THE USE OF CHLORIDE OF MERCURY IN SULPHURETTED HYDROGEN DEPOSITS IN THE SKIN.

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MANY diseases of the skin consist of, or are accompanied by, inflammation of the orifices of the sebaceous and sudoriferous glands, varying in appearance, but usually presenting that of a pustule with a central black dot. This inflammation is caused by the retention of the secretion in the gland-tube, which, undergoing decomposition, hardens and acts as a foreign body. The normal secretion of a sebaceous gland consists of an oily hydrocarbon, which serves the double purpose of draining off effete material from the system, and lubricating and softening the skin. In certain unhealthy states, the screw-like duct becomes impervious, the hydrocarbon decomposes in contact with the skin, sulphuretted hydrogen is evolved, which, on exposure to light at the orifice of the duct, becomes black. This retention may arise either from an abnormal state of the secretion, or defective action of the gland.

It is probable that it depends on both these causes; for we find the symptoms alleviated, first by increased nutrition, and secondly by local stimulant applications. The increased nutrition causing an increase of carbon, the small quantity of which, in proportion to the hydrogen, during the affection permitted the excess of hydrogen to enter into combination with sulphur. The topical treatment acts by stimulating the capillaries and lymphatics, and thus increases the physiological activity of the gland.

We know that, in the preparation of sulphide of mercury, vermilion, it is necessary to add to a solution of the chloride of mercury an excess of sulphuretted hydrogen gas. If this be not attended to, and the chloride of mercury happen to be in excess, the red sulphide is not formed, but a white substance, which is a combination of chloride and sulphide of mercury. $\text{HgCl} + \text{HS} = \text{HCl} + \text{HgS}$ is the formation of the red sulphide of mercury; $2 \text{HgCl} + \text{HS} = \text{HCl} + (\text{HgCl} + \text{HgS})$ expresses that of the white body referred to.

Corrosive sublimate, then, in addition to its stimulant action, possesses chemical properties which render its use as a remedial agent peculiarly adapted to the treatment of acne, and cutaneous affections of this class, since it removes the black spot by combining chemically, and an apparent cure is thus effected before the remedy has had time to cause a real cure, which in a short time it also does, by stimulating the gland sufficiently to make it cast out its accumulated contents. I have seen obstinate cases cured by the application of the following lotion several times daily.

℞ Hydrag. chlorid. (cor. subl.) gr. viij; glycerini pur. ℥ss; aque rose ʒiijss.

The removal of the black spot is not to be considered an unimportant effect of this remedy; for the affection frequently attacks the side of the nose, the forehead, and soft parts of the face.

I am not aware that corrosive sublimate baths have been used in the treatment of extensive discolorations of the skin; but, reasoning analogically, it is not too much to assume that all discolorations, when the symptom is more apparent on the face and hands than on the covered parts, are caused by the action of light on the surface of the body, and may be removed chemically by applications to the surface. The discoloration, or rather coloration, produced by the internal use of nitrate of silver, is not restricted to the face and hands, for the salt acts on organic matter to some extent independently of light; it is an internal action. This affection is successfully treated by the administration of a chemical remedy, iodide of potassium, by Professor Melsens of Brussels. There does not appear to be any reason, then, why the still more direct treatment of external chemical action by external chemical remedy should not also succeed. It, at least, deserves a trial. It is probable it may be useful in the so-called "bronzed skin", referred to unknown and unascertainable morbid conditions of the suprarenal capsules. I say unascertainable; for, owing to the peculiar nature of these glands, even in the healthy subject, they run into decomposition before a *post mortem* examination can possibly be made. I have heard a professor of physiology in one of our universities state that, although he has seen many thousands of suprarenal capsules, he could not pronounce a given specimen positively healthy or unhealthy, for the reason just assigned. But may it not be, after all, that this condition is, in reality, nothing more than a peculiar symptom of impaired nutrition—that is, of an insufficient supply of carbon. A patient suffering from the disease which Dr. Addison referred to these glands, "has gradually fallen from his usual state of health, has become weak, pale, thinner, but not emaciated, languid, spiritless, unequal to bodily or mental exertion, with flabby muscles and a soft pulse, which commonly is very feeble also."

These symptoms are very like what we should expect, *a priori*, from a deficiency of carbon in the system. "Not emaciated"; for hydrocarbons do not really nourish, but are used in fat and heat. It is not surprising, however, that a very extensive and far gone state of decomposition may accompany these symptoms, not as cause, but effect, when we consider that Kölliker has counted as many as thirty-three filaments of the pneumogastric nerve entering into one capsule. We must receive reports on the pathology of these glands with great caution, if not doubt; and is it not possible, without referring to these bodies, of which so little is known, to find the cause of this disease in deficient nutrition, a too small proportion of carbon, and the consequent existence of abnormal, and perhaps poisonous, substances in the economy?

RUPTURE OF THE BLADDER AND ENTERITIS.

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THE following case is one of considerable clinical interest, inasmuch as the actual injury (rupture of the bladder) was at first marked by other symptoms and by the absence of any correct history.

On July 15th, 1867, the wife of a tradesman requested me to prescribe for her husband, aged 30, who was suffering with diarrhoea and cramp-like pains in the abdomen. He had been to Hyde Park in the morning to witness a swimming match in the Serpentine, and had taken some old ale during the day, which excited him, but he was not intoxicated. In the course of two hours, the messenger returned to say the diarrhoea was checked, but he was unable to pass urine, having voided only a little blood. On arriving at the house, no confession of being engaged in a quarrel could be obtained; so I made a careful examination of the abdomen, pelvis, and spine. A small quantity of blood was oozing from the urethra, but no external mark of violence to any organ could be perceived. Being provided with a case of catheters, a No. 7 was introduced easily, and I drew off about thirty ounces of urine tinged with blood.

The patient appeared much relieved by the operation, and was to remain quiet in bed, with instruction to take a sedative draught, if restless. He passed an uneasy night, and I visited him at nine o'clock in the morning. On being taxed with having taken part in a disturbance of some kind, he admitted to have had some words with a stranger, who threw him down in the tavern and fell on his side. I drew off a quart of urine containing much less blood than on the first occasion. A soothing alkaline mixture was prescribed, to be taken every four hours, and a linseed poultice was at once applied, directions being given as to suitable diet. In the evening, another pint and a half of urine was removed with merely a trace of blood, and the prognosis seemed more favourable.

Wednesday, July 17th.—He had passed a fair night, yet still suffered much distress from inability to void the urine. Thirty ounces were drawn off, and he seemed cheerful over the circumstance, promising to hold no further arguments with chance companions. The expression of the countenance being somewhat anxious, and the pulse quick, I felt apprehensive of peritonitis, and ordered the mixture to be continued with plain milk and farinaceous substances. During the afternoon, spasmodic pain was complained of, for which an opiate draught was taken with benefit. A dose of castor-oil was subsequently partly retained, yet failed to produce an evacuation from the bowels. Towards evening, the pain seemed more diffused, with tenderness over the left inguinal region, and there was nausea with occasional vomiting. The bladder was again relieved at nine o'clock by my assistant, Mr. E. Thomas, and a pill containing calomel and opium was administered every four hours.

The morning of July 18th found things more complicated, and it was apparent the patient was fast sinking. There was increased pain and tenderness; pulse small, weak, and frequent; countenance pale and cadaverous; green, bilious matter being vomited continually. Death took place soon after nine A.M.

Autopsy, thirty hours after death.—No evidence of external violence could be discovered beyond a slight abrasion of the face. The thoracic viscera were normal in appearance. The stomach contained a small quantity of greenish fluid. The liver and spleen were healthy. On examining the bladder, there was a vertical slit an inch and a quarter in length, on the upper and anterior part of the fundus, which accounted for the distressing symptoms above enumerated. Some fluid was effused within the abdomen, and a yet larger quantity mixed with pus was in the cavity of the pelvis. The small intestines were congested and inflamed throughout their course, and the colon was distended with flatus.

From subsequent inquiries, it was ascertained that the deceased had been involved in an unpleasant conversation on building affairs, which led to a difference of opinion and passage of arms, during which unfortunate scuffle the misguided man fell heavily beneath his adversary, who was very corpulent and heavy.