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Another difficulty that arose was with the special symbol used by Dr. Addison in the prescriptions. This is not one of the standard Internet characters. A graphic could not have been used, as it would not adapt its size always to match the text.



In its place, a standard letter R was substituted. If this is found to be disturbing, the printed text may be modified by hand.



Yet again, there is another special symbol similar to the figure shown here. This was replaced by a Z. It was in the prescriptions, such as Zss, and once in the body text.

ON THE
**CONSTITUTIONAL AND
LOCAL EFFECTS**
OF
**DISEASE OF THE SUPRA-
RENAL CAPSULES**

ON THE
CONSTITUTIONAL AND LOCAL EFFECTS
OF
DISEASE
OF THE
SUPRA-RENAL CAPSULES.

BY
THOMAS ADDISON, M.D.,
SENIOR PHYSICIAN TO GUY'S HOSPITAL



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1855.

TO
THE RIGHT HONOURABLE LORD HAWKE,
AS A TRIBUTE OF RESPECT,
AND IN GRATEFUL ACKNOWLEDGEMENT OF A LONG, CORDIAL,
AND MOST DISINTERESTED FRIENDSHIP,

THIS LITTLE WORK
IS DEDICATED
BY HIS LORDSHIP'S OBLIGED FRIEND AND HUMBLE SERVANT.

THOMAS ADDISON.

PREFACE.

IF Pathology be to disease what Physiology is to health, it appears reasonable to conclude, that in any given structure or organ, the laws of the former will be as fixed and significant as those of the latter; and that the peculiar characteristics of any structure or organ may be as certainly recognized in the phenomena of disease as in the phenomena of health. When investigating the pathology of the lungs, I was led, by the results of inflammation affecting the lung-tissue, to infer, contrary to general belief, that the lining of the air-cells was not identical and continuous with that of the bronchi; and microscopic investigation has since demonstrated in a very striking manner the correctness of that inference,- an inference, be it observed, drawn entirely from the indications furnished by pathology. Although Pathology therefore, as a branch of medical science, is necessarily founded on Physiology, questions may nevertheless arise regarding the true character of a structure or organ, to which occasionally the pathologist may be able

to return a more satisfactory and decisive reply than the physiologist,- these two branches of medical knowledge being thus found mutually to advance and illustrate each other. Indeed, as regards the functions of individual organs, the mutual aids of these two branches of knowledge are probably much more nearly balanced than many may be disposed to admit; for in estimating them, we are very apt to forget how large an amount of our present physiological knowledge, respecting the functions of these organs, has been the immediate result of casual observations made on the effects of disease. Most of the important organs of the body, however, are so amenable to direct observation and experiment, that in respect to them the modern physician may fairly lay claim to a large preponderance of importance, not only in establishing the solid foundation, but in raising and greatly strengthening the superstructure of a rational pathology. There are still, however, certain organs of the body, the actual functions and influence of which have hitherto entirely eluded the researches and bid defiance to the united efforts of both physiologist and pathologist. Of these not the least remarkable are the "Supra-Renal Capsules,"- the Altra-biliary Capsules of Caspar Bartholinus; and it is as a first and feeble step towards an inquiry into the function of these organs, suggested by Pathology, that I now put forth the following pages

24 New Street, Spring Gardens,
May 21, 1855

T.A.

ON THE
CONSTITUTIONAL AND LOCAL EFFECTS
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DISEASE OF THE SUPRA-RENAL CAPSULES.

IT will hardly be disputed that at the present moment, the functions of the supra-renal capsules, and the influence they exercise in the general economy, are almost or altogether unknown. The large supply of blood which they receive from three separate sources; their numerous nerves, derived immediately from the semilunar ganglia and solar plexus; their early development in the fœtus; their unimpaired integrity to the latest period of life; and their peculiar gland-like structure; all point to the performance of some important office: nevertheless, beyond an ill-defined impression, found on a consideration of their ultimate organization, that, in common with the spleen, thymus and thyroid body, they in some way or other minister to the elaboration of the blood, I am not aware that any modern authority has ventured to assign to them any special function of influence whatever.

To the physiologist and to the scientific anatomist, therefore, they continue to be objects of deep interest, and doubtless both the physiologist and anatomist will be inclined to welcome, and regard with indulgence, the smallest contribution calculated to open out any new source of inquiry respecting them. But if the obscurity, which at present so entirely conceals from us the uses of these organs, justifies the feeblest attempt to add to our scant stock of knowledge, it is not less true, on the other hand, that any one presuming to make such an attempt, ought to take care that he do not, by hasty pretensions, or by partial and prejudiced observation, or by an over-statement of facts, incur the just rebuke of those possessing a sounder and more dispassionate judgement than himself. Under the influence of these considerations I have for a considerable period withheld, and now

venture to publish, the few facts bearing upon the subject that have fallen within my own knowledge; believing as I do now, that these concurring facts, in relation to each other, are not merely casual coincidences, but are such as admit of a fair and logical inference- an inference, that where these concurrent facts are observed, we may pronounce with considerable confidence, the existence of diseased supra-renal capsules.

As a preface to my subject, it may not be altogether without interest or unprofitable, to give a brief narrative of the circumstances and observations by which I have been led to my present convictions.

For a long period I had from time to time met with a very remarkable form of general anæmia, occurring without any discoverable cause whatever; cases in which there had been no previous loss of blood, no exhausting diarrhœa, no chlorosis, no purpura, no renal, splenic, miasmatic, glandular, strumous, or malignant disease. Accordingly, in speaking of this form of anæmia in clinical lecture, I, perhaps with little propriety, applied to it the term "idiopathic," to distinguish it from cases in which there existed more or less evidence of some of the usual causes or concomitants of the anæmic state.

The disease presented in every instance the same general character, pursued a similar course, and, with scarcely a single exception, was followed, after a variable period, by the same fatal result. It occurs in both sexes, generally, but not exclusively, beyond the middle period of life, and so far as I at present know, chiefly in persons of a somewhat large and bulky frame, and with a strongly-marked tendency to the formation of fat. It makes its approach in so slow and insidious a manner, that the patient can hardly fix a date to his earliest feeling of that languor, which is shortly to become so extreme. The countenance gets pale, the whites of the eyes become pearly, the general frame flabby rather than wasted; the pulse perhaps large, but remarkably soft and compressible, and occasionally with a slight jerk, especially under the slightest excitement; there is an increasing indisposition to exertion, with an uncomfortable feeling of faintness or breathlessness on attempting it; the heart is readily made to palpitate; the whole surface of the body presents a blanched, smooth and waxy appearance; the lips,

gums and tongue seem bloodless; the flabbiness of the solids increases; the appetite fails; extreme languor and faintness supervene, breathlessness and palpitations being produced by the most trifling exertion or emotion; some slight œdema is probably perceived about the ankles; the debility becomes extreme, the patient can no longer rise from his bed, the mind occasionally wanders, he falls into a prostrate and half-torpid state, and at length expires: nevertheless, to the very last, and after a sickness of perhaps several months' duration, the bulkiness of the general frame and the amount of obesity often present a most striking contrast to the failure and exhaustion observable in every other respect.

With, perhaps, a single exception, the disease, in my own experience, resisted all remedial efforts, and sooner or later terminated fatally. On examining the bodies of such patients after death, I have failed to discover any organic lesion that could properly or reasonably be assigned as an adequate cause of such serious consequences; nevertheless, from the disease having uniformly occurred in fat people, I was naturally led to entertain a suspicion that some form of fatty degeneration might have a share at least in its production; and I may observe, that in the case last examined, the heart had undergone such a change, and that a portion of the semilunar ganglion and solar plexus, on being subjected to microscopic examination, was pronounced by Mr. Quekett to have passed into a corresponding condition. Whether any, or all, of these morbid changes are essentially concerned, as I believe they are, in giving rise to this very remarkable disease, future observations will probably decide.

The cases having occurred prior to the publication of Dr. Bennett's interesting essay on "Leucocythæmia," it was not determined by microscopic examination whether there did, or did not, exist an excess of white corpuscles in the blood of such patients.

It was whilst seeking in vain to throw some additional light upon this form of anæmia, that I stumbled upon the curious facts, which it is my more immediate object now to make known to the Profession; and

however unimportant or unsatisfactory they may at first sight appear, I cannot but indulge the hope, that by attracting the attention and enlisting the cooperation of the Profession at large, they may lead to the subject being properly examined and sifted, and the enquiry so extended, as to suggest, at least, some interesting physiological speculations, if not still more important practical indications.

The leading and characteristic features of the morbid state to which I would direct attention, are, 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, occurring in connexion with a diseased condition of the "supra-renal capsules."

As has been observed in other forms of anæmic disease, this singular disorder usually commences in such a manner, that the individual has considerable difficulty in assigning the number of weeks or even months that have elapsed since he first experienced indications of failing health and strength; the rapidity, however, with which the morbid change takes place, varies in different instances. In some cases the rapidity is very great, a few weeks proving sufficient to break up the powers of the constitution, or even to destroy life; the result, I believe, being determined by the extent, and by the more or less speedy development, of the organic lesion. The patient, in most of the cases I have seen, has been observed gradually to fall off in general health; he becomes languid and weak, indisposed to either bodily or mental exertion; the appetite is impaired or entirely lost; the whites of the eyes become pearly; the pulse small and feeble, or perhaps somewhat large, but excessively soft and compressible; the body wastes, without, however, presenting the dry and shrivelled skin, and extreme emaciation, usually attendant on protracted malignant disease; slight pain or uneasiness is from time to time referred to the region of the stomach, and there is occasionally actual vomiting, which in one instance was both urgent and distressing; and it is by no means uncommon for the patient to manifest indications of disturbed cerebral circulation. Notwithstanding these unequivocal signs of feeble circulation, anæmia, and general prostration, neither the most diligent

inquiry, nor the most careful physical examination, tends to throw the slightest gleam of light upon the precise nature of the patient's malady; nor do we succeed in fixing upon any special lesion as the cause of this gradual and extraordinary constitutional change. We may indeed suspect some malignant or strumous disease; we may be led to inquire into the condition of the so-called blood-making organs; but we discover no proof of organic change anywhere,- no enlargement of spleen, thyroid, thymus or lymphatic glands,- no evidence of renal disease, of purpura, of previous exhausting diarrhoea, or ague, or any long-continued exposure to miasmatic influences: but with a more or less manifestation of the symptoms already enumerated, we discover a most remarkable, and, so far as I know, characteristic discoloration taking place in the skin,- sufficiently marked indeed as generally to have attracted the attention of the patient himself, or of the patient's friends. This discoloration pervades the whole surface of the body, but is commonly most strongly manifested on the face, neck, superior extremities, penis and scrotum, and in the flexure of the axillæ and around the navel. It may be said to present a dingy or smoky appearance, or various tints or shades of deep amber or chestnut-brown; and in one instant the skin was so universally and so deeply darkened, that, but for his features, the patient might have been mistaken for a mulatto.

In some cases this discoloration occurs in patches, or perhaps rather certain parts are so much darker than others, as to impart to the surface a mottled or somewhat checkered appearance; and in one instance there were, in the midst of this dark mottling, certain insular portions of the integument presenting a blanched or morbidly white appearance, either in consequence of these portions having remained altogether unaffected by the disease, and thereby contrasting strongly with the surrounding skin, or, as I believe, from an actual defect of colouring matter in these parts. Indeed, as will appear in the subsequent cases, this irregular distribution of pigment-cells is by no means limited to the integument, but is occasionally also made manifest on some of the internal structures. We have seen it in the form of small black spots, beneath the

peritoneum of the mesentery and omentum- a form which in one instance presented itself on the skin of the abdomen.

This singular discoloration usually increases with the advance of the disease; the anæmia, languor, failure of appetite, and feebleness of the heart, become aggravated; a darkish streak usually appears upon the commissure of the lips; the body wastes, but without the extreme emaciation and dry harsh condition of the surface so commonly observed in ordinary malignant diseases; the pulse becomes smaller and weaker, and without any special complaint of pain or uneasiness, the patient at length gradually sinks and expires. In one case, which may be said to have been acute in its development as well as rapid in its course, and in which both capsules were found universally diseased after death, the mottled or checkered discoloration was very manifest, the anæmic condition strongly marked, and the sickness and vomiting urgent; but the pulse, instead of being small and feeble as usual, was large, soft, extremely compressible, and jerking on the slightest exertion or emotion, and the patient speedily died.

My experience, though necessarily limited, leads to a belief that the disease is by no means of very rare occurrence, and that were we better acquainted with its symptoms and progress, we should probably succeed in detecting many cases, which, in the present state of our knowledge, may be entirely overlooked or misunderstood; and, I think, I may with confidence affirm, that although partial disease of the capsules may give rise to symptoms, and to a condition of the general system, extremely equivocal and inconclusive, yet that a more extensive lesion will be found to produce a state, which may not only create a suspicion, but be pronounced with some confidence to arise from the lesion in question. When the lesion is acute and rapid, I believe the anæmia, prostration, and peculiar condition of the skin will present a corresponding character, and that whether acute or chronic, provided the lesion involve the entire structure of both organs, death will inevitably be the consequence.

If this statement is correct, and I quite believe it to be so, the chief difficulty that remains to be surmounted by further experience in this, I fear, irremediable disease, is a correct and certain diagnosis;- how we may at the earliest possible period detect the existence of this form of anæmia, and how it is to be distinguished from other forms of anæmic disorder. As I have already observed, the great distinctive mark of this form of anæmia is the singular dingy or dark discoloration of the skin; nevertheless at a very early period of the disorder, and when the capsules are less extensively diseased, the discoloration may, doubtless, be so slight and equivocal as to render the source of the anæmic condition uncertain. Our doubts, in such cases, will have reference chiefly to the sallow anæmic conditions resulting from miasmatic poisoning or malignant visceral disease; but a searching inquiry into the history of the case, and a careful examination of the several parts or organs usually involved in anæmic disease, will furnish a considerable amount of at least negative evidence; and when we fail to discover any of the other well-known sources of that condition, when the attendant symptoms resemble those enumerated as accompanying disease of the capsules, and when to all of this is superadded a dark, dingy or smoky-looking discoloration of the integument, we shall be justified at least in entertaining a strong suspicion in some instances,- a suspicion almost amounting to certainty in others. It must, however, be observed, that every tinge of yellow, or mere sallowness, throws a still greater doubt over the true nature of the case, and that the more decidedly the discoloration partakes of the character described, the stronger ought to be our impression as to the capsular origin of the disorder.

The morbid appearances discovered after death will be described with the cases in which they occurred; but I may remark that a recent dissection (March 1855) has shown that even malignant disease may exist in both capsules, without giving rise to any marked discoloration of the skin; but, in the case alluded to, the deposit in each capsule was exceedingly minute, and could not have seriously interfered with the functions of the organs: extensive and fatal malignant disease had, however, affected other parts. It may be observed in conclusion, that on subjecting the blood of a patient, who recently died from a well-marked

attack of this singular disease, to microscopic examination, a considerable excess of white corpuscles was found to be present.

CASE I.*- Reported by Mr. Thomas Fuller.

James Wootten, æt. 32, admitted into Guy's Hospital, under Dr. Golding Bird, Feb 6, 1850, has been residing at Long Alley, Moorfields, and is by occupation a baker. States that he was attacked with a cough three years since, which he was unable to get rid of by ordinary remedies, and was finally cured at St. Bartholomew's, after taking pills for one week. From this time, his skin, previously white, began to assume a darker hue, which has been gradually increasing. Twelve months after leaving the above hospital he was laid up from excessive weakness, the result of his cough, which had again appeared, and incapacitated him for his work. He now became an out-patient at St. Thomas's, under Dr. Goolden, who cured his cough, and thinking that the colour of his skin depended on jaundice, treated him for that disease, but to no purpose. He left the hospital in tolerable health, but subsequently lost flesh, and became so excessively weak, the colour of his skin at the same time getting rapidly darker, that he applied for admission here, which was granted him.

Present Appearances.- The whole of the skin of his body is now a dark hue, and he has just the appearance of having descended from coloured parents, which he assures me is not the case, nor have any of his family for generations, that he can answer for, manifested this peculiarity. The colour of the skin does not at all resemble that produced by the absorption of the nitrate of silver, but has more the appearance of the choroid of the eye; it seems to have affected some parts of his body more than others, the scrotum and penis being the darkest, the soles of the feet and palms of the hands the lightest; the cheeks are a little sunken, the nose is pointed, the conjunctivæ are of a pearly white-

* The cases generally are given in the language and style of their respective reporters.

ness; the voice is puny and puerile, the patient speaking with a kind of indescribable whine, and his whole demeanour is childish. He complains of a sense of soreness in the chest about the scrobiculus cordis. The chest is well-formed and perfectly resonant; the sounds of the heart are also healthy; there is some slight fullness in the region of the stomach. The urine is of a proper colour, and he has passed in twelve hours one and a half pint, which has a specific gravity 1008, an acid reaction, and contains neither albumen nor sugar; there is also some pain on pressure in the left lumbar region.

Feb 8.- Dr. Bird wished a likeness to be taken, so as to be able to watch any alterations in his colour; and considering the case one of anæmia, ordered Syr. Ferri Iodidi ʒj ter die; and middle diet. These he took the whole of the time that he was in the hospital, and was discharged in April, rather stronger, but the colour remained precisely the same.

Shortly after his discharge from the hospital, he was seized with acute pericarditis and pulmonic inflammation, under which he speedily sank and died.

The following is a report of the post-mortem examination:-

Lungs universally adherent, the adhesions being very old. The upper lobe of the right lung contained some small defined patches of recent pneumonia, about the size of a crown-piece, surrounded by tolerably healthy structure. The lower lobe was extremely fleshy and without air. The left lung was bound down by old pleuritic adhesions, which were very tough and difficult to be torn through. The substance of this lung was fleshy, and contained but little air. There was no tubercle or cavity. The mucous membrane of the bronchial tubes was considerably injected, and, I believe, rather thickened. The pericardium was distended with fluid of a deep brown colour, amounting to about half-a-pint; recent lymph was effused over the whole serous surface. The liver and spleen were both of weak texture, and easily broken down; the structure of the liver rather coarse. The gall-ducts pervious. The gall-bladder contained the usual quantity of bile, which was thin, watery and

clear. The thoracic duct was pervious throughout; and there was no obstruction to any of the veins or arteries that I could discover. The colour of the blood in the arteries had an unusually dark appearance. The kidneys were quite healthy and of full size. The supra-renal capsules were diseased on both sides, the left about the size of a hen's egg, with the head of the pancreas firmly tied down to it by adhesions. Both capsules were as hard as stones. Intestines pale. Lumbar glands natural. No tubercular deposit was discovered in any organ. The head was not examined. (Vide Pl. 1)

In some of the cases about to be given, the capsules merely participated in disease affecting other organs, either of a strumous or malignant character, and it might consequently be doubtful whether the peculiar symptoms depended upon such complications, or upon the special disease of the capsules.

In the above instance, however, no such doubt could reasonably be entertained, inasmuch as there was found no abnormal condition whatever of any organ, to which these peculiar symptoms could by any means be attributed. The slow and gradual inroads of the disease, and the remarkable excess of pigment, were sufficiently accounted for by the universality of the change that had taken place in the structure of both capsules; at least such would be the legitimate conclusion to be drawn from a comparison of the present with other cases about to be related.

CASE II.

James Jackson, æt. 35. The subject of this case was admitted into the Clinical ward, under my own care, November 11, 1851, and died December 7, 1851. For the particulars of its history and result, I am indebted to my former pupil and present distinguished colleague, Dr. Gull, who was the first to suspect the true nature of the malady during the life of the patient.

A married man, residing at Gravesend, and occupied as a tide-waiter in the Customs. Of a bilious temperament, dark hair and sallow complexion, which since his illness has much deepened, so that now it is of a dark olive-brown. His wife says, "The obvious change in his complexion has been from the beginning of the illness, and gradually came on at that time."

There can be no doubt as to this change in the complexion depending upon increase of pigment, for if the lips be turned down, the mucous membrane is seen to be mottled by a deposit of pigment, and a closer examination shows that the dark colour of the lips, which at first had the appearance of sordes, is dependent upon the presence of a black pigment, which is not moveable by moistening or washing the lips. There is an expression of anxiety in the face, and the brow is contracted. He gives the following history of himself:-

His occupation subjects him to much anxiety; he is exposed to all the vicissitudes of the weather, both night and day, and sometimes his food for weeks together consists of salt provisions. Eight years ago he had rheumatism, accompanied with great nervous depression; since that time he has enjoyed general good health, and with the exception of some attacks of bilious vomiting. His present illness came on six months ago with headache, vomiting and constipation. About the sixth day of his illness he became delirious, and was insensible for twenty-four hours. On recovering consciousness, he was unable to move the fingers of either hand, nor could he move the legs below the knees; the

same parts were numb, as was also the tip of the tongue. He continued weak during the whole summer.

Two months ago he resumed his occupation, and remained at it until ten days back, when the old symptoms of headache, vomiting and constipation returned. Dr. McWilliam saw him at this time, and found his symptoms to have an intermittent character, and regarded the case as one of miasmatic poisoning, not only from his general symptoms, but also from the dark poisoned look of his face, not altogether unlike that presented on the approach of the asphyxic stage of cholera.

On his admission into the hospital, the pulse was extremely small and feeble, the expression of the face pinched, the brows knitted. He vomited mucus containing altered blood of a dark brown colour; tongue clean; epigastric region full, especially towards the left side, where he has had some twitching pain and slight tenderness on pressure. Urine natural in colour and quantity, of a light brown colour, not coagulable by heat. He went on, day by day, with but slight symptoms of change. Skin cool; pulse moderate in frequency, but extremely feeble, so as scarcely to be felt at the wrist. On several occasions the depression was so great as to require the exhibition of decided stimulants. There was a continued tendency to sickness. The abdomen soft, with marked aortic pulsation. Bowels constipated; chest everywhere resonant; heart's sounds normal; extent of dullness on percussion not increased. Slight traces of intermittency in the symptoms; the surface in the evening being cool, or even cold, and the following morning warm, as if from reaction.

Probable diagnosis.- The epigastric tenderness and pulsation, with frequent vomiting, and the ejected mucus and altered blood, point to an inflammatory condition of the gastric mucous membrane. But what condition of system is it which favours the production of black pigment? Is it some affection of the liver; or is it, as Dr. Addison supposes, disease of the supra-renal capsules?

SECTIO CADAVERIS.

The lining membrane of the stomach was finely injected into minute puncta and stellæ of a bright red colour, with two or three spots of ecchymosis. The structure of the membrane was thickened and pulpy, and the surface covered with tenacious mucus. In some parts there were irregular superficial abrasions; these appearances of the mucous membrane becoming very distinct by examining it under water by aid of sunlight, and seeming, moreover, unequivocally to demonstrate the existence of a gastritis. The brain, lungs, heart, spleen, liver and kidneys were normal.

The supra-renal capsules contained both of them compact fibrinous concretions, seated in the structure of the organ; superficially examined they were not unlike some forms of strumous tubercle. (Vide Pl. II. and Pl. VIII. figs 4, 5.)

The slow and insidious approach and progress of the constitutional loss of strength, the extreme feebleness of the pulse, the absence of all evidence of any lesion sufficient to account for the patient's declining condition, the loss of appetite, the uneasiness and irritability of the stomach, and the indications of disturbed cerebral circulation, were all so strongly marked, and so exactly corresponded in kind with what have been observed to accompany the most extensive disease of the capsules, that, coupled with the excess of dark pigment in the integument, we did not hesitate to anticipate with much confidence an extensively diseased condition of these organs.

CASE III.- Reported by Mr. Williams.

Henry Patten, æt. 26, a carpenter and window-blind maker, residing at 13 Brandon Street, Walworth, was admitted Nov. 9, 1854, having been for some time an out-patient under Dr. Rees.

His habits have been somewhat intemperate; his drink chiefly malt liquor and spirits. With the exception of a sister, who died of phthisis, all his relations are healthy. He has been married four years. The patient states that up to six months ago, he enjoyed very good health, but then began to be troubled by what he calls "rheumatic" pains in the right leg, which, without laying him up, gradually extended to his hips and side, and thence to the bottom of the spine. His back latterly has been very tender, a jerk or jarring movement giving him great pain at that part. He has noticed his lips to have become dark-coloured for the last three months, and more lately his face to be similarly discoloured in patches. For the last month he has discontinued work on account of attacks of giddiness and dimness of sight, accompanied by a peculiar pain at the back of the head and partial loss of consciousness. These attacks would occur several times in the course of the day, upon any unusual exertion, always whilst in the standing posture, and were instantly relieved by sitting or lying down. Since he has discontinued his employment, they have only occurred on getting out of bed in the morning.

It is for the pains and tenderness at the back, and occasional attacks, as above described, with general debility, that he has been attending this hospital as an out-patient.

Present condition.- The patient presents a highly strumous appearance, being thin, pale, and the hair dark and dry. Over the face and forehead, which are of a general yellowish hue, are several patches of darkened skin, and similar black patches on the lips. There is angular curvature at the second, and great tenderness on pressure over the upper three lumbar vertebræ; he complains also of pain at this part upon moving in bed. There is no paralysis, but considerable general debility. His bowels are regular, and tongue clean, but the appetite is impaired; the urine is

clear, moderate in quantity, and not albuminous. Heart-sounds normal, but the impulse feeble. Pulse 80, small and weak.
Nov. 10th. R

Quinæ Disulph. gr. iss.
Aquæ distill. ʒj.
Syr. Rhædos ʒss.
Acid. Suph. dil. m. v.

Ft. Haustus ter die s.-Vin. Alb. ziv.

With these medicines and middle diet he continued with no appreciable change until the 24th, when he had a kind of fainting fit upon rising to have his bed made, contrary to an order that he should keep in the recumbent posture. This day his diet was changed to milk, at his own request. He has been once or twice sick after taking his food.

28th.- The sickness has continued, and he today has a troublesome hiccough, for which he was ordered

Jul. Ammon. p. r. n.

29th.- He has had little sleep, the hiccough, unrelieved by Julep. Ammon., annoying him much. Dr. Barlow, who now took the ward, ordered him

.Æther. Chlor. m. v.
Vini Opii m. v.
ex Mist. Camph. t. d. s.

30th.- He is today about the same. Has been sick this morning, the vomited matter consisting of food and drink. The hiccough occasionally ceasing.

Dec. 1st.- Hiccough still very harassing.

R

Vini Opii m. x.

Tinct. Castorei m. x.

ex Julep. Pimentæ p. r. n

This was found to relieve the hiccough somewhat.

2nd.- He seems considerably weaker, and upon approaching him, his eyelids, half-closed, allowed the lower sclerotic of the raised eyeballs to be seen. The tongue was moist and clean, and pulse 80, very weak. On speaking to him he roused up and appeared quite as usual, but soon relapsed to the torpid state again. His blood under the 1/4-inch object-glass presented from forty to sixty white corpuscles in each field, mostly scattered about, but with some patches of two or three and six or eight together.

3rd.- Slept better, although the hiccough did not cease. He complains of a constricting pain about the waist; he is tender on pressure over the spleen, where no tumour is to be felt. The tongue today is dry, and beginning to be sordid, teeth dirty, pulse weak. He presents the same typhoid appearances.

4th.- Pulse weaker, dicrotic, 96; roused from the torpid state with more difficulty than yesterday. He talks very sensibly, but his wife, who watches by his bedside, states that he wanders in the night.

Jul. Ammon. c. Tinct. Castorei m. v. p. r. n.

The blood presents the same appearances under the microscope as before.

5th.- Hiccough continues, is more feeble, pulse scarcely perceptible, lies in a torpid and typhoid state. When roused, said he was sore all over the body. Tongue and teeth sordid.

6th.- Died quietly at 5 A.M.

SECTIO CADAVERIS.

Nine and a half hours after death in cold wet weather. Rigor Mortis, but no decomposition. There was not much emaciation, and the axillæ were slightly discoloured. The countenance was paler than in life, but presented the same olive hue, with the dark patches on the face, forehead and lips. There was a psoas abscess on the right side, extending from Poupart's ligament to the diseased vertebræ, and holding about a pint of flaky pus.

The disease was between the first and second vertebræ, commencing in the cartilage, and nearly destroying the neighbouring vertebræ at their centres. The bone surrounding the cavity was red, soft, and infiltrated with strumous matter.

Pleura and bronchi healthy.

Both lungs contained hard masses of grey strumous pneumonic deposit, mostly in the apices, but also in the lower lobes; these masses presented the appearance of a conglomeration of tubercles, held together by inflammatory matter. Heart and pericardium healthy. Heart's weight 7 1/2 oz. The blood on microscopic examination contained the same excess of white corpuscles observed in life. Stomach healthy, slightly adherent to the left supra-renal capsule; its structure was not affected. Spleen large, firm, 7 1/2 oz. in weight. Corpuscles visible. The pancreas and all other abdominal organs were healthy. The head was not examined.

Each supra-renal capsule was completely destroyed and converted into a mass of strumous disease, the latter of all degrees of consistency. The left supra-renal capsule had formed at the upper part a close connexion with the outer coat of the stomach. The upper part of this capsule seemed fluid, and of the colour of pus; the lower firmer; and of the consistency of putty. The right capsule had all degrees of consistency from the bottom to the top; the lower part almost fluid and resembling pus, the centre putty-like, and above this the matter could be detached in flakes; and at the top it was quite earthy, separate angular pieces being easily detached. Vide Plates III. and IV.

Although this patient was known to be labouring under a serious affection of the spine, the ordinary indications of disease of the supra-renal capsules were sufficiently prominent to justify the prediction, which was so satisfactorily confirmed by the post-mortem examination. It is also worthy of remark, that although the patient, as usual, suffered considerably from irritability of the stomach, there was but little change observable in that organ after death.

CASE IV.- Reported by the Ward Clerk.

John Iveson, æt. 22, admitted into Guy's Hospital, March 20, 1854, and died the following day. A stonemason, residing as Lambeth. Last winter he had pain in the stomach and vomiting. He slightly improved, but the day after Christmas was confined to his bed with great pain and vomiting; the vomited matter consisting of a watery fluid. At the time he had "tic douloureux." On admission his extremities were cold, he was almost pulseless, his hands were blue; he had not had any diarrhœa; he had slight pain, or rather soreness in the hypogastric region; he was quite sensible; the pupils were much dilated. He rallied a little after his admission; had no purging, but vomited bilious matter; had no diabetes or albumenuria. He appeared to die from syncope.

SECTIO CADAVERIS

Seventeen hours after death, weather cold, limbs rigid, body tolerably nourished, face of a dingy colour, also the axillæ and hands. Abdomen not distended.

Head.- The dura mater and sinuses were found to be healthy, the membranes injected and the veins full. There was slight subarachnoid effusion. The grey matter of the cerebrum was rather deep in colour. The brain was in other respects normal.

Chest.- Trachea granular and congested. The right pleura adherent at the posterior and lower parts; on the left side there were firm adhesions at the apex. The bronchi granular; the left apex was a little puckered, and presented several lobules, with iron-grey consolidation and calcareous deposit. The right lung was healthy, with the exception of a single iron-grey consolidation at the apex. The bronchial and mediastinal glands were healthy.

Heart.- Pericardium healthy. There was a white patch on the right ventricle. The right side of the heart was moderately distended with clot, the left entirely and firmly contracted. The valves were healthy,

and the muscular fibre, though flaccid, appeared healthy. No fat was found about the heart. Weight 7 oz.

Abdomen.- Peritoneum healthy, viscera moderately contracted. Stomach not distended; at the cardiac extremity there was post-mortem solution of the mucous membrane: towards the lesser curvature it was granular, in some parts destroyed, ulcerated; quite superficially there was arborescent injection. On microscopic examination, mucous and granule-cells were observed. Brunner's glands were very prominent. Ileum with much mucus congestion. Peyer's and solitary glands very distinct, but only hypertrophied. The mesenteric glands were enlarged, firm and white, full of nuclei, hypertrophied.

Large intestines were healthy.

Liver was of normal form and condition; there was a small amount of fat in the cells; weight 2 lbs. 14 oz., containing no arsenic. Gall-bladder healthy; ducts free, but not enlarged. Spleen enlarged, weight 6 oz. Pancreas was healthy.

The two supra-renal capsules together weighed 49 grains; they appeared exceedingly small and atrophied; the right one was natural, firm; the left deformed by contraction; each adherent to surrounding parts by dense areolar tissue. The section gave a pale and homogeneous aspect; it presented a fibrous tissue, fat and cells about the size of white blood-corpuscles. The lumbar glands were enlarged. The kidneys coarse, weighing 10 oz. The bladder and prostate were healthy. Vide Plate V.

The history of this man's case renders it probable that his disease commenced several months prior to his admission into the hospital, and it is not a little remarkable that his earliest complaint was of sickness,

vomiting and pain in the region of the stomach; symptoms which have constituted a more or less prominent feature in every case that has fallen under my notice, and which in the present instance were so urgent as to suggest a suspicion of some acrid poison having been received into the stomach.

How far these gastric symptoms when present are referrible to sympathy existing between the diseased capsules and the stomach- how far they depend upon disturbed circulation within the head- how far they are attributable to accidental or essential gastric inflammation- and how far the inflammatory aspect of the gastric mucous membrane is the mere result of severe and repeated vomiting, a more extended observation will probably determine hereafter. It was from the presence of these gastric symptoms, the extreme and peculiar prostration of the patient's strength, the great feebleness and smallness of the pulse, the anæmiated eye, the absence of any discoverable lesion to account for the patient's condition, and more especially the dingy discoloration of the face, that led before death to a belief that we should on post-mortem examination find disease of the supra-renal capsules.

It is, moreover, of some significance and importance to observe, that in the present instance, the diseased condition of the supra-renal capsules did not result as usual from a deposit either of a strumous or malignant character, but appears rather to have been occasioned by an actual inflammation,- that inflammation having destroyed the integrity of the organs, and finally led to their contraction and atrophy.

CASE V.

The following, taken from Dr. Bright's Reports of medical cases, presents, according to my belief, a very good illustration of the disease under consideration, and is headed: "Serous effusion under the arachnoid and into the ventricles in a case of emaciation, with bilious vomiting and diseased renal capsules."

"*Ann Roots* was admitted in July 1829, under one of the surgeons, into Guy's Hospital, on account of a tumour in the left breast and a swelling of the right parotid; but as it was perceived that she was greatly emaciated and apparently sinking, and therefore quite unfit to undergo any operation, she was transferred to the care of the physician.

"*Her complexion was very dark*, her whole person emaciated; she had no cough, and neither tension nor tenderness of abdomen; she had great difficulty opening her jaw, owing to the glandular swelling, and could not protrude her tongue. There was no indication but to support the strength. Her stomach soon became irritable; she had bilious vomiting, which reduced her strength, and for a day or two before her death, which took place on the 18th of August, she became drowsy, yet capable of being roused; complaining of some pain over the forehead, and occasionally wandering a little in her intellects.

"In the absence of all positive symptoms, I concluded that it was possible some glandular disease, similar to that which had shown itself below the mammæ and under the jaw, might exist internally, giving rise to emaciation and vomiting; and it appeared probable that serous effusion had been going on in the head for the last few days.

"SECTIO CADAVERIS.

"Considerable emaciation; and on removing the integument the scalpel opened into an abscess, containing an ounce or two of pus, situated beneath the mamma of the left side. The dura mater was firmly attached to the skull at the vertex, where the bone was remarkably thin, and indented by the glandulæ Pacchioni, and the ordinary opaque deposit which surrounds them; on raising the dura mater several small opacities were observable on the arachnoid, and a very considerable quantity of serous fluid was effused under the arachnoid, raising it into bladders, as well as filling up the hollow between the convolutions.

"The whole brain was soft and watery, and many vessels showed themselves where horizontal sections were made. In the ventricles about half an ounce of fluid was collected. The choroid plexus was quite exsanguine.

"Slight adhesions of the pleura pulmonalis and pleura costalis were found, but not sufficient to prevent the lungs from collapsing pretty completely when the air was admitted into the chest. The upper lobe of each lung was in an unhealthy state, looking puckered and containing one or two masses of earthy matter, besides several small incipient tubercles; the greater part of the lungs, however, was in a very healthy condition. Heart small, but healthy. In the abdomen slight old adhesions had taken place in various parts, but were composed of the finest transparent cellular tissue; even the omentum, which was glued by them to various parts both of the intestines and the parietes, had lost none of its natural delicacy and transparency. The intestines were healthy, but stained with bile; the mucous membrane healthy; the liver healthy, and the gall-bladder full of bile; the pancreas healthy, and the spleen also, but just between the pancreas and the spleen a few absorbent glands were enlarged. The glands of the mesentery were also slightly enlarged. The only marked disease was in the renal capsules, both of which were enlarged, lobulated, and the seat of morbid deposits apparently of a scrofulous character; they were at least four times their natural thickness,

feeling solid and hard; on the left side one part had gone into suppuration, containing two drachms of yellow pus. The kidneys themselves healthy. The uterus held down by adhesions in the pelvis.”

It does not appear that Dr. Bright either entertained a suspicion of the disease of the capsules before death, or was led at any period to associate the colour of the skin with the diseased condition of these organs, although his well-known sagacity induced him to suggest the probable existence of some internal malignant disease. In this, as in most other cases, we have the same remarkable prostration; the usual gastric symptoms; the same absence of any very obvious and adequate cause of the patient’s actual condition, together with a discoloration of the skin, sufficiently striking to have arrested Dr. Bright’s attention even during the life of the patient.

CASE VI.

R. H., Esq., was a member of the bar, somewhere about middle age. I had the satisfaction of attending him in consultation with Dr. Watson and Mr. Barker, when I was informed that he had been getting thin and emaciated during a period of about twelve months. His appearance and symptoms were very remarkable. He was certainly thin, but not strikingly emaciated, and the surface was soft, loose and supple. He was greatly anæmiated; his eyes were pearly; he complained of extreme languor and faintness; his pulse, contrary to what is usual in capsular disease, was of good size, but exquisitely soft and compressible; the impulse of the heart was feeble, and palpitation or throbbing with scrobicular pulsation was immediately produced by the slightest exertion; without pain, the stomach was exceedingly irritable, and vomiting was both urgent and distressing.

With these symptoms, the surface generally presented a dark dingy aspect, and there were observed, chiefly on the face, neck and arms, patches of a rather deep chestnut-brown colour; these chestnut-brown patches were of various sizes and shapes, and were associated here and there with others presenting a singularly white or blanched appearance, arising either in consequence of the latter portions of the integument having remained unaffected, and so contrasting with the surrounding discoloration, or, what is more probable, from their having received a less supply of pigment than natural. A patient inquiry and most careful examination failed to elicit any information, or to detect any lesion, sufficient to afford even a plausible explanation of the patient’s singular condition. The violent vomiting pointed to organic, perhaps carcinomatous, disease of the stomach; nevertheless the general condition and symptoms did not in other respects seem to warrant such a conclusion; and coupling the existing condition and symptoms with the irregular disposition of dark pigment in the skin, a suspicion was entertained that the whole might arise from disease of the supra-renal capsules. To the last, however, considerable doubt prevailed amongst us as to the true nature of the case,- chiefly in consequence of the severity and persistence of the vomiting; and from the vomited mucous

matters having been occasionally tinged with blood. The patient speedily sank, and the following report of the morbid appearances discovered after death was furnished, I believe, by my distinguished friend Dr. Hodgkin,

“The morbid specimens consisted of part of the stomach and duodenum,- the termination of the small, and the commencement of the large intestines, with the appendix vermiformis, and the renal capsules with a small portion of the kidney. They were taken from a man rather beyond middle life, who for a considerable time had suffered from obstinate derangement of the stomach.

“The coats of the stomach, taken unitedly did not produce any preternatural thickness, but rather the reverse; yet there might be a little thickening or increased development of the mucous membrane. The peculiarity of its appearance consisted in a spotted character not very easily described. Near the pylorus it seemed to consist of a very slight degree of that irregularity which Louis has described as the *état mamelonné*, and which appears to be nothing more than increased development of a natural structure; but in this instance the elevations were smaller in size, and consequently more numerous, though less prominent than those generally seen towards the middle of the stomach, where this appearance is most frequently noticed.

“Further from the pylorus, in the direction of the smaller curvature, smaller spots were seen more scattered and distant from each other, and apparently consisting of opaque lighter-coloured matter, within the semi-transparent substance of the mucous membrane itself, which was generally of a faint dusky reddish colour. It could not be decided whether these spots depended on any glandular apparatus, yet the idea suggested itself that they might be connected with the follicles of Lieberkühn. Immersion under water, with the intention of facilitating the examination with the microscope, rendered these spots less conspicuous. The largest might equal a small pin’s head; the smaller ones scarcely a quarter so large. The duodenum appeared healthy. The portion of small and large intestine, of which the next specimen

consisted, offered nothing remarkable in texture. The mucous membrane was tinged with the dingy olive-green of the faecal contents, and the ileo-colic valve was rather more prominent than usual in the cæcum. The appendix vermiformis was about three inches in length, but much distended, being about an inch in diameter at its commencement, and becoming gradually less towards the free extremity, where it but little exceeded the normal size. Its peritoneal coat was quite healthy; its general thickness was very little increased; its mucous membrane apparently healthy, of greyish colour, from a little black pigment towards the upper part. Its follicular apparatus was nearly or quite imperceptible. It was completely cut off from the interior of the intestine, the mucous membrane forming a cul-de-sac at both extremities, although there was no apparent want of continuity on the exterior; the septum between the two cavities being merely composed of the two mucous membranes united by cellular tissue. No appearance of cicatrix was discovered, indicating that the separation was of long standing, if not congenital. The contents of the appendix consisted principally of a transparent colloid or thick mucoïd secretion, partly of light straw colour, partly tinged with blood. Interspersed through it, but especially towards the upper part, was an opaque white substance of the same consistence, resembling coagulated milk or ground white lead. A few points were blackened by pigments. Examined with the microscope, the transparent portion exhibited no determinate structure, but a slight tendency to filamentous arrangement. The whole portion was made up of a congeries of oil-globules, varying in size, but all very minute. The black pigment appeared to pervade some of the oil-globules, rather than itself to compose distinct corpuscles. The basis of this collection was undoubtedly the mucus of the appendix itself, retained by the want of any excretory passage.

“The small fragment of kidney appeared to be of healthy structure, but both the renal capsules were enlarged, (the united weight of the two being one and a half ounce,) of rather irregular surface and considerably indurated. When cut into, instead of exhibiting the ordinary appearance of combination of dark and yellow substances, they seemed to consist of a firm, slightly transparent reddish basis,

interspersed with irregular spots of opaque yellow matter, the whole bearing a strong resemblance to an enlarged mesenteric gland, mottled with tubercular deposit. Such was probably the nature of the change which the organ had undergone. The naked eye could discover no trace of cystiform arrangement, and the opaque matter when examined with the microscope exhibited a copious amount of fatty matter, but no nucleated cells.”

It was to me a matter of much regret that I had not an opportunity of employing an artist to make an exact representation of the singular discoloration observed upon the skin, and the more so, because, although agreeing in general character with those observed in other cases, there was a manifest peculiarity, as well as in the intensity, as in the mode of distribution of these discolorations. With universal dinginess of the surface, there were, especially about the neck, hands and arms, several well-defined patches of a deeper, or somewhat chestnut-brown hue, interspersed here and there with blanched or almost dead-white portions of integument, contrasting in a very remarkable manner with both the general dinginess and deeper brown patches; and what is very remarkable, wherever the integument presented the blanched or dead-white appearance, the hairs upon its surface were observed to have turned completely white.

The superiority of a coloured drawing over the most elaborate verbal description, in conveying a correct idea of any morbid appearance, is so universally felt and acknowledged, that I have great satisfaction in being now able to furnish one, which may most fairly and faithfully be applied to the above case.

Very recently- March 1855- I was requested to visit a patient (Mr. S.) about 60 years of age, who presented, in a strongly marked degree, the indications of diseased renal capsules. The history, mode of attack, the progress, the anæmia, the extreme feebleness of the heart's action, the uneasiness and irritability of the stomach, and the discoloration of the skin, were all such as characterize the disease generally, and bore the closest resemblance to the above case in particular. My belief was that

the capsules were affected with malignant disease, and that probably some other structures about the posterior mediastinum might have been in a similar condition, as the patient had slight œdema of both the upper extremities, whilst the lower limbs remained free. Anxious as I was to procure a post-mortem examination, it was most firmly and peremptorily refused, and it was only through the kind and persevering efforts of my friend, Mr. Parrott of Clapham, that I succeeded in gaining permission to have a sketch taken of the discoloured integument. Of course this representation does not carry along with it such authority and conviction as one taken from a subject actually proved to have had diseased capsules. Nevertheless I entertain no doubt whatever that the capsules were diseased; and even if they were not, I hold myself answerable for the most perfect resemblance between the two cases, so far as the affection of the integument was concerned. Vide Pl. XI.

CASE VII.

The following case, having been under the care of one of the surgeons for "carcinoma" of the mamma, I have not been able to furnish any record of the symptoms during life. The corpse, however, presented appearances sufficiently striking to arrest the attention, and call forth the correct prediction of Dr. Lloyd the inspector, who kindly furnished me with the following report.

"SECTIO CADAVERIS

"*M. T.*, æt. 60. Cancerous disease of the mamma, with cancerous degeneration of the supra-renal capsules.

"Sixteen hours after death. Body extremely emaciated; the left mamma presented a very extensive ulcerated phagedænic malignant tumour, occupying the whole of the upper part of the left side of the chest, infiltrating the cellular tissue, the skin and intercostal muscles with carcinomatous material. *The colour of the skin covering the face, arms and chest was of a peculiar light brown swarthy hue.*

"*Chest.*- On raising the sternum and cartilages, it was found that the malignant growth had passed through the pleura and invaded the lung on the left side, for a space of the size of the palm of the hand, by direct continuity of structure. The pleural cavity of the side contained about 16 oz. of dark-coloured fluid. The lower lobe of the left lung was compressed, and sank in water. The upper lobe was healthy. The right lung was healthy.

"*Heart.*- was small and flabby.

"*Abdomen.*- The liver was contracted, irregular on its surface, of yellow colour, containing abundance of fat, burning brilliantly in the spirit-lamp; upon its surface were several nodules of cancerous development. The gall-bladder was occupied in its entire extent by a calculus, and did not contain any bile.

"Both supra-renal capsules contained a considerable amount of cancerous deposit, invading their entire structure, and almost obliterating their cavities.

"The kidneys were contracted and granular. The uterus healthy, but atrophied."

I have already expressed my belief that the urgency of the symptoms, and the quick or slow progress of the disease, are determined by the activity or rapidity of the morbid change going on in the capsules, and by the actual amount or degree of that change; and that universal disease of both capsules will in all probability be found to prove uniformly fatal. These views appear to be countenanced by the character, progress and termination of the cases already given, and receive additional confirmation from the history of the following, in which the morbid change was limited to a single capsule, and in which the constitutional and local consequences indicated a corresponding result.

CASE VIII.- Reported by the WARD CLERK.

Elizabeth Hannah Lawrence, æt. 53, admitted into Guy's Hospital under Dr. Babington, March 30, 1853.

Appearance.- A short woman; emaciated and feeble; skin harsh and dry, and of a darkish hue. The folds of the axillæ were remarkably dark: coloured patches, the size of the palm of the hand, were observed, raised in wrinkles, and resembling a slight Ichthyosis. Also a very dark brown areola around the umbilicus. Hair grey; much long hair on lips and chin.

Previous History.- Is a single woman, has always been a servant, and has been living of late in Trinity Street, Borough. Was always thin, but yet always enjoyed good health.

Present History.- Four months ago an eruption appeared on her body, for the cure of which she went to the Cutaneous Infirmary at Blackfriars. In a short time she was cured, and just as the eruption disappeared, the present stomach symptoms began. For three months she has had vomiting, with pain in the abdomen and back, particularly in the latter. She has thrown up no blood. She was sent to the hospital as a case of malignant disease of the stomach. The stomach can be felt as a hard tumour in the abdomen: no remains of eruption on the skin. The vomiting continued after admission, and in three days she died from exhaustion.

SECTIO CADAVERIS

External Appearance.- The body that of a small emaciated woman, with a fair skin and dark hair, presenting certain peculiar discolorations. On either side of the neck there was a tawny appearance, which would not have been remarked, had it not been for three still more marked tawny patches, one on the centre of the sternum, the other two under either axilla. The skin also, besides presenting this yellowish-brown appearance, was somewhat raised and wrinkled or corrugated. These

marks led me to prognosticate disease of the supra-renal capsules before opening the body, believing them to be the marks pointed out by Dr. Addison.

Thorax.- The lungs were congested, exuding a frothy serum, and easily lacerable.

Heart.- Small and lacerable. The mediastinal glands in one or two instances carcinomatous.

Abdomen.- was shrunk and contracted.

Stomach.- The walls of the stomach from the pylorus through the lesser curvature were thickened, presenting on the surface externally a peculiar network appearance, containing a transparent stroma; beneath this, another layer, with its fibres longitudinally arranged, of strong cellular material; within this, the mucous membrane whole and intact; the entire thickness being about three-quarters of an inch at the pylorus, gradually decreasing to a quarter at the commencement of the cardia. The mucous membrane lower down was here and there destroyed by ulceration, and this ulceration in one instance of an eighth of an inch in size. The stomach was contracted and empty; externally to the stomach several of the glands were affected, even to the head of the pancreas, but the pancreas itself was not affected. Several of the lumbar glands were enlarged.

The left supra-renal capsule was infiltrated with malignant material, and closely adherent to the vessels of the kidney. The kidney itself was healthy. The uterus contained three fibrous tumours, the size of walnuts. Vide Pl. VIII. Fig 1, and Pls. IX. and X.

Although this woman only survived four days after her admission into the hospital, we were led by the partial discoloration of the skin to anticipate disease of the capsules, one only of which, however, was found to be implicated. It will have been perceived, that in a certain number of the cases already given, either strumous or malignant disease existed in other parts or organs, as well as in the capsules; and of

course, in the midst of such complications, there is often more or less difficulty in satisfactorily unravelling the case in all its details during life; nevertheless as we know, that without any such complications whatever, mere disease of the capsules themselves has proved sufficient to produce such alarming symptoms and such severe consequences, it cannot with any show of reason be alleged that these peculiar symptoms, when present, arise exclusively from the accidental complication of other organs.

In the present instance, as in some others, the immediate cause of death, as well as of many of the most distressing symptoms during life, was unquestionably carcinomatous disease of the stomach.

CASE IX.

Thomas Clouston, æt. 58, admitted into Guy's Hospital, February 11, 1852, under Dr. Barlow. A muscular and strong-built man, of a sanguine temperament and dark complexion. He has been a married man, but his wife died about twenty years ago. His occupation has been that of a sailor, and according to his own statement, he has led a very sober life. His general health has been very good. About five years since, he had a hernia in the left inguinal region, for which he has since worn a truss. This has never given him any difficulty to return. About two months ago he came from Liverpool, in which place he had settled, not intending to go to sea again; and was taken on board the *Dreadnought* for stricture. His general health was quite good at this time, but while in the *Dreadnought* he began to lose his appetite and to feel generally unwell; he had likewise some affection of the left eye, in which he is now nearly blind.

On Saturday the 8th he left the ship at his own request, thinking that he might be better on land; after waiting two or three days, he found that he got no better, and his friends advised him to come to the hospital.

Present Symptoms.- He complains of a sensation of sickness, without actual vomiting; and tightness over the epigastrium. His countenance is anxious. He has no pain in any part. He has rigors, followed by mild sweats, every five or six hours, the rigors usually lasting about an hour. The abdomen is tense and tympanic; not tender to the touch, excepting over the upper part. The liver does not appear enlarged. His chest is broad and well-formed; the motion of the ribs moderate, resonant on percussion; and the lungs are apparently sound. The heart's sounds are normal. Pulse rather feeble, 80. Tongue injected at the tip and edges, coated with a light brown fur, very dry. Urine of about average quantity, rather large than otherwise; of a high colour, acid, and does not coagulate by heat. The bowels have been regular. After he had been in a few hours, he brought up a large quantity of beer. Ordered
Mist. Efferves. 4tis horis.

Feb. 12.- The sickness has not returned, but he is without any appetite. He slept but little.

Feb. 13.- He is much the same, but has a more sallow and sunken expression of countenance. He complains of nothing but loss of appetite and general debility. His tongue continues dry and coated with a brownish fur. His bowels have been relaxed, and he has passed his motions partly involuntarily.

Feb. 14.- No special change.

Feb. 17.- He seems rather better; he had a little breakfast, and enjoyed it.

Feb. 18.- He has relapsed into his former state, having no appetite and complaining of great debility and thirst. He has *ziv* of sherry daily.

Feb. 20.- There is but little change in him, *his countenance appears to grow darker*, and his strength seems gradually failing. His bowels are rather irritable. Ordered

Enema Amyli c. Syr. Papav. zss.

Inf. Cuspariæ ziss t.d.

Feb. 25.- He has been getting gradually weaker, without showing any special symptoms in addition to those mentioned. He died this morning.

SECTIO CADAVERIS

None was allowed beyond the brain and abdomen; of the former there was considerable softening, and a large amount of subarachnoid fluid. The kidneys were slightly enlarged, mottled, and in some parts the cortical substance was entirely degenerated into fat. A few tubercles were observed on the surface. The tunic was easily taken from the surface. Tubercles were also observed on the spleen, and on the peritoneum covering the termination of the Ileum. Tubercular deposit

was likewise found in one of the supra-renal capsules. Vide Pls. VI. VII.

The development of tubercles on various parts, as well as in one of the supra-renal capsules, sufficiently attests the strumous character of the patient's disease; and it is difficult to divest oneself of the notion that the disease in the supra-renal capsule had some share in producing the peculiar symptoms which immediately preceded the fatal result, whatever importance may be attached to the state of the kidneys and cerebral complication. At all events, the discoloration of the skin indicated before death the existence of capsular disease; and it is worthy of remark, that in this instance the deposition of pigment-cells was not limited to the integument, but was found scattered in small masses over the omentum, the mesentery, and the cellular tissue on the interior of the abdominal pariet

CASE X.

Jane Roff, æt. 28. This person was admitted to the Obstetric Ward, labouring under cancer of the uterus, Feb. 4, 1852. She died Feb. 8, and on the 9th the body was placed on the table for inspection. When proceeding to perform this duty, Dr. Lloyd was struck with the peculiar dingy appearance of the skin, and in consequence, prior to commencing, sought me to look at it. The appearance, though not very strongly marked, was certainly such as to create a strong suspicion that something was wrong with the capsules. On exposing the organ on the right side, it presented a perfectly healthy appearance, and we felt disposed to conclude that our anticipation would turn out to be erroneous. On proceeding to examine the left capsule, however, we were much surprised to find a very extraordinary, and, I suspect, an extremely rare condition of parts. A malignant tumour had developed at that precise point, where the large vein escapes from the organ; this tubercle projected into the interior of the vein, so as almost or entirely to obstruct it, and had moreover led to rupture and effusion into, or a sort of apoplexy of the capsule itself.

This case would render it probable that the excess of dark pigment, so characteristic of renal capsular disease, depended rather upon an interruption to some special function, than upon the nature of the organic change; for, with the exception of the manifestly recent sanguineous effusion into its tissue, the capsule itself did not appear to have undergone any considerable deterioration. Vide Pl. VIII. figs. 2, 3.

CASE XI.

I may observe in conclusion, that very recently there was examined at Guy's Hospital the body of a person- *William Godfrey*- who had died of cancer affecting the thoracic parietes, and extending through to the lungs. Quite unexpectedly there was found extensive disease of one of the supra-renal capsules; the organ being very much enlarged, and converted into a hard mass of apparently carcinomatous disease. On referring to the notes of the case as taken by the clinical clerk, I found it stated that "the patient's face presented a dingy hue," although he was naturally of a fair complexion, with reddish or sandy hair on the pubes; and, moreover, the face of the corpse was ascertained to present a freckled and dingy appearance, with a slight brown discoloration at the root of the nose and at each angle of the lips. Vide Pl. VIII. figs. 6, 7,

EXPLANATION OF THE PLATES

PLATE I.

Head of James Wootten. Both capsules diseased. CASE I.

PLATE II.

Head of James Jackson. Both capsules diseased. CASE II.

PLATE III.

Head of Henry Patten. Both capsules diseased. CASE III.

PLATE IV.

Fig. 1. The liver of Henry Patten, with the diseased supra-renal capsules in situ.

Figs. 2 & 3. Sections of the diseased supra-renal capsules.

PLATE V.

Head and part of the trunk of John Iveson. Both capsules diseased. CASE IV.

PLATE VI.

Head of Thomas Clouston. A single capsule diseased. CASE IX.

PLATE VII.

Separate parts of Thomas Clouston.

Fig. 1. Portion of the small intestine and mesentery with deposits of dark pigment.

Fig. 2. Ditto ditto.

Fig. 3. Portion of omentum with deposits of dark pigment.

Fig. 4. Deposit of dark pigment in the adipose tissue on the inner surface of the internal oblique muscle.

Figs. 5 & 6. Microscopic views of the dark pigment taken from fig. 1, (1/4-inch).

Fig. 7. Natural size of the deposit represented in fig. 6.

PLATE VIII.

Fig. 1. The left kidney and diseased supra-renal capsule of Elizabeth Lawrence.

CASE VIII.

Fig. 2. The left supra-renal capsule of Jane Roff, exhibiting a fungoid growth obstructing the vein of the capsule at its entrance into the renal vein. CASE X.

Fig. 3. Section of the same, exhibiting sanguineous infiltration of the organ.

Fig. 4. Section of one of the supra-renal capsules of James Jackson, with strumous deposit. CASE II.

Fig. 5. Exterior view of same.

Fig. 6. Kidney and diseased supra-renal capsule of William Godfrey. CASE XI.

Fig. 7. Microscopic view displaying meshes composed of delicate stroma of transparent and fibrous tissue, containing cancer-cells, taken from the diseased supra-renal capsules of William Godfrey.

Fig. 8. Cancer-juice, consisting of well-formed cells, with large nuclei and nucleoli, from the same.

PLATE IX.

Neck and part of the trunk of Elizabeth Lawrence. A single capsule diseased. CASE VIII.

PLATE X.

Abdomen of same, exhibiting general dinginess of the integument, with several small circumscribed deposits of darker pigment.

PLATE XI.

Head, neck and trunk of Mr. S., exhibiting peculiar discolorations and white patches of the integument, similar to those observed in CASE VI.

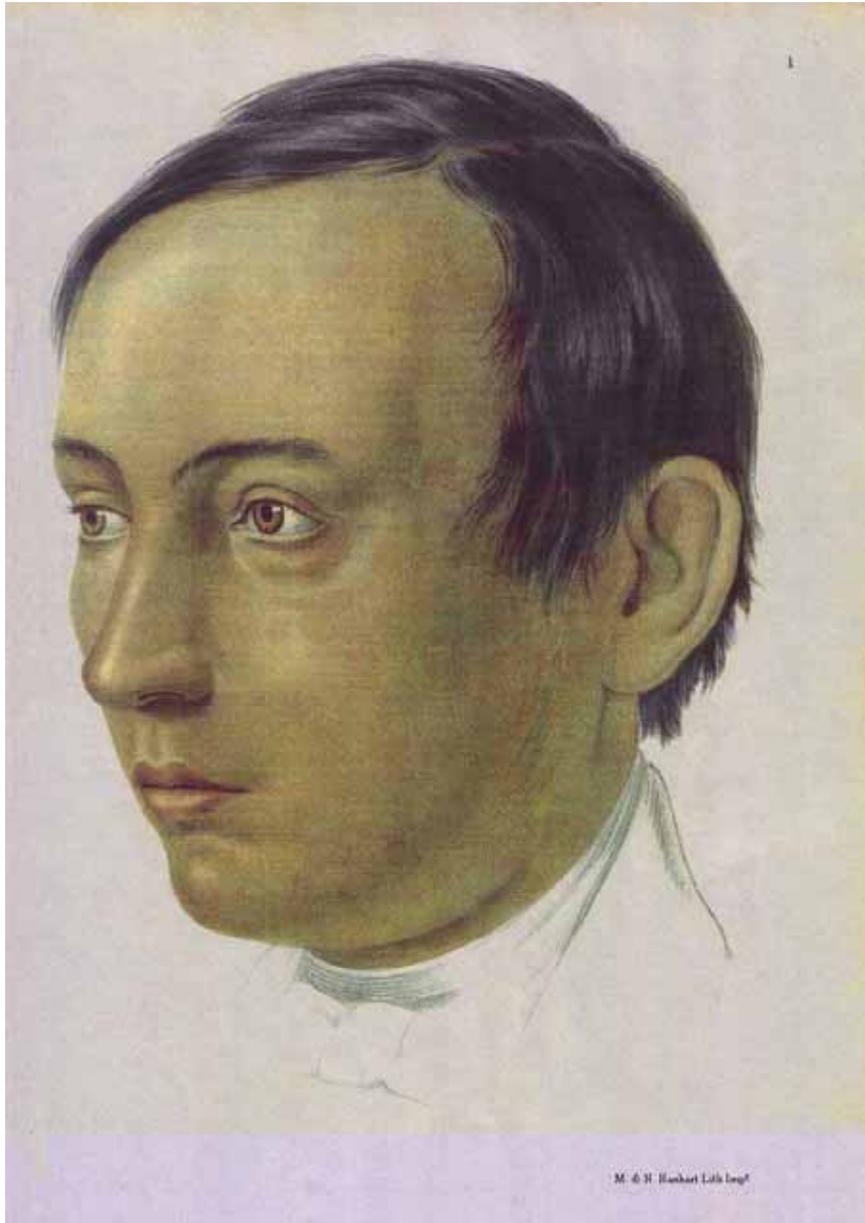


Plate 1

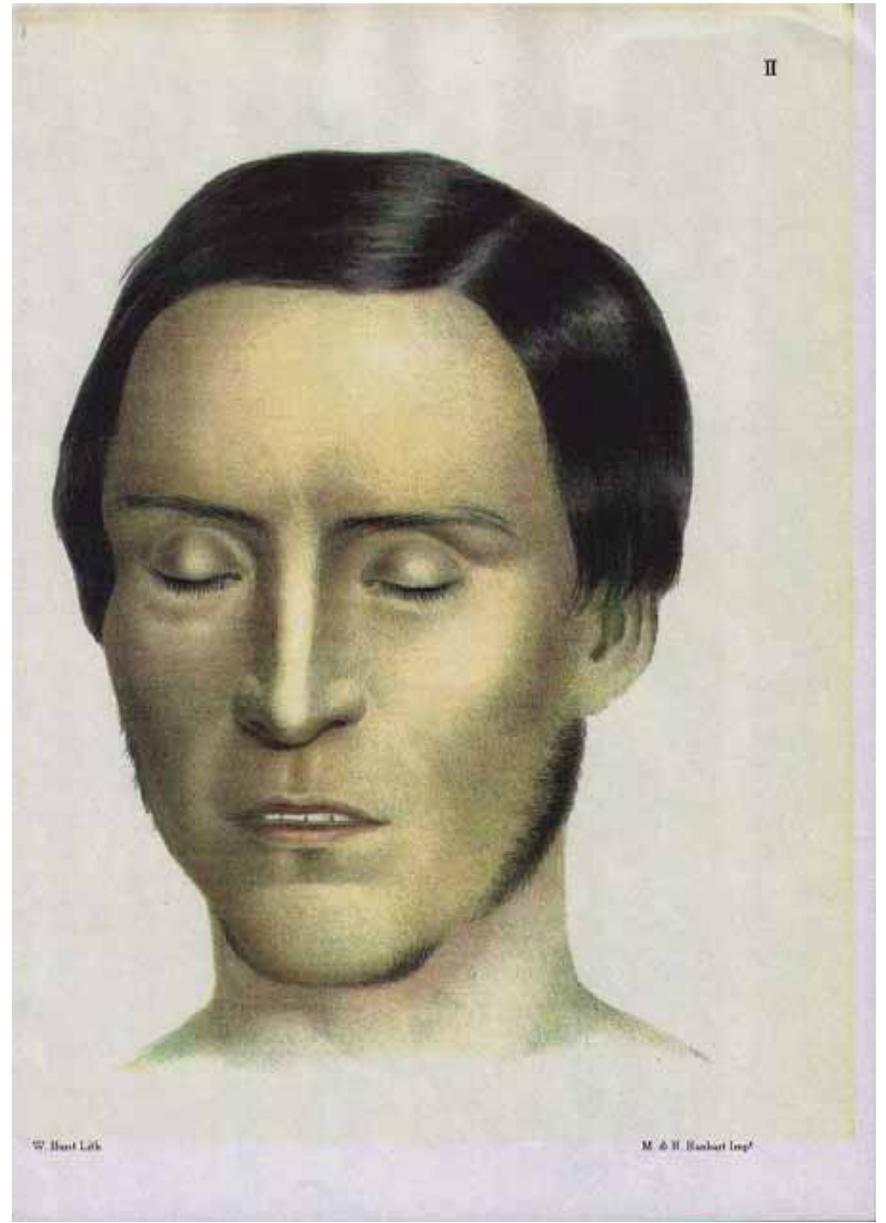


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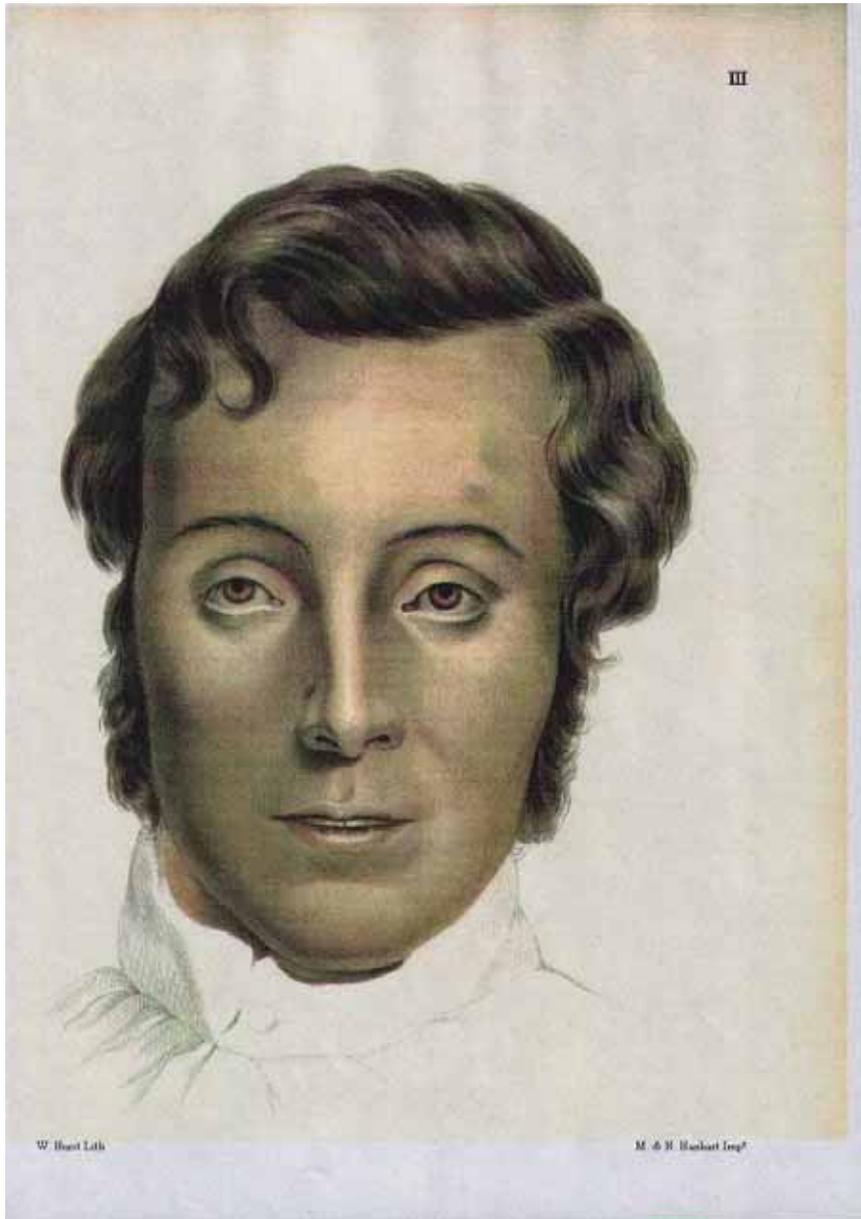


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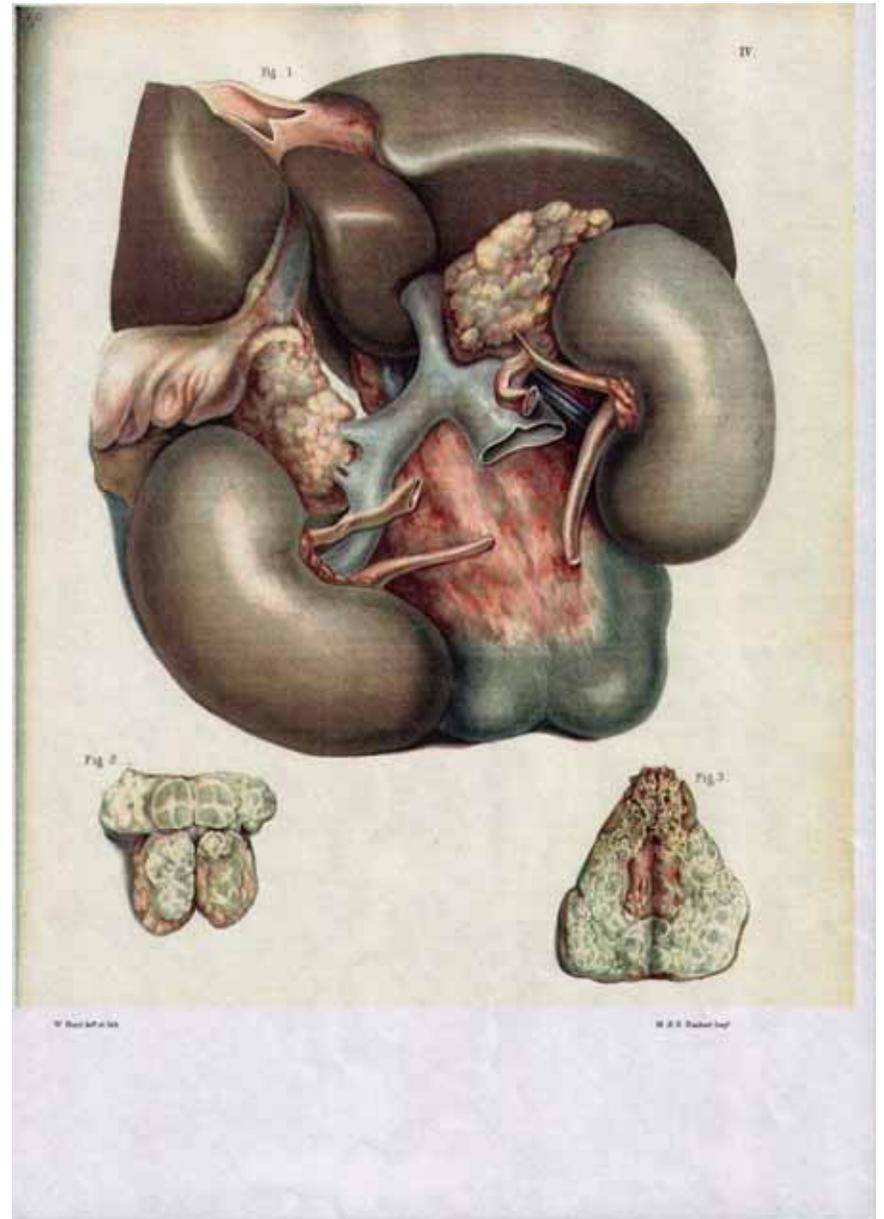


Plate 4



Plate 5

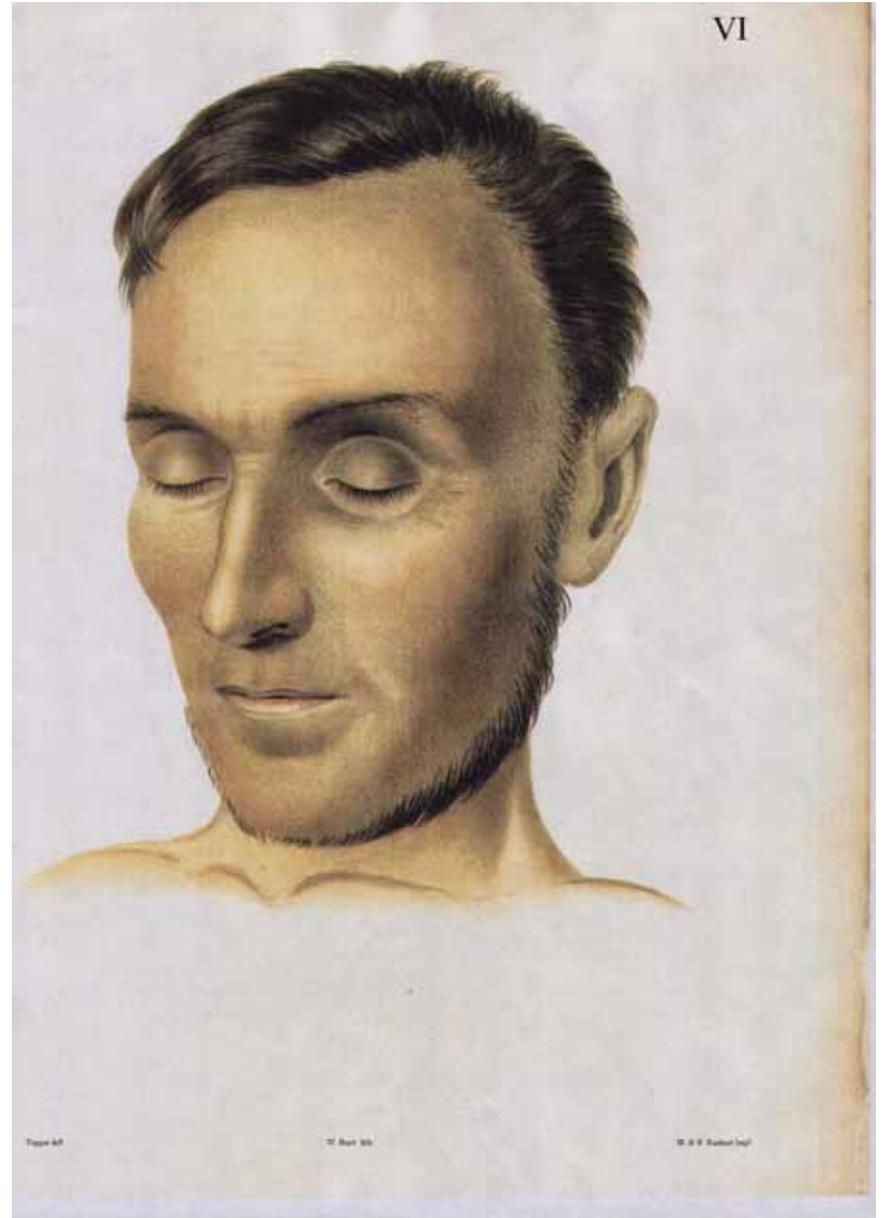


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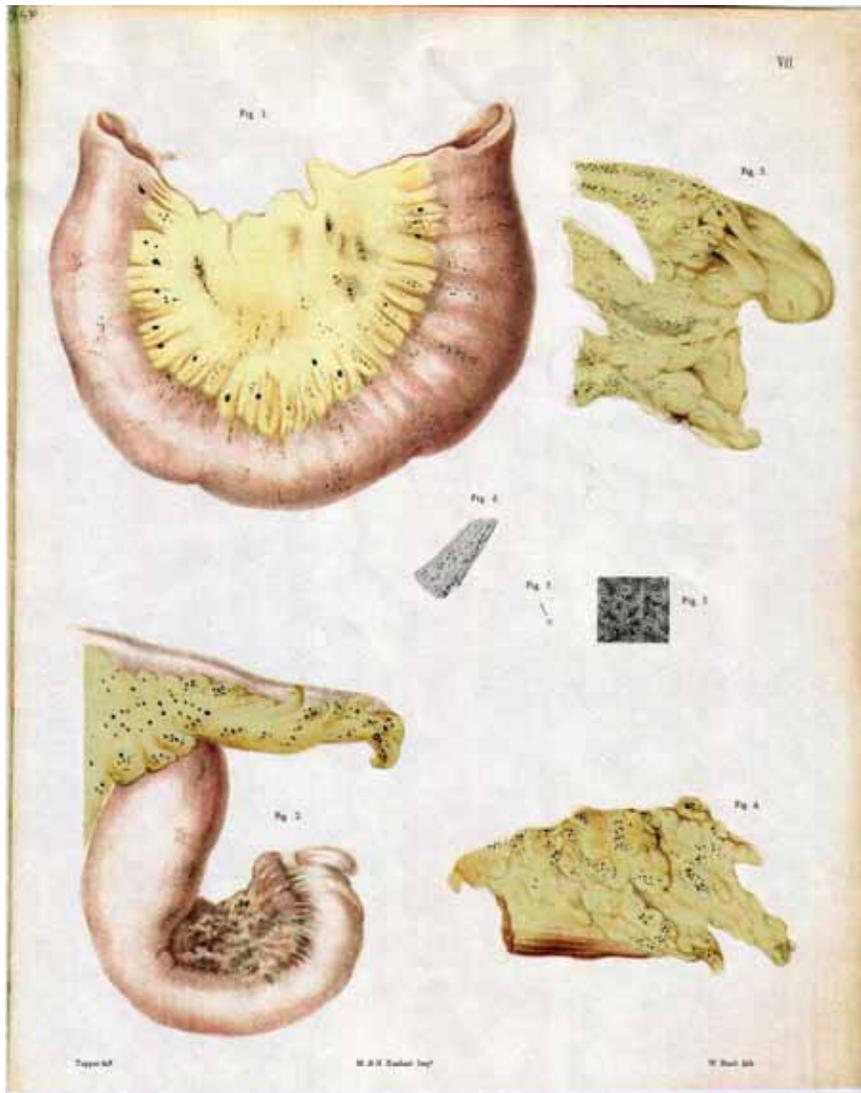


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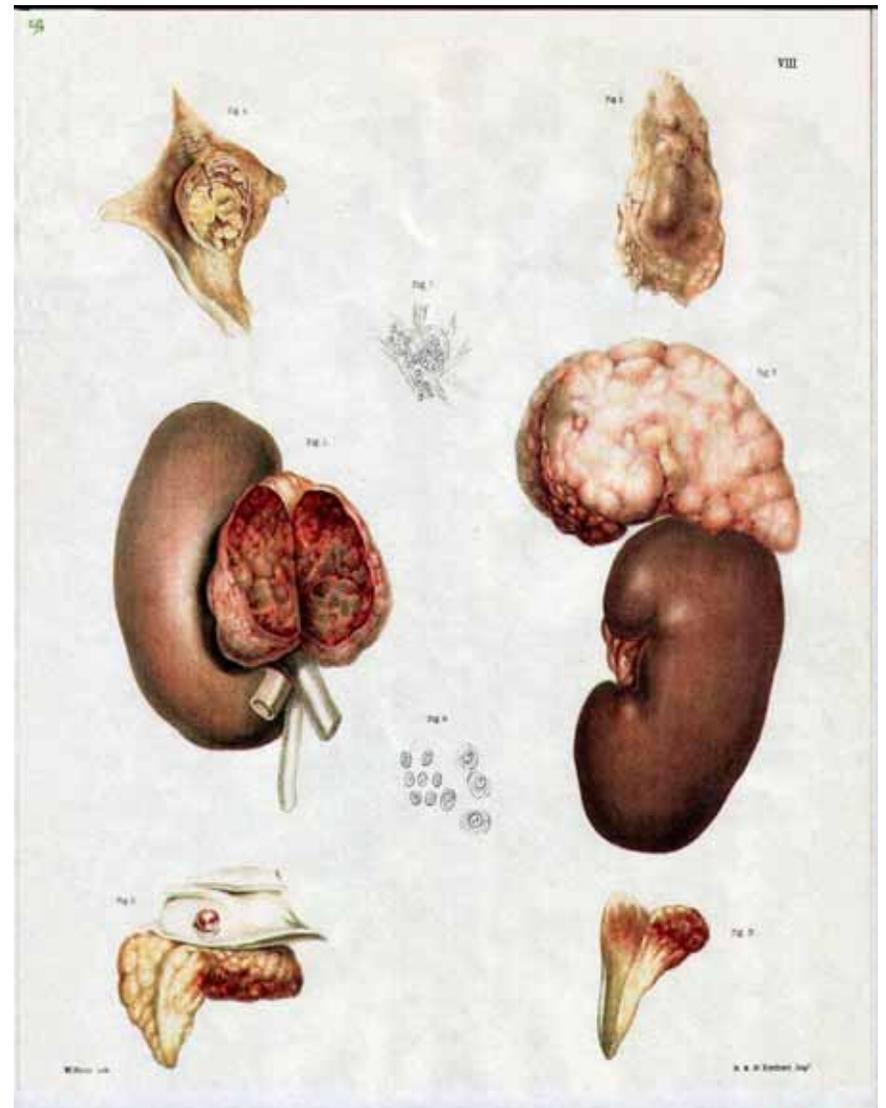


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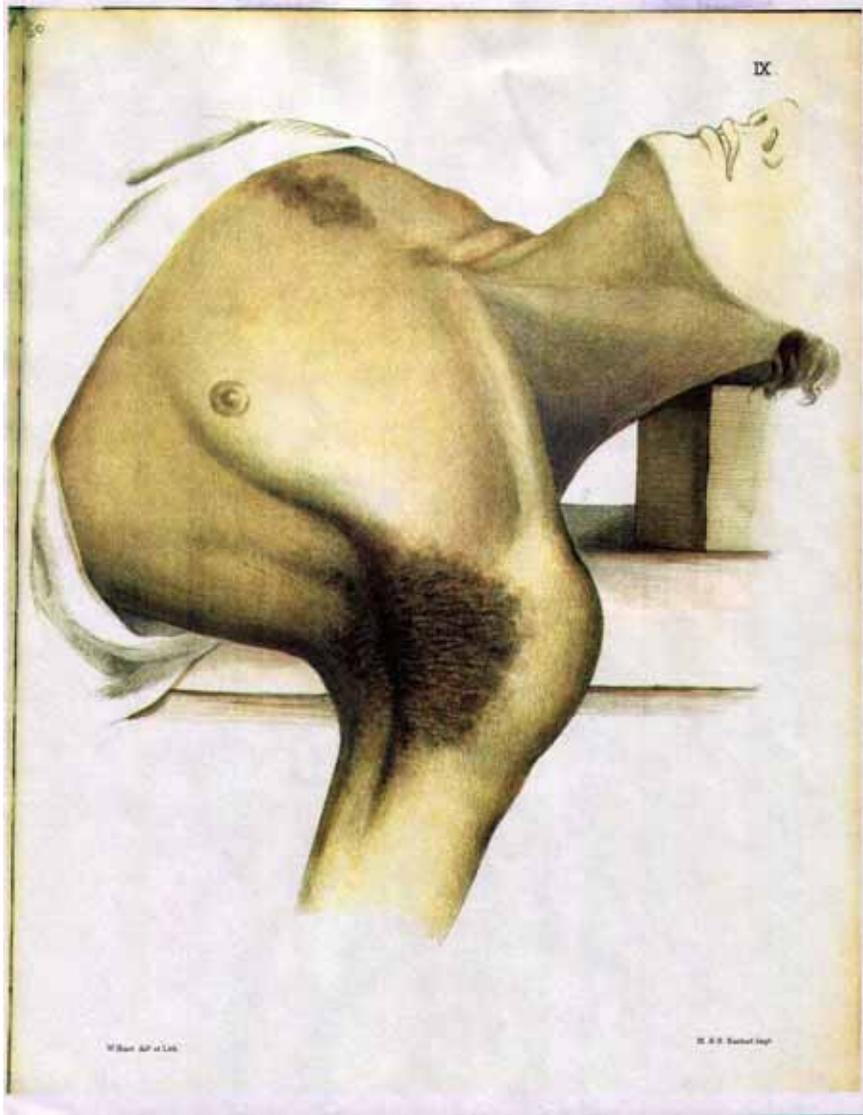


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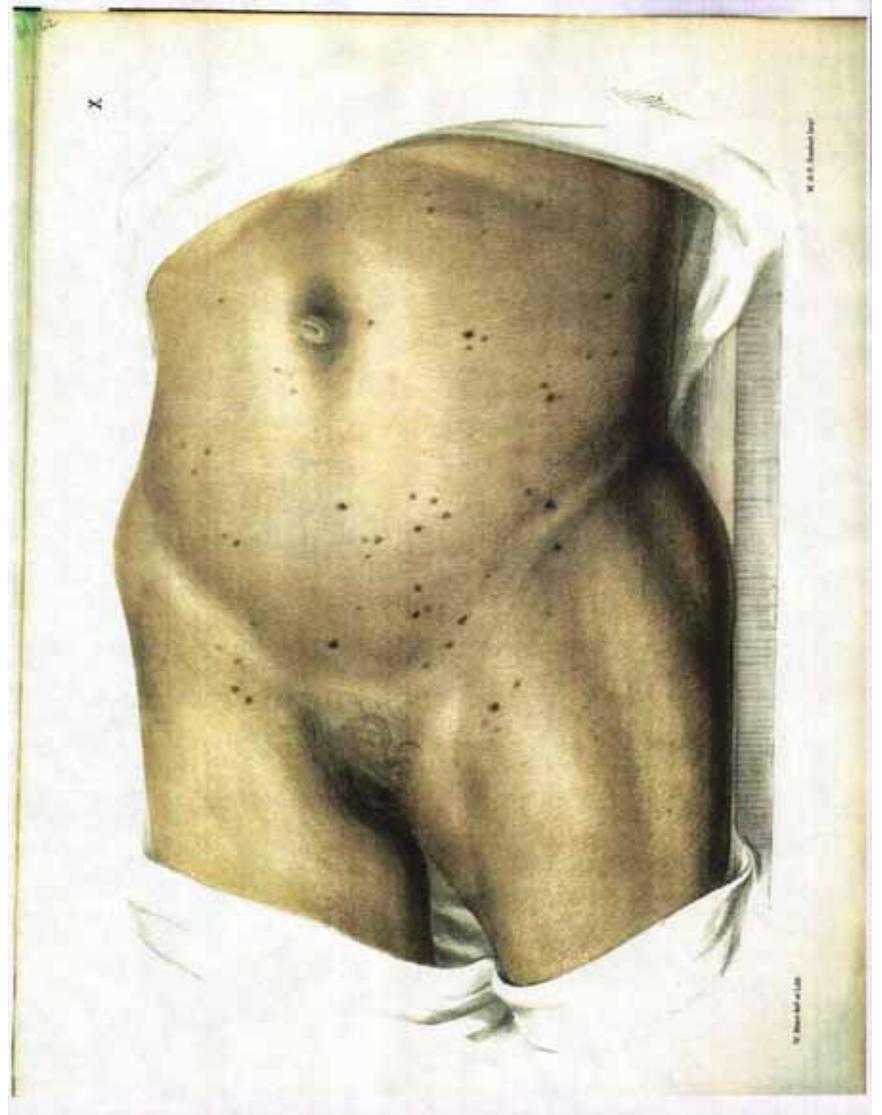


Plate 10

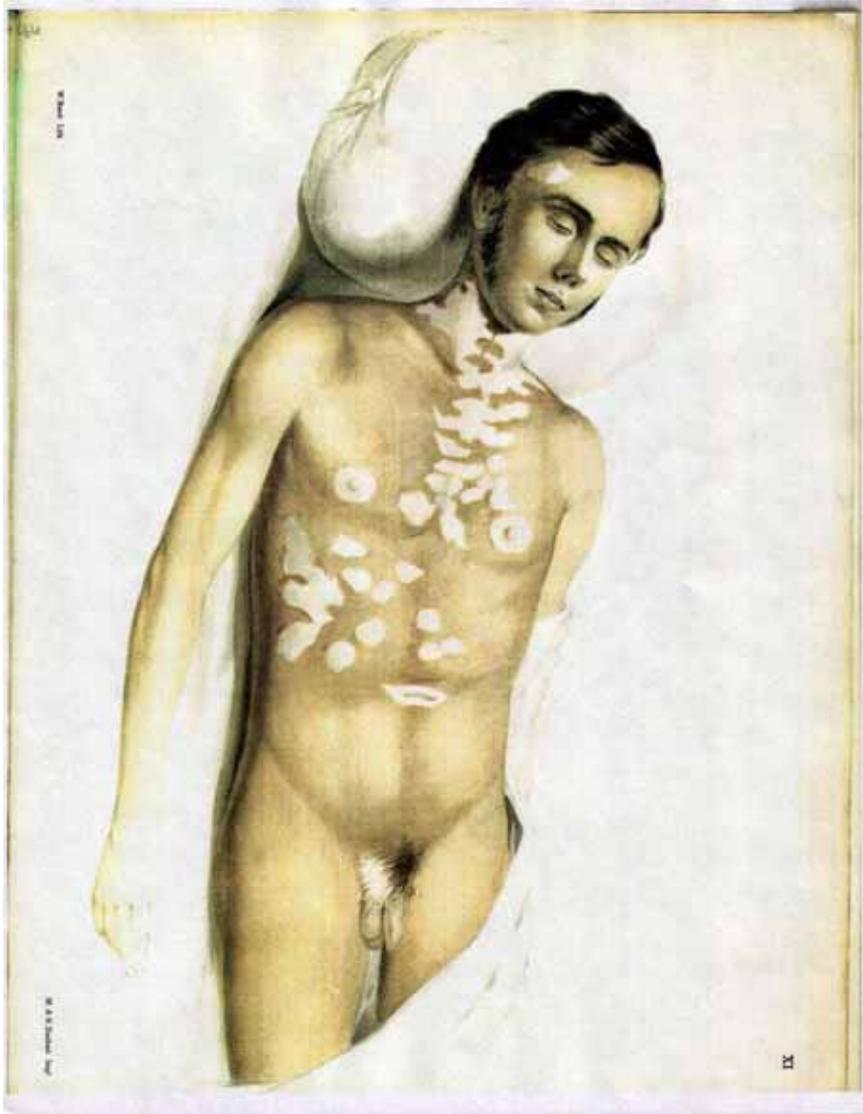


Plate 11