some people, and the number of these is not small, are peculiarly susceptible of the influence of this poison, and they suffer in proportion to their susceptibility.

In more than one of the instances that I have seen, this idiosyncrasy has appeared. In one that I have cited the patient had suffered considerably on a previous occasion; and, in more than one instance, I have heard of the symptoms being increased by arsenic having been prescribed for a person living in one of those places. These idiosyncrasies are familiar to all of us. In administering arsenic, I myself have seen several in which it was impossible to give the ordinary medicinal doses of Fowler's solution from the severity of the irritation produced.

It is fortunate, and the wide-spread use of these pigments seems to prove the fact, that arsenic is not an accumulative poison, and that it is got rid of so easily by the kidneys. If it were not so I cannot but think that we should have much more obvious proofs of the poisonous character of the papers.

In this record I am only anxious to relate facts that have come under my own notice; but I believe that the workmen who make and who hang these papers are liable to suffer considerably. The quantity of arsenic used in their manufacture is something startling. Taylor says: "A manufacturer has informed me, that so great was the demand for this 'cheerful' but poisonous colour, that his average consumption of arsenic amounted to about two tons weekly". (*Ibid.*, p. 430.)

It is generally supposed that the danger is limited to green paper; but this is by no means the case, as I have myself proved. There are various shades of grey and mauve and other colours that are produced out of this poison; and I believe that the only safe plan to adopt is to have the papers analysed before they are employed. Other noxious ingredients are used besides arsenic, but the consideration of them is beyond my present purpose.

It becomes a serious question whether the use of papers for ornamenting walls is not, for more than one reason, an unsanitary proceeding, and whether some other method equally artistic might not be adopted with advantage.

I have already adverted to the medico-legal bearing of this subject. In former times, when great stress was laid upon the finding of very minute quantities of arsenic, and when juries were moved to a verdict by the demonstration of test-tubes containing infinitesimal portions of arsenical products, the absorption of arsenic from a residence in one of the rooms that I have been noticing might have placed a man in danger of his life: but it is to be hoped that the time has quite gone by when the chemical evidence in a case would be allowed to outweigh the moral circumstances and the general history. I can, however, imagine that in case of suspicion of the criminal administration of a poison to a person still living, the finding of so much poison in the secretions as in the case that I have cited, might give rise to serious results, unless the source of the poison could be clearly traced.

In conclusion, I would say that I believe and think that the evidence I have adduced fully proves the existence of disease produced by arsenical papers. I believe, also, that it is very common, and not only so, but the presence of these poisons is apt to modify and influence the course of other diseases and injuries. I have pointed out the symptoms that I have observed, and am sure that by a careful observation of them, the mischief may be detected and remedied.

I know that a great many maladies are attributed by some to arsenical papers which own quite another cause; for, whilst some people are too sceptical, others are far too credulous; and it would be absurd to hold that a case of cancer, or catarrh, for instance, was caused by these poisons, because it should happen to be discovered that the patient was living in a noxious atmosphere; nor would the finding of arsenic in the urine or other secretions prove more than that the person was absorbing arsenic; it would not show at all that their disease was caused by it. But when certain symptoms, which have again and again been noticed by different observers, are found, and then disappear when the patient is removed from the poisonous room, I think we may safely conclude that the disease has been produced by the arsenical colour. At all events, I hold that there is a sufficiently strong case to call for some stringent legal enactment that shall prevent such a deadly poison being scattered broadcast amongst us; and, as in Prussia, the employment of it should be made a crime. But I am afraid that there is not much hope of such an Act of Parliament, for the British mind, notwithstanding modern radical tendencies, is amazingly content with what is, whether it be poisonous or whether it be salutary. Upon us, however, the duty lies to inform the people of the existence of an arsenical disease; and when they are sufficiently educated by us, as they have been in other sanitary matters, action will be taken to prevent it.

CASE OF PUERPERAL CONVULSIONS AFTER DELIVERY.*

By ALLAN D. MACKAY, M.B., Stony Stratford.

AT our annual meeting held in this town in 1865, I had the pleasure of reading notes of a case of puerperal convulsions coming on after the completion of labour. This case afterwards formed the basis of a paper upon this subject, published in the second volume of the *St. George's Hospital Reports*, to which I had been asked to contribute by my friends the editors. In that paper, I ventured to suggest a treatment from which (as the rule) blood-letting was excluded—a plan of treatment, no doubt, at the time thought heretical, yet one which I see is insisted upon, as, in his opinion, the proper and rational treatment of such cases, by Dr. Barnes in those admirable lectures which he has this year delivered at the Royal College of Physicians of London, and which you all, no doubt, have read in our JOURNAL. I have nothing to qualify in the remarks made in the paper alluded to above, nor should I wish to do so after the support of such a skilled and original teacher on the subject; but, when my paper was written (1865), the hydrate of chloral had not been added to our armamentarium of drugs wherewith to combat disease. Now, in the hydrate of chloral I hope we have a most valuable aid in dealing with puerperal convulsions. And this brings me to my case, a few brief notes of which I will now read.

On the evening of February 8th, 1873, I was asked to see a woman who had been confined (by a midwife) at 7.30 A.M. The labour was perfectly natural, though it came on about a month before the expected time. The patient was a handsome and well-made woman, with a good healthy colour. Her legs had been for some little time cedematous, and on February 7th she had headache, her sight failed her, and her husband "could make nothing of her." She was delivered, as I have stated, at 7.30 A.M.—naturally, though the midwife said that, when she first came to her, "she was queer in the head." At 11 A.M., she had "a slight convulsion;" at 1 P.M., "a bad convulsion;" and at 5 P.M., "a still worse convulsion." I saw her about half an hour after this, and found her with a partially furred tongue (she complained of its being sore), a pulse of 112, weak, and her legs slightly, but decidedly, cedematous. She was not quite clear in her head, and was very drowsy, but easily waked up. Her pupils were dilated, and, though they did contract, did not do so thoroughly to light applied quite close to them. I drew off more than a pint of urine with the catheter, and found it of specific gravity 1018, and containing much albumen. I prescribed perfect quietude, broth and milk for her diet, and a draught containing twenty-five grains of hydrate of chloral to be given as soon as she could swallow, in case another convulsion should come on; if none recurred, that she should be left alone, as far as medicine was concerned, till I saw her the next day.

On the following day, I found her with a tongue loaded with a creamy fur, very swollen, and showing traces of having been bitten. Her pulse was 100. She had headache, but could "see a little." No urine had been passed, so I again drew it off with the catheter, and it was still albuminous. The legs still pitted a little. But now for the practical part of my paper, and it is solely for this that I bring the matter before you to-day. Soon after I left her on the previous evening, about 7 P.M., she had "a severe convulsion." There had not been then time for the medicine to reach her. At 11 P.M., she had "a still more severe convulsion;" when this ceased, she was able to swallow the draught (twenty-five grains), and was soon afterwards asleep. She slept for four hours; then woke, saying she "could see a little," and slept again and again. At night, the chloral was repeated, and she had an aperient dose to take during the day.

On the 10th, the tongue was cleaning; pulse 80. The urine was passed last night and this morning. She could see, though still "a little misty." She had to-day no headache, and there had been no more convulsions.

On the 11th, the milk had come, and the urine was passed well. I need not detain you with the progress of the case. She got better each day, and is now perfectly well, the albumen quickly passing away from the urine.

In chloral, then, it would appear we have a grand assistant in these cases. For some time I doubted with myself (hating to believe too soon that the *post hoc* is *propter hoc*) whether the cessation of the convulsions could be due to the chloral or not; but, considering that they were increasing in severity, it seemed that such might be the case. And this is more confirmed in my own mind now, since the appearance in last week's JOURNAL of a similar, though more severe, case occurring

* Read before the South Midland Branch.

in the practice of Dr. Barclay of Leicester. I should have reported this case earlier, because it appeared to be an eminently practical question to bring before the profession, whether chloral had a beneficial effect upon cases of puerperal convulsions, but that I thought the question would not be one unfitted to lay before my friends at this our annual meeting.

I will detain you no longer, gentlemen; my paper professes to be a practical one, and nothing else. The pathology of these cases I do not touch upon here. It has been so well and ably set forth by Dr. Barnes in his late lectures, that it would be folly on my part to reproduce it.

ON HÆMATOMA AURIS.

By WILLIAM YEATS, M.D., Coton-Hill Institution, Stafford.

THIS affection, also named Othæmatoma, or sanguineous tumour of the ear, almost without exception peculiar to the insane, has, at different times, been treated of in the current medical journals, both in this country and on the continent, and is generally referred to in the more recent works on insanity. Seeing that the presence of the affection is almost sufficient in itself as a symptom to stamp the insane individual as mentally incurable, the case recorded below, being a decided recovery, is rare enough to be worthy of record. Before, however, detailing the case, it may not be out of place to give a brief *resumé* of the received facts regarding the nature, causes, and prognosis of the affection. The diagnosis and treatment require no notice, as the former is unmistakable, while the latter is unnecessary, and never enforced, as far as I am aware, as the disease tends to a spontaneous cure.

A learned essay on the subject was written by Dr. Fischer, of Illnau, and translated by Dr. Arlidge, in 1854. Dr. Stiff, of Nottingham, gave a very full account of the affection in the *British and Foreign Medico-Chirurgical Review* for 1858; and more recently, Dr. Nicol, now of Bradford, contributed to the same periodical a well-written paper on the subject in 1870. From these papers, and from my own observation, the nature of the affection may be briefly stated.

The tumour, as it is so called, may occur in one or both ears simultaneously, but generally in one at first. The particular parts affected are those where cartilage is present, viz., the helix, its fossa, the antihelix, triangular fossa of the antihelix, concha, antitragus, and tragus. Several of these parts usually, sometimes the whole of them, are affected together. The lobule is absolutely exempt; for this reason, that it contains no cartilage. The swelling is more prominent on the anterior surface of the ear. Its size varies in different individuals, and in the different stages. In most cases, on its first appearance, the swelling ranges from the size of half a walnut to double, or even more than that; the organ becomes much misshapen, as the natural elevations and depressions become obliterated in the parts affected. In colour, the tumour is purplish; the temperature is often locally increased; common sensation is more acute than usual, and the integument is tense and tender to the touch. Sudden in its onset, and rapid in its growth, its maximum size is reached in a few—often four to six—hours. The swelling commonly begins to lose its acute-looking character, and gradually to subside in about a week, and appears quiescent about the tenth day, although three or four weeks may elapse before such a condition occurs, depending, as I believe, on the usage to which it is submitted. The swelling at first essentially consists of blood, effused between the cartilage and the perichondrium; and here it may be mentioned, that this effusion has been seen to be preceded by a hyperæmic condition of the parts. By and by the effused blood resolves itself into its visible physical constituents, blood-clot and serum; and later on these contents become partly absorbed, partly organised, the result being a tough, irregular, misshapen mass, composed in part of newly formed yellow-fibrous cartilage, and in part of the original cartilage hypertrophied. In many cases, after a year or two, the tumour shrinks a good deal, almost disappearing, leaving the ear shrivelled and puckered, and its cartilages hard, as if they were ossified, although only very little thickened. Regarding this affection, it may be remarked, that it is very unusual for a second attack to present itself in the same ear; also, that it does not seem in any way prejudicial to correct hearing; on the contrary, in some instances it has appeared that the special sense was intensified. The case of a gentleman in the Aberdeen Asylum was striking in this respect. He was the subject of chronic mania, and had hæmatomatous disease of both ears so extensive, that both apertures were almost occluded, yet the acuteness of his hearing was something remarkable.

The affection does not seem to be confined to any particular form of mental disorder. Some have considered its presence more common in dementia, and certainly it does occur quite as frequently in that as in any other form; yet cases of it are present in all the classes. Before me are

the notes of fourteen cases that have come under my notice in the Aberdeen Asylum, and in this institution. To enumerate these: the affection occurred in two cases of acute mania; in four of chronic mania, one of which threatened dementia; in four of dementia, one of epileptic mania, one of epilepsy, one of melancholia attonita, and one of general paralysis. Several other cases were known to me, but unfortunately no accurate notes were kept of them. The affection is generally observed to take place when the general physical health is below par, when the circulation is feeble, and the respiration inactive; exceptions to this, however, are not wanting, although they are few. The tumour may occur soon, or years after the commencement of the mental affection, and is common at any age after thirty. Its occurrence is not frequent, and is less so than formerly, yet it is impossible to give an average percentage, as the comparative numbers in each asylum are so widely different; e.g., in Dr. Nicol's report it is stated that two cases only were present among seven hundred females, while in this institution there are three well-marked cases among seventy females, and six among seventy males. These latter numbers may be considered large. It is noticeable that in most asylums the disease is more frequent in men than in women.

The sane, I think we may safely say, are free from this affection. Two cases, certainly, are mentioned in Dr. Fischer's essay, but their nature has been considered doubtful, the individuals being more insane than otherwise, if we may judge from the description of them.

The causes to which the affection is attributed are almost as various as the writers on it. Here it is only practicable to mention one or two of them. In Dr. Fischer's time it was the generally received opinion that the invariable antecedents of the affection were some dyscrasia, almost or quite peculiar to the insane, as the predisposing, and some external irritation, or violence, as the exciting cause. Dr. Stiff concludes, that the affection is the result of a true hæmorrhage, consequent upon impaired texture of the coats and laceration of the small blood-vessels of the perichondrium, and that it is produced by causes analogous to those that excite cerebral apoplexy. Dr. Sankey's view of the cause is, that the bones of the skull in lunatics become, in many cases, more compact and dense, causing obstruction to the flow of blood through them, and that the result is œdema of the parts from which the veins come. Such a mode of causation is legitimate enough, and very ingenious, however, I would here state, that hæmatoma does not invariably result from such a condition of the cranial bones, for in my possession is a skull of most unusual density and thickness (in some parts more than half an inch thick), the subject of which was a lady who died while in a state of chronic mania, yet no hæmatoma was present. The prevailing idea is, that the cause of the affection is a blood-dyscrasia, casually connected with some general excitement and some mechanical influence. The mechanical irritation may be violence, self-inflicted or otherwise. Many deny that violence has anything to do with it; yet, although believing it to be of very rare occurrence, if we consider that a person is predisposed, it cannot be denied that, if violence were administered, it should be a highly exciting cause. At one time it was believed that a blow was the common cause, and that idea was favoured by the fact that the left ear was more often affected; which, indeed, would be naturally struck by the right hand of an aggressor. Dr. Nicol states that sufficient external irritation is supplied in every case by the unfavourable condition of the ear during recumbency, and that the disease is less frequent in women, on account of the protection afforded by the natural and artificial coverings of the head.

The prognosis of the mental condition in individuals the subjects of hæmatoma is most unfavourable. Recovery is mentioned as possible, and as occurring now and then; yet all observers are agreed that the presence of the affection is of very evil augury. The only individual whom I have seen or read of, as having made an absolute recovery, is the subject of the following case.

E. J., female, aged 33, married, was admitted to Coton Hill Institution on 10th January, 1870. She was under size, but plump, and well made. She was fairly educated, in average good health, and had borne several children. All the bodily functions were normal except the catamenial, which was suspended. She had been brought up in humble circumstances, under the direction of an indulgent and somewhat eccentric parent, and allowed to practise her notions, which were the opposite of sedate or slow. Her charms secured her a very respectable marriage settlement, but her married life was somewhat marred by domestic worry. On her admission, it was stated that this was the first attack, and that its duration was three months. No particular cause was given, beyond that she had been grieved and disheartened at their unhappy and apparent embarrassed condition. From the time of her coming here, until August, 1872, she was the subject of acute mania, with strong suicidal and homicidal tendencies, having attempted drowning, starvation, and even to bury herself alive. At times she re-