

Clinical Lecture

ON

ADDISON'S DISEASE.

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PART I.

GENTLEMEN,—Ten years ago the late Dr. Addison, senior physician to Guy's Hospital, published a monograph "On the Constitutional and Local Effects of Disease of the Supra-Renal Capsules." Beyond the fact, which had been revealed by post-mortem examinations, that these organs were liable to inflammation and suppuration, to effusions of blood into their substance, and to cancerous and tubercular degeneration, nothing whatever was known respecting their diseases, or the influence which these exercised on the general health, until the publication of that work. Dr. Addison had for a long period observed, from time to time, cases evidently belonging to the same class, characterized by very remarkable symptoms, and to which, for want of a perfect knowledge of their true nature, he applied the term idiopathic anæmia. It was in the course of his endeavours to obtain some additional light on this subject that he discovered the relation between these symptoms and disease of the supra-renal capsules, which relation he brought for the first time under the notice of the profession in the work I have just mentioned. Dr. Addison briefly stated these symptoms which he had found occurring in connexion with supra-renal disease to be as follows: "Anæmia, general languor and debility, remarkable feebleness of the heart's action, irritability of the stomach, and a peculiar change of colour in the skin." On account of this discoloration of skin, which Dr. Addison at first conceived always to accompany the disease, it was originally named "melasma supra-renal." At a later period, however, Dr. Addison stated, at a meeting of the Medico-Chirurgical Society, that cases might and did occur without any such discoloration. The newly-discovered malady was nevertheless afterwards called bronzed-skin disease, but has now become generally known by the more appropriate and convenient name of Addison's disease: appropriate because it commemorates the name of the discoverer, in accordance with the custom which has connected the names of Bright and Pott with the diseases which they first recognised, and convenient because it involves no theory as to the ill-understood nature of the disease itself. Dr. Addison's book contains the record of eleven cases, some of which he had not seen during life, and several of which were certainly not true examples of the disease now known by his name. Indeed he appears at that time to have thought that any disease involving the structure of the supra-renal capsules would be accompanied by the symptoms he described. Subsequent observation appears to show that the symptoms peculiar to Addison's disease only occur in connexion with that form of disease of the supra-renal capsules which has commonly been called tubercular—a term perhaps not precisely accurate, but which, for want of a better, I shall on this occasion continue to employ. I do not, however, mean you to infer that the deposit found in the capsules in these cases is identical with tubercle as we meet with it in other organs, but only that it has such an apparent resemblance to it, and undergoes degenerative changes of so similar a character, that this term is, in the present state of our knowledge, the most convenient for clinical purposes, more particularly as we find it in a very large proportion of cases occurring in persons of a tubercular diathesis. Evidences of inflammation, afforded by adhesion to neighbouring organs, and by thickening of the connective tissue surrounding the capsules, are, indeed, common in Addison's disease, but are always associated either with abscess or with tubercular affection of the capsules themselves. Abscess—or at least transformation of the capsules into cysts filled with creamy-looking fluid, or with thinner fluid containing flocculi—has been found associated with the symptoms of Addison's disease in a few instances. It appears to me, however, that there are good grounds for believing that in such cases the abscesses have

been formed by the softening down of the deposit, and that they are therefore only examples of one form of the ordinary tubercular affection. With the exception of a case reported by Dr. Duclos, a French physician, as one of cancer of the supra-renal capsules (but which from the description and symptoms I am inclined to regard as having been, in reality, a true example of Addison's disease), no single case of cancer of the supra-renal capsules has to my knowledge been reported, in which either the constitutional or external symptoms of Addison's disease were present. Neither, with the exception of the same case, has cancer of the supra-renal capsules, so far as I can discover, ever been reported, unassociated with, or probably otherwise than secondary to, cancer of other organs.

Addison's disease is therefore due to a much more definite affection of the supra-renal capsules than its discoverer himself was aware of; and, as we have seen, the manifestations of its existence during life are clearly divisible under two heads—viz.: 1, constitutional symptoms; and 2, external signs.

Having had under my own care during the last few years at least five genuine cases of the disease, and having had the opportunity of watching several of those which were under Dr. Addison's care, I shall now sum up the results of my own personal observations as to the constitutional symptoms and external signs of this singular malady.

I. The constitutional symptoms are: gradually progressive asthenia, often originating without any apparent cause, and seldom dating from any definite period; great languor and indisposition for exertion, with, in advanced cases, breathlessness and palpitation, frequent sighing or yawning, and generally faintness on making any muscular effort, sometimes even on being raised up in bed. There is almost invariably great weakness of the heart's action, and remarkable feebleness of pulse; loss of appetite; irritability of stomach, with nausea; and, towards the close of the illness, at least occasional, often persistent, vomiting. The mind is generally clear to the last, but so great is the prostration in the latest stage of the disease that the patient often lies in a drowsy, apparently semi-comatose state, from which, however, he can be roused by questions, and to these he generally gives pertinent though slow and reluctant answers. The above I should class as the characteristic symptoms of the disease: but there are in many cases pains in the loins, hypochondria, or epigastrium; and, more rarely, dimness of sight, vertigo, and, near death, a tendency to incoherence or delirium. Death takes place from asthenia, and often rather suddenly. It is a remarkable fact that, notwithstanding the great debility, which is the earliest and constant symptom of the disease, there is, in uncomplicated cases, comparatively little or no emaciation. The skin also is soft and cool; the tongue usually clean and moist until the last days of life; the bowels seldom disordered, though sometimes confined; and the urine generally normal. It should be observed that the constitutional symptoms of this malady have been sometimes masked, or at least overlooked, in cases in which the patient has been contemporaneously suffering from some other serious wasting disease, such as phthisis or lumbar abscess; but even in such cases the languor and prostration are for the most part out of all proportion to the severity of the more obvious complaint: a circumstance well illustrated by a case I shall presently quote, which was under the care of Mr. Hulke some time since in this hospital, and in which—partly no doubt on account of the complication with psoas abscess, partly also from the absence of discoloration of skin—the affection of the capsules was not suspected during life.

II. The external signs of Addison's disease are found in the discoloration of skin, which, when present in a fully developed form, is, I need scarcely say, its most striking feature. It is true that in a recent case in this hospital, in which the discoloration was very slight, I ventured to diagnose the disease on the strength of the constitutional symptoms, and that diagnosis, as you well know, was verified by the post-mortem examination; but, as a rule, this external sign has been the main ground on which this disease has been hitherto diagnosed. The discoloration of skin in Addison's disease is very peculiar, and gives to the patients in whom it is well marked the appearance of belonging to one of the darker races of mankind. Most frequently it is of a dusky-brownish or yellowish-brown hue, but sometimes rather of an olive or greenish-brown colour. The shade is not uniform on all parts of the body, but is generally darker on the face, neck, and hands, and in the axillæ and groins. The penis and scrotum and the nipples and areolæ are usually the darkest parts, and the discoloration of these last may be regarded as one of the diagnostic external signs of Addison's disease. If the patient have been blistered

or have sustained any other superficial abrasion of the skin, the injured surfaces are always darker than the surrounding parts, but the cicatrices of deeper injuries usually remain pale. Very often, also, small well-defined specks or patches of darker colour, resembling moles, are found upon the face, neck, arms, or trunk; but so far as I have observed, they only appear on the already discoloured parts. Although the discoloration is generally most marked on certain parts of the body, and may even exist on some parts while the skin of other parts is of the normal hue, there is rarely, or never, any definite line of demarcation between the discoloured and normal portions of the skin; but the former fade insensibly into the latter. The characteristic discoloration is not restricted to the skin, but in well-marked cases is also usually found upon the lips in the form of an irregular stain running lengthwise, and upon the gums and buccal mucous membrane in the form of stains or patches: this last may indeed, perhaps, when present, be considered as the most decisive of the external diagnostic signs of Addison's disease. It is, on the other hand, important to remark that the conjunctivæ always remain uncoloured, and in the more deeply discoloured cases their pearly whiteness presents a striking contrast to the dusky hue of the face. I may mention, by the way, that this discoloration of the gums and buccal mucous membrane affords another analogy between the discoloration of Addison's disease and the natural colour of the darker races; two Hindoos who were hospital out-patients of mine having presented dark stains on those parts, exactly resembling the stains found in cases of Addison's disease. Moreover, in one of them I noticed that some superficial cicatrices were of a darker shade than the surrounding integuments.

We have had in the hospital during the last year two well-marked cases of this rare malady; one in April last, and the other quite recently. The first of these well illustrates both the constitutional symptoms and the external signs which I have just described.

W. B—, aged twenty-four, an engineer's labourer, first came under my observation on the 12th of April, 1864, when he was admitted into Cambridge ward, under my care. He stated that he had been in good health until about nine months previous to his admission, when an abscess had formed in the left hypochondriac region. A few weeks later, after the healing of the abscess, he had been seized with severe pain in the left hip, shooting downwards along the course of the sciatic nerve; and the pain had continued with varying intensity ever since. About the same time he had begun to lose strength, becoming very rapidly weaker during the last ten days. He had for some weeks lost his appetite, and had been affected with nausea and occasional retching, with, for the last day or two, vomiting of food. He said that he had suffered latterly from sudden attacks of breathlessness and faintness on exertion; and he actually fainted while under examination in the waiting-room. His face had a sunburnt appearance, and his wife and mother on being questioned said that they had observed his complexion becoming darker for the last three or four months. From the above symptoms I at once diagnosed a typical case of Addison's disease.

On the day after admission the patient could with difficulty be raised up in bed on account of tendency to faintness. Pulse extremely feeble, small, and compressible; the heart's impulse feeble, and sounds exceedingly faint; the skin cool and soft; the tongue moist and clean; the urine dark-coloured, acid, copious, free from albumen, specific gravity 1022; the bowels costive. General hue of the skin dusky; the face somewhat darker, resembling that of a person bronzed by exposure; the back and sides of the neck darker than the face; the hands much darker than the arms, and the knuckles sensibly darker than the surrounding surface, as were likewise the cicatrices of several former injuries. The skin over the spine, for nine inches downwards from the eighth dorsal vertebra, was much darker than the rest of the back. Over the left hip, where a blister had been applied four months previously on account of the sciatic pain, was an oblong surface, four inches by five, much darker than any other part of the body. At some parts near the edges and centre of the patch, where apparently there had been superficial ulceration, the skin was nearly as black as that of a negro. The nipples and areolæ were very dark. The cicatrix of the abscess in the left hypochondrium was itself pale, but was surrounded by a dark-coloured ring. The penis and scrotum were extremely dark; the thighs and legs much less dark than the body. The lips had a dark, almost black, stripe of varying breadth extending along their whole length. The buccal mucous membrane, with the exception of a few paler spots, was also of a dark, almost black, colour; and there

were several well-defined dark patches on the gums of the lower jaw. The conjunctivæ were clear and perfectly white. The patient became progressively weaker from day to day; vomiting recurred after almost every meal; the pulse became quicker and nearly imperceptible; the heart-sounds were only audible on very close examination; the sense of faintness was constant and intense; and the surface of the body became cold to the touch two days before death, which took place five days after his admission. His intellect remained unimpaired to the last.

At the post-mortem examination, the body was spare, but not much emaciated, and its general hue dusky, but paler than it had been during life. The muscles were of a normal red colour; the blood thicker and darker than usual, presenting under the microscope an excess of red corpuscles. The lungs were quite free from tubercle. Many of the mesenteric glands were enlarged; their surfaces were pale and yellow, and on section they had a somewhat dry, cheesy texture. The vessels of the small intestine were much congested. Peyer's patches were enlarged, prominent, of yellowish-white colour, and remarkably opaque. The solitary glands scattered throughout the ileum were also enlarged. The supra-renal capsules were closely invested with very dense connective tissue, and were both much enlarged; they were of very firm consistence, and on section no distinction was visible between cortical and medullary substance, the whole organs being converted into masses of firm, yellowish-white tissue, in parts semi-transparent. Scattered throughout these masses were numerous opaque yellow deposits, varying in size from a hemp-seed to a small bean, of cheesy consistence, mixed with gritty matter. On laying open the pelvic fascia at the upper edge of the true pelvis on the left side, about half an ounce of thick, creamy-looking pus escaped. The abscess was connected with carious bone at the sacro-iliac synchondrosis.

You will have noticed in the case I have just read the presence of almost every one of the constitutional symptoms which I have enumerated above as being characteristic of Addison's disease; and although the asthenia appears to have supervened contemporaneously with the sciatic pain, the latter could not even during life be considered as its cause, it being altogether insufficient to account for the severity of the symptoms. Again, with reference to the external signs, you will have seen that this case presented all those which I have described as specially diagnostic of the disease: the face, neck, and hands were darker than the general surface; the areolæ, penis, and scrotum were the darkest parts of the natural skin, and the cicatrix of the blister on the hip was almost black, whilst the deeper cicatrix of the abscess remained pale; lastly, the lips and buccal mucous membrane were deeply discoloured with the characteristic stains.

ON

EXCISION OF THE WRIST FOR CARIES.

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(Continued from page 313.)

THE operation is performed in the following manner:—Chloroform having been administered, a tourniquet is placed upon the limb to prevent oozing of blood, which would interfere with the careful scrutiny to which the bones must be subjected. Before the operation is commenced, any adhesions of the tendons are thoroughly broken down by freely moving all the articulations of the hand. The radial incision is then made in the situation indicated by the thick line (t r) in the accompanying diagram of the anatomy of the back of the hand (Fig. 4). This incision is planned so as to avoid the radial artery, and also the tendons of the extensor secundi internodii pollicis and indicator. It commences above at the middle of the dorsal aspect of the radius, on a level with the styloid process, this being as close to the angle where the tendons meet as it is safe to go. Thence it is at first directed towards the inner side of the metacarpo-phalangeal articulation of the thumb running parallel in this course to the extensor secundi internodii; but on reaching the line of the radial border of the second metacarpal bone it is carried downwards longitudinally for half the length of the bone, the radial artery