CASE OF BRONZED SKIN, ASSOCIATED WITH DISEASE OF THE SUPRARENAL CAPSULES.

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[Read before the Bath and Bristol Branch, February 15th, 1857.]

On the evening of the 3rd of October, 1856, I was called to visit a female aged 21, unmarried. I found her in bed, apparently very ill; and inquiry of her relatives elicited the following history of her complaint.

She had nearly a year she had experienced an increasing sense of debility, without any obvious cause. There was nothing in her occupation which accounted for it; and her habits of life were regular and industrious. Menstruation had always been normal, and there was no record of leucorrhea or of diarrhoea. Progressive emaciation had accompanied the weakness, and a corresponding loss of animal heat; so that, although originally of good development, she had become exceedingly thin, and had felt very cold even during the excessive heat of last summer. There had been great constipation, and hardly any appetite for food. Within the last three months, both herself and her friends had noticed a muddiness of the skin on the face and hands; and, on the dorsal aspect of the latter, this muddiness had increased to such an extent that it might have been imagined that she had exchanged limbs with a negro. The tint of the face was of a much less decided character. She had no history of anemia or cardiac disease; and the surviving members of her family were in good health.

Her first interview I had with my patient was by candle-light, and her appearance indicated nothing beyond aggregated spasmophilia. It is not surprising that I should have overlooked, under such circumstances, the peculiar colour of the face; and the hands I did not particularly look at. The only thing which struck me was the extent of the face, and the area of the areola round the eyes. I made a careful physical examination of the thoracic organs, but failed to discover anything abnormal beyond a slight anemic murmur. An examination of the abdomen led to only a negative result. No pain was complained of, but much nausea whenever she raised herself in bed; and, in the same posture, she described herself as experiencing a weight in the right hypochondriac region. The bowels were constive; but this fact was explicable by the small amount of nourishment taken. The urine was natural; the pulse was 80; the respiration 10.

My patient had previously been under medical treatment, and, as far as I could learn, of a judicious kind. I was puzzled why she should have derived no permanent benefit from it, but I really could not see anything to interfere with a diagnosis of pure spasmophilia; and I must have formed a false prognosis that she would probably be quite well in two or three weeks time. I prescribed a mixture of tincture of sesquisulphide of iron with tincture of hyoscyanum; a dose after each meal, and directed that food should be given in small quantities at frequent intervals.

October 4th. I visited my patient by daylight, and I could not help noticing the dark earthy tint of her face and hands. No other portion of the surface was affected in the same way: the skin every where else was perfectly clear, and free from abnormal stain of any kind. However, the real nature of the case did not then occur to me. The medicine had caused a relaxation of the bowels, and therefore the colour of iron was substituted for the sesquisulphide; and an opiate pill ordered to be given at bedtime.

A decided improvement became manifest during the next few days; so that she was able to leave her bed and come down stairs, still preserving the recumbent posture on a sofa. On the 10th of October, the feeling of weight in the right hypochondriac region increased to absolute pain. I made another physical examination of the abdomen, and the result was deep percussion elicited a dull note over the seat of pain, and palpation imparted the sense of a soft solid, deep in the abdominal cavity. Although the strength had increased, the emaciation progressively continued; and, with a view to remedy this, I recommended the administration of the cod-liver oil. To this, however, great objection was offered, the bare thought of taking it being incomprehensible; and, on the 21st, it was given.

October 13th. A retrograde step had already commenced. The citrate of iron mixture could no longer be retained; the bowels had become confined; the indescribable sense of powerlessness had completely returned; and my patient went back to her bed, from which she never rose again.

During the preceding week, I was perusing Dr. Addison's celebrated monograph on Diseases of the Suprarenal Capsules, as well as a review of that work in the then current number of the British and Foreign Medical-Chirurgical Review. I now turned to suspect the real nature of this case, and once communicated the possibilities and probabilities of the case to the patient's friends. They were astonished at the altered tone of my prognosis, and did not at all appreciate the reasons I gave; but it was agreed, however, that further advice should be obtained.

October 15th. Mr. Norman met me in consultation. It was clear that we had to deal with the results of a special disease. The cure of these results being necessary, the connection of the nutritive processes. The data on which we had to form an opinion were principally subjective: these were the extreme lassitude and debility, the constant nausea and anemia, the pain and the weight in the right hypochondriac region.

The great objection was the administration of cod-liver oil, to which my patient reluctantly assented. Mr. Norman also suggested that a couple of grains of blue pill should be taken once or twice a week, not only with the view of maintaining the circulation, but also to stimulate the nutrition of the liver; for the possibility of bilary toxemia had occurred to our minds as tending to confuse the other elements of diagnosis; although such an hypothesis would not account for the marked viscid emaciation, and was almost certainly negatived by the clear pearly hue of the conjunctiva.

Under the plan of treatment above laid down, and for some time faithfully carried out, the tendency to emaciation was certainly arrested, and the strength appeared to be somewhat improved. A blister was subsequently applied to the right hypochondrium, in order to relieve the local pain.

Things remained very much in status quo until the middle of November. Disgent of the cod-liver oil was now experienced, and consequently its use was abandoned; and so complete was the repugnance to every kind of food, that beef-tea, in very limited quantities, was the only article of diet which we could persuade her to accept. The sense of hunger was altogether suspended, and the withdrawal of the demand for nourishment was apparently the proximate cause of that wasting process which now began. Pain was no longer an unusual symptom, the secretions generally were properly carried on; there was no cough, and no symptom referrible to the pulmonary organs; the sounds of the heart were sharp and clear; and, with the exception of the facility of memory, the intellectual powers were unimpaired.

For a short time, I gave her quinine, with a slight improvement of the appetite; but, at the beginning of December, she firmly refused to take medicine of any kind. A week afterwards, she would see nobody beyond her own family; and on Friday, December 19th, she quietly died away, as if she had only fallen asleep.

Post Mortem EXAMINATION, December 21st, fifty-four days after death. The body was greatly wasted; the breasts very much atrophied; there was very little adipose tissue anywhere; and the muscular structures were flabby and atrophied. The skin of the face was nearly as brown as a nut; the exact hue it would be difficult to describe, but it was duller and less intense than bronze, and resembled more than anything else the tint of the lighter portions of a photographic impression. The liver was very marked when compared with the integuments of the thorax and abdomen, or with any linen article of clothing. The skin of the dorsal aspect of the hand was exceedingly dry, the knuckles being particularly so; the wound being most fittingly the real tint, because it really possessed the shining properties of that alloy. The popular term "brown jaunudice" is sometimes a very appropriate one in these cases.

The stomach was found to be in a healthy state. The cronite nausea, elongation of the omentum of the thorax were anatomically healthy, but very bloodless: the heart was exceedingly small, and contained several fibrinous coagula. The stomach was distended with gas: it contained a thin
yellowish fluid, but its coats were in all respects free from disease. Nothing abnormal could be detected in the large and small intestines; the spleen and the liver were of the natural size. When the liver was being removed, I found that the right kidney had come out with it, and that the adhesion had taken place between the contiguous peritoneal layers of the posterior lobe of the liver and of the suprarenal capsules. This circumstance may adequately account for the constant pain in the right hypochondriac region during life, and the sense of weight also complained of was evidently caused by the entire mass unduly stretching the ligaments by which it was attached to the diaphragm. The slow progress of the adhesion or inflammatory action had probably been going on for some time: the connection between the two organs was of the most intimate kind, and the knife was required to separate them. The right suprarenal capsule was very large; the left scarcely exceeded the normal size, and was unalike to adjacent viscer. Purulent matter exuded from both glands when a section was made through them: and a number of little military bodies was visible to the naked eye. My friend, Dr. Martyn, of Bristol, has been kind enough to make a careful examination of the diseased organs. His report is as follows:—Left suprarenal capsule. Preservation good, colour rosy-yellow, surface uneven: weight 73 grains. Tears readily, showing rough yellowish-white surfaces, covered with creamy fluid. Consists of a thickened thin, within which are fibrous septa, forming meshes in which cheesy masses lie loosely surrounded by fluid. Granular appearance. (a) Irregularly roundish nuclear corpuscles, containing fatty granules (often to half the entire cell-content) by Ytrent-cells containing (a), (c) Protein granules. (b) Large Vacuities of fat. Fuciform and also containing fat. These are derived from the septa. The right suprarenal body exhibited a similar condition. Kidney pale. From the appearances above-mentioned, and from the action of glycerine, acetic acid, and ether, I conclude that the specimen is one of yellow tubercle in an advanced stage of degenerative softening. The specimen has been deposited in the museum attached to the Bristol Medical School.

Remarks. On looking through a valuable series of cases in the Medical Times and Gazette, illustrative of disease of the suprarenal capsules, I find that there are three symptoms more common present than any others. These are debility, bronzed skin, and emaciation. I have enumerated them in the order of frequency. The debility appears to exist always. It indicates the development of a special dysarria, characterised by a grave error in the blood forming process, and consequent prostration of the vital powers. The dysuria is one which probably has some affinity with idiopathic anemia, with chronic intestinal obstipation. It is the consequence of the local deposit of tubercol. It is impossible in all cases to define its cause: but it is certain that some mental derangement or shock has had a great deal to do with many of the cases. They are, for the most part, unaccounted for. Such observers as Humorists may here find a capital debating ground: for the inquiry is naturally suggested, is the disease of the blood the cause of the neuritis, or the neuritis the cause of the blood-disease?

Next let me advert to the bronzed skin. I find two apparently authentic cases on record in which bronzing of the skin was unaccompanied by any noticeable changes in the suprarenal capsules. But these are only two cases out of a considerable number in which the disease of the glands has been successfully diagnosed during life from the cutaneous discolouration. Disease of the disease of the capsules has been certainly mentioned in several instances without any corresponding bronzing; but I believe that not a single case has been published in which total destruction of the capsules has existed, without manifest discoloration of the integuments also. Hence, as the British and Foreign Reviewer remarks, the cutaneous bronzing may be dependent upon the capsular affection, but the converse of this proposition cannot for a moment be entertained. But while I agree with the Reviewer in thinking that the condition of the integument is almost absolutely diagnostic of disease of the capsules, I think he too hastily concludes that the latter is the cause of the former. We must know a great deal more than the mere pathology of the disease of that organ before we venture to pronounce so decisively on the phenomena of their pathology.

Emaciation is a symptom not so frequently observed, and in cases where it has been entirely absent. It is easily explained, whenever it exists, by the deprived condition of the blood, and by the altered nerve-tone resulting therefrom. Nutrition must be gravely interfered with by such primary conditions of disease.

The case which I have related affords a marked illustration of the three great symptoms. The debility and emaciation existed in an extreme degree; but the bronzing was strictly limited to those portions of the skin habitually exposed to the light, and therefore looked like an aggrivated form of sunburnness.

Dr. Addison's opinion as to the hopelessness of the prognosis appears to be confirmed by every fresh case which has come under my observation, and of which I have been                              

An account of the structural anatomy of the suprarenal capsules, by Kolliker, is to be found in the Medical Times and Gazette, vol. ii, for 1855. M. Brown-Séquard's investigations in their physiology show that these bodies have a very important part to play in the animal economy—a part which, if omitted, must lead to fatal results. (Arch. Générales de Med., Oct. and Nov. 1856, quoted in Raking's Abstract, Jan. 1857.) The substance of M. B.-Séquard's observations is, that the capsules are very sensitive. (b) As age advances, the capsules are found to gain considerably both in weight and in volume; and hence it appears that these organs are not exclusively related to embryonic life. (c) Extirpation of both capsules destroys life with as much certainty and rapidity as extirpation of the kidneys. The extirpation of a single organ was invariably fatal. After removal of both capsules, the following phenomena were noticed: febrile, gradual, and protracted excitement, to which, first, heeled, then retarded, and lastly irregular and spasmodic; a quick and weakened pulse; gradual diminution of animal heat; and lastly, vomiting, convulsions, in various forms; and occasionally coma. It would thus appear that the suprarenal capsules are essential to life, and that their removal or disorganisation may lead partly to some injurious alteration in the blood, and partly to some injurious operation on the nervous system.

CASE OF WOUND OF KIDNEY: RECOVERY.

By J. Johnston, M.B.Lond.

[Read before the Birmingham and Midland Counties Branch, February 19th, 1857.]

On December 24th, 1855, at 10 P.M., I was hastily summoned to attend William Hyde, aged 32, who had been stabbed in the mid-lumbar region, about 2 inches below the spine, without knowing where. I found him in a state of collapse from the great loss of blood; the pulse hardly perceptible; vomiting was continuous, with biceps. He was examined by a Mr. Hyde, of the town, where, he said, he had been stabbed with a carving knife. I therefore examined the groin: there was no wound, but a spasmotic retraction of the testicle. Having turned him on his side, I felt an indescribable sense of the knife, I then gave him one inch and a half in length, on the right side of the spinal column, and about two and a half inches above the posterior crest of the ilium. Considerable haemorrhage was still taking place, and he said that the knife had knapped in his back. Having sent the policeman to find the broken knife, during his absence I assiduously applied cold water to the lumbar region, and gave the patient some brandy and cold water, with forty drops of tincture of opium. The policeman not being able to find the knife, I thought it advisable to pass my finger into the wound, to probe for any broken piece. My finger passed upwards and inwards, touching the transverse process of the third lumbar vertebra, and about an inch above this entered the peritoneal cavity. The knife was afterwards found, unbroken, but bent about three-fourths of an inch from the point: it was eight and a half inches in length, and had been driven in up to the haft. I continued the cold application. A magistrate having arrived, the patient's deposition was taken, as I did not think that he could rally. Warmth was applied to the feet. Gallic acid in five-grain doses with a fourth of a grain of opium, were given every twenty minutes, for three doses, and afterwards repeated every hour, with occasional doses of cold brandy and water. He chiefly complained of retraction and pain in the testicle; and was relieved by an embrocation of brandy and opium in equal parts. About half an hour after my arrival, he expressed a desire to pass his urine, and then passed by the