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Clinical Lecture

ON

ADDISON'S DISEASE.

BY

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PART I.

GENTLEMEN,—I propose to bring under your notice to-day a rare but very interesting disease, which was first recognised only a few years ago by the late Dr. Addison of Guy's Hospital, and is on that account now commonly called Addison's disease. It consists in a particular change of structure in the suprarenal capsules, which usually manifests itself by a peculiar train of constitutional symptoms, and by a very remarkable discoloration of skin. From this last named most striking, though not quite invariable feature, the disease has been frequently but not very happily termed bronzed skin disease; for it is only in a comparatively small number of cases that the peculiar discoloration of skin could be accurately described by the term bronzing.

During the last twelve months, it has singularly happened that we have had in the wards of the hospital four well-marked cases of this uncommon disease; namely, two under Dr. Thompson's care, one under the care of Dr. Stewart, and one under my own care. My own case and one of Dr. Thompson's left the hospital much benefited by treatment, and are still under my occasional observation as out-patients; Dr. Thompson's other case proved fatal on the 2nd instant; and the case under Dr. Stewart is at present in Founder Ward. The suprarenal disease in this patient is, I scarcely doubt, associated with caries of one or more vertebræ, which is by no means an unusual complication of Addison's disease; but the case is none the less, in its history and progress, a typical example of that disease; and the discoloration of skin is perhaps the most characteristic of any which has come under my observation. Partly on this account, and partly also because you have still the opportunity of verifying my statements, I proceed, with Dr. Stewart's permission, to read you an abstract of the notes I have taken of the case.

C. S., aged 32, was admitted an in-patient on the 13th of February. In early life, he worked as an agricultural labourer in his native county of Herefordshire, but for the last thirteen years had been employed as a coal-porter at a London wharf. About three years previously to the commencement of his

illness, he had strained his back severely in the lower dorsal region while shunting a loaded coal-truck, and had felt as if something gave way at the moment of the accident. For some days he suffered much pain in the part, and more or less ever afterwards, though he was able to continue his work. He did not himself attribute the origin of his illness to this injury, and, indeed, attached so little importance to it, that I only elicited the fact by careful inquiry. He stated his health to have been uniformly good until about eight or nine months before his admission to the hospital, when his illness began with headache, sweating and debility, followed by loss of appetite, sickness and breathlessness on exertion, with pain in the lumbar region and right flank. The symptoms of asthenia steadily increased; faintness was superadded to breathlessness on making any muscular effort; and he had been incapacitated from labour for about two months before he came under our observation a month ago. The gastric disturbance also continued; he had nausea, and retching at other times, as well as vomiting after food; the pains in the loins increased in severity, and became associated with gastralgia and with pains in both hypochondria; and these symptoms were all much aggravated by any attempt to move about. Three or four months after the accession of the first constitutional symptoms, his wife had noticed a slight duskiness of colour, which she believed was at first confined to the face and hands, but which gradually spread over the whole body, and progressively deepened in hue.

On careful examination a few days after his admission, I found the skin generally of an olive-brown colour, which was especially marked on the face, hands, and neck; the shade being deepest on the more exposed parts, and least dark on that part of the forehead covered by the hair. The chest, down to the fourth rib, was paler than the face and neck; but the nipples and areolæ were very dark. From the fourth rib downwards, the colour gradually deepened; the abdomen was very dark; the groins still more so; and the penis and scrotum almost black. The upper parts of the thighs were also dark, but the colour faded away towards the legs, which were very lightly tinted. On the right flank, and also over the lumbar vertebræ, were well-defined oval patches darker than the surrounding skin, corresponding with the sites of blisters which had been applied some months previously for the relief of pain in those parts. The knuckles likewise were more deeply coloured than the rest of the hands. But for the thoroughly English cast of the man's features, the peculiar tinge of the discoloration might have easily caused him to be mistaken for a person belonging to one of the darker races of mankind. The white pearly hue of the conjunctivæ contrasted strongly with the dusky complexion; and this is a peculiarity which has been remarked by all those who have carefully observed genuine cases of this disease. Upon the face were several small black specks, which might have passed for congenital marks, had not the patient's wife assured me that they had appeared since the commencement of his

illness—a statement corroborated by the fact that they have manifestly darkened and increased in size, if not in number, since he came under observation. Lastly, there was a dark stain upon the right edge of the tongue, near the tip; and the lips and buccal mucous membrane generally were mottled with brownish discoloration.

In this description, noted nearly a month ago, I have not found it necessary to make any change; for the only alteration that has occurred is the general deepening of the discoloration characteristic of the later stages of the disease.

The patient has complained more or less, ever since his admission, of pain in the loins and right side, and of occasional pain in one or other hypochondrium, but most frequently in the right. He also complains of difficulty in stretching out his legs when he has been lying for some time on his back, with his feet resting on the bed and his knees raised; and says that this difficulty is caused by a sense of tightness, as though the extension of the legs were restrained by cords situated between the flanks and the groins. He has, moreover, a feeling of weakness in the back, as if it were broken or had a loose joint; and a sense of constriction round the lower part of the abdomen, which seems to start from the weak and painful portion of the spine. He rarely now attempts to leave his bed; but, when he does so, suffers from vertigo, with dimness of sight and sickness, accompanied by such extreme prostration, that he is afraid of falling; and, when he sits down in a chair, can scarcely rise again. He has an anxious, exhausted expression of countenance, which is increased by sitting up in bed; is breathless on the slightest exertion, with a tendency to yawn, especially at nights; has frequent retchings, and rarely passes a day without vomiting. His appetite is bad; bowels confined, the faces being dark coloured and dry; urine normal. The pupils of his eyes are large, and act sluggishly under the stimulus of light. He is slightly deaf; but his intelligence is unimpaired. He sleeps badly, owing to the pain in the loins, which he says is more intense by night than by day. There is frequently uneasiness on pressure over the epigastrium and one or other hypochondrium, and always great tenderness on pressure, and severe pain on percussion, over several of the lower dorsal and upper lumbar vertebræ; but he has neither difficulty in micturition, nor yet pain, numbness, nor formication in the lower limbs. The pulse varies from 80 to 100, is exceedingly feeble even when the patient is in a recumbent posture, and becomes almost imperceptible when he is raised up in bed. The percussion-resonance over the anterior and upper part of the chest is slightly deficient; and the respiration is tubular below the right clavicle, and harsh below the left. There is also increased vocal vibration on the right side. The percussion resonance is somewhat deficient over the base of the right lung posteriorly, and the respiration is somewhat harsh over the back of both lungs; but there are no moist sounds. The patient has slight cough, and is subject to catarrh. The heart's impulse, though feeble, is comparatively stronger than the arterial pulse; and the sounds are healthy.

The history and progress of this case render it, as I have said, a typical example of Addison's disease; for although it is true that, besides the vertebral complication to which I have already alluded, there exists apparently some slight inactive pulmonary affection, I need not tell you that neither of these would account for the peculiar constitutional symptoms and discoloration of skin which I have de-

scribed, and which present in an unusually striking and fully developed form all the features recognised as belonging to this remarkable malady.

As regards the assumed vertebral disease, I am led to diagnose it both by the local pain and tenderness in the lumbar vertebræ, and also by the sense of constriction round the abdomen, and the difficulty in stretching out the legs. Lumbar pain, and obscure pain on percussion over the loins, are indeed common in this disease; but here the pain is more severe and better defined than in simple cases of Addison's disease, and is accompanied by the other symptoms which I have described, and which are by no means usual features. I have no doubt that the injury to the back, received now nearly four years ago, produced some mischief, which set up slowly progressive inflammation, with, as I have said, probably caries of the bone and the formation of an abscess; and, if we should hereafter have the opportunity of examining the state of these parts, I expect that we shall find the cellular tissue around the suprarenal capsules thickened, and the capsules themselves infiltrated with tubercular or scrofulous-looking deposit. The time that has elapsed since the injury is indeed considerable, but by no means unparalleled; and I may mention that, in a case of this disease under my own care some years ago, the illness appeared also to have originated from a strain in the back received seven years before the commencement of definite symptoms of Addison's disease. That there is an intimate relation between the vertebral and suprarenal disease in our present case, I am well assured; and I believe the latter to have been caused by the extension of inflammation from the cellular tissue in the vicinity of the carious bone to that surrounding the capsules, and from it, secondarily, to the capsules themselves, which have thus become the seats of inflammatory deposit. My opinion respecting the origin of the suprarenal disease in this case is confirmed by a careful perusal of all the published cases I have been able to meet with; for not only has caries of the spine been found associated with Addison's disease in more cases than any other lesion, excepting always tubercle in the lungs and other organs, but in many other cases in which it was not found I am persuaded, by the symptoms recorded during life, that disease of vertebræ might have been discovered, had it been sought for at the *post mortem* examinations. Moreover, even when no disease of the spine exists, the capsules are often found adherent to adjoining organs, and surrounded by thickened cellular tissue, shewing that inflammation has probably been the primary link in the chain of local mischief.

The pulmonary affection in this case may be of tubercular character; but, whether or not, it is assuredly much too slight to be of any moment in the illness, and far less could it account for the remarkable prostration and other symptoms under which the man is labouring. Seeing, however, that his occupation has been of a very dusty nature, that he has been subject to catarrh, and that there is certainly no marked difference of percussion-note in the two infraclavicular regions, I incline to believe that the slight chest-symptoms are due rather to continued mechanical irritation arising from the inhalation of dust, than to actual tubercular disease. But on this point I can only speak with some doubt and reserve; for the physical signs are slight, and

the patient's condition such as to preclude a thorough examination, and it is certain that tubercular disease of the lungs has been frequently found associated with Addison's disease in so quiescent a form as to have given rise to no prominent symptoms during life. Moreover, as I have myself explained on many occasions, the pulmonary affection caused by mechanical irritants is apt to develop slow tubercular disease in persons of strumous constitution.* Be this as it may, after eliminating all those symptoms which can be referred to the vertebral and pulmonary complications, there still remain, in an unusually complete degree of development, almost all those especially characteristic of Addison's disease of the suprarenal capsules; and, before proceeding further, it will perhaps be well that I should sum up these under the two heads of Constitutional Symptoms and External Signs; as I have observed them, more or less perfectly developed, in all the genuine cases of the disease which I have had the opportunity of watching.

1. Constitutional Symptoms. These 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 end always 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 semicomatose 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, more rarely vertigo and dimness of sight, and occasionally, near death, a tendency to delirium. Death takes place from asthenia, and sometimes rather suddenly. It is a remarkable fact that, notwithstanding the great debility which is the earliest and most constant symptom of the disease, there is, as a rule, 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. I should not omit to state that the constitutional symptoms which I have described are sometimes masked, or have at least been overlooked, in cases in which Addison's disease existed contemporaneously with some other serious wasting disease, such as phthisis or lumbar abscess; but even in such cases the languor and

prostration have for the most part been out of all proportion to the severity of the more obvious complaint.

II. External Signs. The external signs of Addison's disease are found in the peculiar features of the discoloration of the skin, which when present in a fully developed form is, I need scarcely say, the most striking symptom of the disease; and has indeed, in most cases, been the main ground on which it has hitherto been diagnosed. This discoloration of skin is generally of a dusky or yellowish-brown, but sometimes rather of an olive or greenish-brown hue, and gives to the persons in whom it is well marked the appearance of belonging to one of the darker races of mankind. The shade is not uniform on all parts of the skin; being generally deeper on the face, neck, and hands, and in the axillæ and groins, than over the general surface of the body. The penis and scrotum and the nipples and areolæ are usually the darkest parts, and their discoloration may be regarded as among the diagnostic external signs of Addison's disease, although it is true that they have sometimes been absent in otherwise well marked cases. 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, or, at most, are bordered by a dark ring. Very often also, small, well-defined specks or patches, resembling black freckles, are found upon the face, neck, arms, or trunk; but, so far as I have observed, they appear only 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 whilst the skin is in other places of normal hue, there is rarely or never, excepting when the boundary coincides with that of some former injury, any definite line of demarcation between the discoloured and normal portions of the skin, but the former fade insensibly into the latter. In strongly marked cases, the characteristic discoloration is also frequently found upon the lips in the form of an irregular stain running lengthwise, and upon the buccal mucous membrane and sometimes also upon the gums and tongue, in the form of patches or mottled stains; but the discoloration on the tongue, in the only cases I have seen, has assumed a somewhat purplish instead of the usual brownish hue. These discoloured patches inside the mouth may perhaps, when present, be considered as the most decisive of the external diagnostic signs of Addison's disease; they afford a further analogy between the discoloration which takes place in Addison's disease and the natural colouring of the darker races, several individuals of these races who have come under my observation having presented similar dark stains on these parts. It is, on the other hand, important to remark that the conjunctivæ always retain their normal hue, and in the more deeply discoloured cases their pearly whiteness presents a striking contrast to the dusky hue of the face.

* This lecture was delivered on the 14th of March, and the patient here referred to died on the 28th. In order to complete the case, I may mention that the suprarenal capsules were found in the state anticipated, the disease being evidently furthest advanced in the left capsule. On the left side of the spine, the intervertebral substance had been torn, apparently by violence, from the upper surface of the first lumbar vertebra for about two-thirds of its depth, and in front of the spine, extending from the seventh dorsal to the third lumbar vertebra, was an abscess, containing about two ounces of thick curdy pus. The bodies of the vertebrae involved were denuded and rough. Both lungs were extensively adherent to the walls of the thorax, and the apices presented small masses of obsolete cretaceous tubercle, surrounded by consolidated pulmonary tissue.

MORBID APPETITE. Dr. Pilcher, in the *Lancet*, relates a case of a lunatic lady who was in the habit of eating nails, stones, and crockery. They were retained in the intestines for ten weeks, and subsequently passed *per anum* without having caused much mischief.