted application of the remedy? If this were

<sup>\*</sup> Observations on the internal use of nitrate of silver, in certain convulsive affections. By Richard Powell, M.D. Medical Transactions, published by the College of Physicians in London. Vol. IV. p. 85.

the case, the second question would be answered.

4th. Why do the parts exposed to the light, more particularly contract a blue colour?

5th. What remedies might be prescribed to cure this alteration of the skin?

Additional Facts relative to the subject of the preceding Paper. By P. M. ROGET, M.D. F.R.S. Physician to the Northern Dispensary.

HAVING some years ago met with an instance in which a change has taken place in the colour of the skin, similar to that described by Dr. Albers in the preceding paper, and arising from the same cause, I am induced, with the approbation of the council, to subjoin to it a brief account of the history of this case, as well as of some others which have occurred on the continent: for it is only by accumulating evidence on the subject, that we can hope to arrive at the true theory of this singular phænomenon.

A young lady, about 25 years of age, while apparently in good health, was seized with an epileptic fit, which lasted twenty minutes. The misletoe, aided by occasional cathartics, was taken for a long time without any apparent advantage, and a second attack occurred about three months after the first.