

conditions of rude health. And if I wanted to mention the most likely case for the occurrence of pulmonary embolism, I should certainly say let the patient be a robust muscular man suddenly thrown upon his back with an accidental traumatic fever. It is not the emaciated subject whose blood clots, unless the emaciation be associated with pyrexia or sepsis. I was talking this subject over some years ago with my colleague, the late Dr. Wooldridge—alas! too early lost to fame—and he said, "Yes, you are right; but the best means of all of increasing the clotting power of the blood, short of injecting material into the circulation, is to feed the animal on fat." This was the result of Dr. Wooldridge's experiments on animals; and in many cases since then I have treated cases of aneurysm in this way, although I cannot say with any striking results; but I take it—and this is the purport of the introduction of the subject here—that if it can be shown that the clotting power of the blood is increased by a fat diet, a strong argument is afforded in favour of my contention that in some way or other fats are necessary to the due elaboration of the nitrogenous compounds of the body. Unless I am much mistaken, we do not think in that way, and, indeed, physiology seems to me to teach; such and such things for the formation and repair of the fabric, and such other things for storage for heat purposes; and that the two have no connection. I would maintain the opposite, and, if I may not say that the two forms of food are interchangeable, I am sure it is the outcome of clinical experience that the two are far more intimately necessary to each other than is usually thought. I mean to say that, supposing it were possible to feed a man on an exclusively nitrogenous diet, he would die, not for the want of fat as fat, but because of his inability in its absence to assimilate his stores of albumen.

Sometimes renal colic is very difficult to distinguish from hepatic colic when the right kidney is affected. I could tell of three, if not four, such cases; and one comes clearly to my mind of a gentleman who came all the way from the West Indies, for what was supposed to be gall stone, as he had had jaundice with the attacks of colic, but on weighing the history carefully I was convinced that the attacks were renal and not hepatic. He saw several physicians while he was in town, and no one was inclined to speak positively as to the nature of his calculus, and I heard no more of him for several months, when one day I received a note from him saying that he had gone abroad again; had passed a renal calculus a short time after he went out; and had been quite well since. There is perhaps no great improbability of a certain proportion of people suffering from both renal and hepatic calculi at the same time; but I also think that in connection with the disturbance, inflammatory or otherwise, that centres round a case of renal colic it sometimes happens that the liver becomes involved by its propinquity, or by its nervous supply becoming implicated in the storm, and that thus an attack of mild jaundice is the result.

Another point worth remark is the not infrequent association of fever with what is after all only simple obstruction of the ducts by gall stones or growth. I used to fear that the febrile state indicated the supervention of a suppurative form of inflammation. But I could give many cases to show that this is by no means the case, and although I do not mean to say that it does not introduce some little fresh anxiety into the case on that score, this need not be great, unless the fever and general symptoms be of a very pronounced character, for a sustained fever of moderate hectic type is quite capable of explanation by milder causes, and also by such as admit of complete resolution.

I suppose, too, I must say a word or two about the treatment of gall stones by cholecystotomy. My own experience has not been fortunate. I saw a lady some year or two ago who was suffering from this malady, and who, after I had seen her, was operated on, and a stone crushed, and she got well. But the operation was a very severe one, and she was ill some time. For the rest, one case, a woman, was operated on, the ducts were found to be in a state of suppuration, and she died after a short time. In another case, a man of middle age was admitted for chronic obstructive jaundice and a largely-distended gall bladder. Although there was no definite history of colic, gall stone seemed the most likely diagnosis. My colleague, Mr. Symonds, opened the gall bladder, but found no stone; and when, after some months, the patient died, after

another operation, undertaken to close the fistula then made, and which had made his life not worth the living, we found that the case was not one of gall stones now, whatever it might have been at the beginning, but a case of simple stricture of the common duct. Another somewhat similar case I had in a youngish man with insuperable jaundice; I gave large doses of olive oil without any result, except that we were enabled to verify in him, as we had done in the other cases, that the oil was apparently digested. He also had a continuous mild hectic fever, and rigors also. He was a married man with a family, and reminding me, as he did, in his history and in the absence of any definite colic, of the case I have just now related, I strongly advised him not to have anything done, and he left the hospital. I saw him again some months after, in just the same condition as when he left us, but he told me that since he left us he had been persuaded to be operated upon, with the result that no stone was found.

Some two or three years ago I advocated the use of pilocarpin as a sometimes very successful means of allaying the intolerable itching of chronic jaundice. It occurred to me that the extreme action upon the skin, evidenced by the copious perspiration induced by this drug, gave a hope of in some way modifying the peripheral nervous or vascular supply, and thus putting a stop to what must largely be due to one of these factors of the sensation. Since then I have tried it again several times, and have recommended it to others; and although it is not always successful, I think it is certainly one of the most valuable means we have of controlling itchings of this sort. It may be given either by the mouth or by hypodermic injection, but it is far more successful in the latter form.

#### ON THE IMPORTANCE OF THE EXAMINATION OF THE EYES SEPARATELY FOR DEFECTS OF COLOUR VISION.

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THE papers read at the last annual meeting of the Association and the discussion which followed have drawn attention afresh to the very important question of the condition of the sight and colour vision of railway employes. The subject, as has been well urged in an editorial article, is, if men engaged at sea be included, as important as any medical topic of the present day. The object of this short note is to direct attention to the importance of testing each eye separately for colour vision. The need of this in ascertaining the amount of sight for form is, of course, recognised, and always acted upon, not so, I think, as to colour testing. A recent case has suggested these remarks.

**CASE I. *Unicocular Green Colour-Blindness.***—A lady brought her little girl, aged about 11, to me, and gave the following account. During the mother's absence on the Continent the child had run against a door-latch, and struck the lower eyelid of the left side. This was followed by some slight swelling, but not enough to have attracted much notice. On the mother's return, about a month after this occurrence, her attention was drawn to the fact that the little daughter on closing the right eye was unable to give the colours of flowers with which she was quite familiar. Mrs. D., a most intelligent lady, had in her own way before bringing the little patient to me tested her with wools, and had satisfied herself that the colour perception of the left eye was defective. She was anxious to know if the injury had occasioned it. I found, however, that vision was normal, and the appearances of the fundus gave no indications of anything abnormal; nor was the field of vision affected. The slight accident had occurred about six weeks before, and there was just a faint mark on the lower eyelid showing where the latch had struck her. I tested each eye separately with Holmgren's wools. With the left she sorted the wools as a green-blind person would do, with the right she arranged them correctly; then with both eyes open she again matched the colours in a normal manner. My testing, therefore, agreed with what the mother had herself found out.

In view of the absence of any other ocular disturbance, and the trivial nature of the injury, which appeared merely to have affected the eyelid, I was led to regard the defect as congenital. It is easy to understand what dangers would have attended a man similarly conditioned if he had been employed as a fireman or driver of an engine, or in any post on sea or land in which good colour vision was requisite. Any cause excluding the perfect eye, even for a brief period, would be attended with the possibility of disastrous results. Fon-

tenay, in an article on Colour Blindness in Denmark, published in Knapp's *Archives of Ophthalmology* in 1881, says that he examined the eyes separately in 217 cases, and that the two were always alike. I do not recall any later observations of this nature at the present moment. Fontenay mentions that Niemetscheck had reported four congenital monocular cases, but stated that he himself regarded them as doubtful. My little patient belongs to a family in which the other members are quick sighted and endowed with acute hearing. They have not yet been tested for the presence of monocular colour defects.<sup>1</sup>

Some years ago I drew attention<sup>2</sup> to the importance of recognising the possibility of the colour perception not being alike in each eye. The following case was mentioned:—

CASE II. *Dissimilar Defects in Colour Vision in the Same Person.*—The patient, a youth aged 21, had, about twenty months before he was first seen, fallen from one of the large Liverpool docks and sustained serious injuries—fracture of the frontal bone, of the inferior maxilla, of the right femur, and of the left wrist. He was stated also to have suffered from concussion of the brain, and quite recently had been the subject of "fits." At the time of his coming to me there was a large depression on the left side of the forehead. He mentioned vision as having become worse since the accident, but I have no note as to its condition when first seen. Later it is stated there was H.+5D. in each eye, and that corrected V. in the right was  $\frac{3}{6}$ , and in the left  $\frac{2}{6}$ . Ophthalmoscopically there was nothing abnormal. The point of particular interest was the condition of his colour vision. When about to test him he told me that he was less accurate with colours since his accident. He hesitated rather, and was slow in arranging Holmgren's wools, but he did so correctly. Each eye was then tested separately. With the right he sorted the wools as a red-blind person would do, whilst with the left he did so more as a green-blind person, but less distinctly so. Thus he appeared red blind with the right eye and incompletely green blind with the left. Tested again with both eyes open the correct sorting of the colours was repeated. It seemed as if the faulty sense in one eye was counterbalanced by that which was good in the other. The tests were repeated several times, and left no doubt upon my mind as to their correctness. Unfortunately the patient disappeared shortly after, and I have not been able to trace him to see if his condition has undergone change.

Examination of each eye separately means double labour, and in testing large numbers this is a matter of consequence. It is hardly likely that a difference between the two eyes occurs very often, as is indeed shown by Fontenay's statistics referred to above. Some large numbers dealing with this point would however be interesting. As in the case of my little patient such a condition is overlooked, unless an accidental circumstance or testing reveals it.

## CASES OF JAUNDICE DUE TO ANEURYSM OF THE HEPATIC ARTERY AND TO MOVABLE KIDNEY.

By W. HALE WHITE, M.D.,  
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THE two following cases are so very rare that they seem worthy of record. In the first, jaundice was due to the pressure of an aneurysm of the hepatic artery on the hepatic duct. Von Schueppel<sup>3</sup> alludes to eight cases and Caton<sup>4</sup> to the one he records and ten others. The symptoms appear to be pain, a tumour which may be pulsatile, and jaundice. In my case the pain was not great, and was naturally thought to be due to the empyema. The left lobe of the liver was a little prominent, but that was regarded as evidence of pus pushing the liver down, and, as an aneurysm was quite unsuspected, we were at a loss to explain the jaundice. In most of the recorded cases the aneurysm burst, causing sudden death; generally, as in my case, the rupture took place into the peritoneal cavity; in the other cases rupture into the biliary passages occurred. In Borcher's case,<sup>5</sup> as in mine, there were two aneurysms, and his patient was a male, aged 17 years, and my patient was a male, aged 18, and in both the aneurysms were about the size of Tangerine oranges. The cases were, therefore, curiously similar. The points of difference were that in Borcher's case both aneurysms were in the substance of the liver, but only one in mine, and in his case rupture took place into the hepatic duct. I cannot make out whether in his case both were on the same

<sup>1</sup> Mrs. D. has since informed that she has tested them herself with wools and not detected any defect.

<sup>2</sup> *Lancet*, 1881, vol. i, p. 727.

<sup>3</sup> Von Ziemssen's *Cyclopaedia*, vol. ix, p. 835.

<sup>4</sup> *Clin. Soc. Trans.*, vol. xix.

<sup>5</sup> *Aneurysma d. Art. hepaticae*, Kiel, 1878. I have not seen the original.

branch of the hepatic artery; in mine one was on the left and one on the right. I cannot at all explain the cause of the aneurysms; they did not appear to be infective.

In my second case, as the patient is still alive, it is impossible to prove, and even after death it might be impossible to show, that the attacks of jaundice, and bile in the urine were due to the pressure from time to time of the movable right kidney. All that can be said is that during the time that the patient had a movable kidney he was liable to these attacks, in which the urine became quite dark, and that after the kidney was stitched into position he was never noticed to be jaundiced, he never observed his urine to be dark, and when it was examined it never contained bile. Litten<sup>6</sup> records a case of jaundice, in which, as in my case, the attacks came and went suddenly, without any symptoms of catarrh or gallstones. Here, also, there was a movable kidney on the right, side to which he attributed the jaundice. No operation was performed in his case.

Landau<sup>7</sup> remarks that jaundice is more common in women with movable right kidney than in others, but he is inclined to attribute this to the fact that the movable kidney in some way or another renders them more liable to duodenal catarrh. It is difficult to see why this should be so, and it is quite impossible to prove it. My patient did not have any of the sickness, *malaise*, and depression so common with what is called catarrhal jaundice. The renal impression on the liver is so near the transverse fissure that the kidney need not move far to press on the bile duct. I do not know that the kidney has been stitched for jaundice previously to my case, in which Mr. Arbutnot Lane operated.

CASE I. *Jaundice due to an Aneurysm of the Right Branch of the Hepatic Artery, together with an Aneurysm on the Left Branch.*—A young man, aged 18, was admitted into Guy's a few hours after the initial rigor for right-sided pneumonia. The attack terminated by lysis. The temperature fell gradually during the eighth, ninth, tenth, and eleventh days. On the last of these it reached normal. On the fourteenth day a hectic temperature began, and this continued till his death. There was some pain in the right side. A localised empyema was found on the twenty-fourth day under the right nipple. As the hectic continued, an attempt was made with an exploring needle to find another collection of pus in the front of the chest, but none could be found; so it was determined to try a day or two later to find pus in the back part of the chest, but before this could be done, the patient died suddenly. From the position of the localised collection discovered at the necropsy, there is little doubt but that it would have been found during life. On about the twentieth day slight jaundice was first noticed, together with bile in the urine. The jaundice gradually deepened, the urine became very dark, and the stools pale. There was a fulness over the left lobe of the liver. On the thirty-fourth day of the disease the patient was sitting up in bed, and he suddenly fell back, became unconscious, and died in about ten minutes.

*Necropsy.*—Except for a small compressed part at the base, the right lung was quite healthy; the pleura was adherent. There was a localised collection of pus between the lung, the ribs, and the vertebrae, lying close against the spine. The omentum and intestines were oedematous; there was a considerable amount of blood-stained fluid in the abdomen, and a large blood clot occupying the pelvis and the lateral regions of the abdomen. An aneurysm the size and shape of a Tangerine orange was found on the right branch of the hepatic artery. It lay in the transverse fissure of the liver, and pressed upon the hepatic duct, and to a slight extent on the portal vein. Its walls were very thin, and at its lower part the wall had given way. It was filled with *ante-mortem* clot, which showed no softening. A similar but smaller aneurysm also filled with *ante-mortem* clot sprang from the left hepatic artery about an inch after that vessel had entered the liver, which was compressed around it. This aneurysm had not burst; it was not visible from the outside of the liver.

CASE II. *Floating Kidney probably causing Jaundice.*—R. K., aged 34, admitted into Guy's Hospital, December 17th, 1890. His previous and family history are unimportant. On March 4th, 1891, he was struck in the back by a falling pile of straw hats, which knocked him forwards; after this trembling in the limbs came on, followed by weakness, especially of the right arm and leg, pain in the back, and great "nervousness." He frequently attended Guy's and Charing Cross Hospitals for these symptoms, but no diagnosis was made, nor could I come to any conclusion as to their cause when he was under my care.

January 1st, 1891. His urine, which had previously been quite clear, and which he had never before noticed to be dark, had been, he stated, for the last twenty-four hours, quite dark. This was found to be true, and it was deeply bile-stained; the conjunctivæ and skin were slightly jaundiced. A rounded body could be felt below the liver on the right side; it was very movable; pressure on it gave testicular pain; and there was little doubt that it was a movable kidney. The patient had very little of the depression of spirits common in catarrhal jaundice. The morning urine contained much less bile than an afternoon specimen.

January 2nd. Morning urine contains a slight amount of bile; afternoon none; jaundice almost gone. January 3rd. Urine normal, no jaundice. January 4th. Morning urine contained a little bile, afternoon urine a good deal; no jaundice. January 5th. A little bile in the urine. January 6th. Morning urine contained a trace of bile, midday none. January 7th. No bile. January 8th. Morning urine no bile, afternoon specimen a faint trace. January 9th, 10th, 11th. Urine contains a little bile, no jaundice. January 12th, 13th, 14th, 15th, 16th. Urine contains no

<sup>6</sup> *Charité-Annalen*, p. 193, 1878.

<sup>7</sup> *Movable Kidney in Women*, *Syd. Soc. Trans.*