and swelling; the arm was almost immovably pinned down to the side; the general health was bad, and there was some pyrexia. The febrile movement having been subdued by rest and mild aperient medicines, the local disease (which had lasted several months) was treated by a broad ring of iodine liniment painted over the lower part of the neck, the adjacent portion of the thorax, and the superior third of the upper arm; the whole skin-area of the joint being left intact within the circle of counterirritation. The liniment was carefully applied on alternate days, and the forearm was supported in a sling. The constitutional treatment consisted of the administration of citrate of iron, iodide of potassium, and cod-liver oil. There was no interruption to the favourable progress of the case. All the joint-symptoms gradually disappeared; passive movement of the upper arm soon became possible, and eventually (within three months) the recovery was so complete that the girl could raise the limb aloft by the side of her head. And, *pari passu*, she became ruddy and strong.

Mr. Furneaux Jordan recommends enlarged cervical glands to be treated with a long patch of iodine liniment, out of sight on the lower and back part of the neck; and I have adopted this plan with much benefit. Long ago, scrofulous ophthalmia was treated in a similar way by painting a "saturated solution of iodine in spirit freely round the orbit, making a broad ring upon the forehead and cheek, and repeating the application every two or three days." (Dr. Nevins's *Translation of the New London Pharmacopœia*, 1851, p. 513.) Among the many local remedies enumerated for *tingea circinata*, I find that equal parts of tincture of iodine and iodine liniment make a lotion which is extremely serviceable. And I can only just allude to the inhalation of iodine as supplying a real need in allaying the cough and expectoration of some chronic forms of catarrh, and of fibroid phthisis of the lungs.

It is an easy transition from iodine to *Iodide of Potassium*. Almost everything has been said about this drug which there is to be told, but I wish to speak of four points of interest regarding it—two about its internal use, two about its external. Iodide of potassium has remarkable power over certain forms of uncomplicated bronchial asthma. The caprice of this disease is in no respect more conspicuously shown than in its behaviour to remedies; and a large part of our treatment consists in nothing better than trying shrewd experiments. Success often rewards our efforts when we least deserve it; but as we have always to bear the penalties of failure, we may conscientiously appropriate the praise of even a chance success. Then, in the many phases of scrofula of childhood, especially cutaneous ulceration about joints, enlarged tonsils and sore-throat, and "scrofulous lupus" anywhere, iodide of potassium in union with citrate of iron may be given for a long time with a benefit not to be rivalled by any other medicines. Here, again, we see how we can economise our therapeutic resources by making one drug help out another, so that both do more than double work at the same time.

The ointment of iodide of potassium is valuable in many ways, and has been recommended empirically for the cure of itch. I wish to speak in an emphatic manner of the value of the liniment of iodide of potassium with soap. It should be used with much friction over joints rigid from insufficient use, or from the products of chronic inflammation. It is a capital agent to use friction with; nor need it be wiped off when the friction is finished, but the part may be wrapped with a simple covering of wadding or lint, and so more or less absorption will go on. Joints which are damaged by chronic rheumatoid arthritis, but not quite crippled, may be excellently treated by the systematic application of this liniment, alternating with other treatment by the Bath thermal waters.

Although *Bromide of Potassium* belongs to the same chemical group as potassic iodide, it has very distinctive therapeutic properties. My experience of it in the treatment of epilepsy amounts to this: in a large proportion of cases it relieves (or "cures") only so long as it is administered. As an American writer (whose name I forget) well puts it, bromide of potassium *feeds* nerve-tissue as an antidote to convulsion, and therefore requires to be continuously given like food. Certain it is that, if an epileptic patient insist upon leaving off his medicine because he believes himself to be well, a prognosis ought to be given that the malady will probably return. Further, I am confident that the efficacy of the bromide is enhanced by the addition of strychnia; so that our most advanced therapeutic knowledge about epilepsy is now possibly represented by the union of these two medicines.

In my next paper, I propose to continue the illustrations of bromide of potassium, and show the remarkable efficacy of this salt when combined with chloral.

[To be continued.]

CASE OF EXTREME GRANULAR DEGENERATION OF THE KIDNEYS, WITHOUT HYPERTROPHY OF THE HEART.

By W. MOXON, M.D., F.R.C.P.,
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THE following case has an interesting bearing on present questions as to the pathology of granular kidney. (It may, in passing, be remarked that we now are accustomed to use this name in a sense different from that in which Bright used it. He applied the term "granular" to a large kidney which looked to the naked eye minutely conglomerate, so that granules were suggested to the eye by its appearance. He called the small shrivelled kidney, which we now call "granular", by another name—"the contracted kidney". Bright's granular kidney is now recognised as one of the stages of chronic catarrhal nephritis.)

The case is as follows.

Stephen A., aged 72, had been knocked down by a cab, and was admitted under Mr. Birkett's care with severe fracture of the thigh and arm—the former compound, and communicating with the knee-joint. He was sensible throughout the few days that he lived after the accident, and took his food fairly well; but he gradually sank, and died.

Post Mortem Examination.—An aged frame, grey, bald, and toothless. The body was well nourished. The lungs showed senile atrophy, with a good deal of pigment. The heart weighed 11 ounces. There was no hypertrophy or dilatation. There were some milk-patches on the pericardium. The heart was remarkably fat; its right ventricle was covered with fat. The muscular substance was firm and healthy. The liver was healthy, save that a large cavernous angioma was in its right lobe. The kidneys weighed $4\frac{1}{2}$ ounces; and a large part of this weight was due to fat in the hilus. They were very small and shrivelled, looking flabby, pale, granular, with numerous cysts. The cortex was wasted much, both the superficial and the interpyramidal parts. The pyramids were very small. There were no grains of urate of soda in them.

Although the rule is, that we find hypertrophy of the heart in cases of granular kidney, yet there are occasional exceptions. Sometimes these exceptions resolve themselves into differences of degree. I mean that one finds very little hypertrophy, but the kidney is not excessively diseased; and then one falls back for explanation on the relative degrees of the two changes. Often one has to say, "Perhaps this kidney, though considerably diseased, yet did work enough not to call largely on the heart and arteries for supplementary power and consequent hypertrophy." But this, which is at best often an unsatisfactory way of treating the difficulty, fails entirely in many cases, as in the instance before us. We have kidneys here wasted away to the last degree, and yet the heart does not exceed the average weight for the age and size of the man. I have before met with such cases, but have observed that there was a certain relation between the age of the patient and the size of his heart, younger subjects having the heart smaller. Yet there have been striking exceptions to such a rule before the present example.

Evidently we cannot conclude that the renal imperfection causes cardiac hypertrophy as a direct result, through the necessarily consequent impurity of blood, leading to strong efforts of the heart to force this blood onward through the vessels. If the sequence were so direct, such a case as the present could not have arisen. Viewing the present example in its strong differences from the ordinary cases, one cannot but suspect that there is some underlying important difference in their pathology.

When I was observing the cases of granular kidney fatal at very early periods (19 to 24 years), with very little cardiac hypertrophy, I used to suggest to the class that this form of the disease might be due to congenital imperfection of the organ, and to point out certain differences between the contracted gouty kidneys and the kidneys in question. These were more uniformly small. The interpyramidal masses of cortex had not their usual comparative immunity, but had shrunk away as much as the superficial layer; so too the pyramids, which generally are large in granular kidneys, were here shrunken remarkably; and microcysts were plentiful. All this easily suggested an incomplete original foundation of the organs; and I used to consider that such a congenital imperfection probably had led to the premature failure of the glands. Since then I have read a parallel suggestion in Virchow's account of "fœtal cystoid degeneration of the kidneys". He says, in explanation of the cystic degeneration found in adults, "it may, indeed, easily happen that a *partial* fœtal degeneration may continue on into later life" (*Kr. Geschw.*, B. i); and, if this be true for

the more pronounced cystic forms of granular disease, it is likely to be true also of those in which the cysts are less largely developed.

I think it very probable that some atrophic kidneys, such as correspond to the description which I have given above, do commence in a congenitally imperfect structure. In two well marked examples, I found microscopic peculiarities which, however, have not an evident bearing on the question of a foetal origin. I hope to describe these on some other occasion.

But it may be doubted whether, at the advanced age of our present subject, a congenital imperfection can be admitted. Analogies enough could easily be found. Men will live to nearly sixty with congenital close contraction of the pulmonary orifice; and such a compensatory system as makes this wonder possible may also enable a man to pass a long life with a like imperfection of kidney. Still there is nothing even then to save him from the necessity of hypertrophy of the heart, were that necessity directly consequent on the imperfection of the kidney. Hence it still remains true that the existence of these cases, which I am attempting to show are probably congenital, proves that, in the more frequent cases of wasted kidneys in gout, etc., which are associated with cardiac hypertrophy, there is some cause of the cardiac hypertrophy other than that commonly supposed, namely, the impurity of the blood: something whose presence is nearly constant in gouty cases, and which is absent in those congenital cases, must come in to cause the hypertrophy in the gouty subject.

MEMORANDA OF TREATMENT OF CASES OF NERVOUS DISORDER.

By J. LOCKHART CLARKE, M.D., F.R.S.

III.—INCOMPLETE HEMIPLEGIA OF THE RIGHT SIDE, WITH PARTIAL APHASIA.

A LADY who had come from the country to see her daughter, found, in the course of a few days, that she was gradually losing the use of her right hand and arm. The first occasion on which she experienced this weakness was, that one day, after beginning to write, she found herself unable to continue. Very shortly afterwards, she found that she was losing power in the right leg, so that she had great difficulty in walking; she also felt a sensation of "pins and needles" in the right hand, but not in the foot; at the same time she complained of great loss of memory. She was frequently quite unable to recollect many of the words she wished to use; and sometimes she transposed her words, or used wrong ones. Her articulation was very indistinct; but she could protrude her tongue and move it in any direction. There was a dull "heavy" pain on the left parietal region of the head, with a sensation of "creeping or drawing up" of the scalp, and some deafness of the left ear. There was no cardiac murmur, or any other sign of heart-disease.

Her general health was much deranged. Her tongue was loaded; her breath offensive; her appetite was gone; and she complained of nausea and flatulence, with a sensation at the epigastrium "as if something wanted to be removed". Her skin was dirty-yellow; her bowels constipated; but her urine was clear and without albumen. She was ordered a mild aperient, a blister behind the left ear, and the following pills.

Rx Hydrarg. subchlor. gr. vj; ext. hyoscyam. ʒjss. Ft. pil. xij. One to be taken night and morning.

At the end of a week I saw her again, and found her decidedly improved. After two or three days the pills produced brisk purgation. She was ordered to repeat the blister and continue the pills. At the end of another week the improvement was still more marked. Her memory was much better, her articulation more distinct, her right arm stronger, and she could walk without much difficulty; but she still complained of dull pain, and "drawing up" of the scalp on the left side of the head. The bowels had acted about twice daily, and the evacuations on passing caused a scalding sensation. The blister was repeated, and the pills continued. At the end of the third week she was nearly well; all that she complained of was flatulency, and the creeping or drawing sensation in the scalp of the left side. Her skin had lost its previously dirty-yellow colour, and her appetite was keen. She was ordered to discontinue the pills, and to take some rhubarb, ammonia, and æther in peppermint water. A fortnight afterwards, she returned to the country quite well.

64, Harley Street, W., June 1872.

EPILEPSY, WITH SYMPTOMS OF MANIA.

By J. THOMPSON DICKSON, M.A., M.B.(Cantab.),

Physician to the Infirmary for Epilepsy and Paralysis; Lecturer on Mental Diseases at Guy's Hospital; etc.

THE following case presents several features of great interest. On the 1st January of this year, a gentleman called upon me and asked whether his niece could be admitted into the Infirmary for Epilepsy and Paralysis, as she was epileptic and unmanageable at home. I arranged to see her at her uncle's house the following day, and, if not ineligible on the ground of insanity, to admit her.

I found the patient (J. C. by initials) to be a girl 18 years of age, imperfectly developed, but fairly nourished. Her face and neck were covered with petechiæ, her legs and feet were swollen and oedematous, and her left side was slightly paralysed; and I was told that she had been in the *status epilepticus* for nearly twenty-four hours before my visit. She was, however, not only conscious when I saw her, but calm, and spoke rationally. I was unable to find any abnormality of any of her viscera, and I consented to her admission.

Her family history, as far as I was able to learn it from an aunt, was free from all trace of taint of hereditary nervous disease, and I could not discover any accidental disturbing cause. She had not any history of a blow or fall; her urine was free from albumen; and her menses, though sometimes recurring once a fortnight, were by no means excessive. Following my usual course, I withheld medicinal treatment until I had been able to watch the effect of the moral influence of the institution, and also until something requiring treatment was apparent. I heard that the young lady had been left much to herself for three years, or since the death of her mother; and her friends were unable to give a very clear history of her during that time.

For three days after her admission she gave no evidence of epilepsy; but on the fourth day she appeared excited, complained of headache, was very sleepy, and her face exhibited some petechiæ. She said she believed she had had a fit in the night, and I have no doubt she had, though she was not seen in the fit. Her urine was free from albumen. I ordered her to remain in bed, and prescribed belladonna, in doses of a quarter of a grain of the extract, and the same quantity of the powdered leaf, every six hours. In three days' time she was feeling well, and I allowed her to get up; and she continued to improve for about a fortnight, when she suffered from sickness and vomiting of bile. I then suspended the belladonna. She, however, continued free from fits; and, as she was anxious to return home, I consented to her discharge, provided she remained free from attack for another week. She remained free, and it was arranged that she should leave; but the day before her proposed departure she had a violent attack, in which her left side became not only completely paralysed, but rigid as a rod of iron; her tongue shared in the paralysis, so that she was unable to speak. This paralysis lasted twenty-four hours, when she had another fit, and the paralysis disappeared. The following day she was again partially paralysed, probably from having had an attack during the night, which was perhaps rendered certain by fresh petechiæ on her face and chest. Another attack followed when the paralysis disappeared. I again gave belladonna until the pupils were slightly dilated, and I then moderated the frequency of the dose. In three days she seemed so much improved that I allowed her to get up, and she continued to improve for several days. About a week afterwards, the matron reported to me that the patient had become unmanageable; that she was excited and obstinate, and abusive in her language. On examining her, I found fresh petechiæ, which may always be taken as evidence of a fit. The patient was not excited when I saw her; and I told her that she must endeavour to control herself, for I could not consent to her return home if the excitement continued. She promised to try to exercise some control over herself, and seemed to succeed for some days; but shortly I received complaints that at night-time she was noisy, excited, and unmanageable. I questioned her closely, and told her that the report given to me was that of madness (maniacal excitement); and, with a view to testing how much was really mania, and how much was more or less under her own control (hysterical excitement), I told her that any fresh exhibition of such excitement would lead me to the conclusion that she was mad, and induce me to take steps to secure her safety and that of others. She seemed not to realise the fact that she had been excited, and only imperfectly remembered it; but told me that her relatives had thought her insane before seeking her admission into the infirmary, and had spoken of seeking relief for her in asylum treatment. I learned that on the previous day she had had a fit, in which she was unconscious for an hour, but that it was unattended by any muscular contraction, and was not followed by either