

TWO CASES OF INSANITY FROM DRUGGING OF UNUSUAL DURATION.

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DURING a period in which I filled the appointment of assistant-physician in the Sligo and Leitrim Asylum two very interesting cases of insanity were admitted. Inasmuch as these were preceded by the admission of two exactly similar cases some time before, and as in an etiological point of view such cases seem to be rare, or rather the report of them, I beg to record these two.

O. and P. G.— were admitted into the Sligo District Asylum in Oct. 1878. Their ages were respectively twenty-five and twenty-one years, and up to the occurrence for which they were admitted had always been very healthy young men in mind as well as in body, belonging to a family in which there was no hereditary trace of insanity whatever.

On admission the younger brother was the worse of the two; he seemed in a state of semi-stupor; would not speak when spoken to, or rouse up when shaken, even roughly. The temperature was a little raised. The eyes were congested, but with pupils only slightly contracted; whilst the pulse was quiet and strong, but somewhat labouring, and the respiration natural. The tongue indicated catarrh and an irritated mucous membrane, and here and there an ecchymatous spot showed, with a tinged conjunctiva and a muddy skin, a mal-depurated blood.

The older brother did not present any marked mental disturbance, and, indeed, gave a very clear account of the cause and onset of the disorder for which he was admitted. Still, in a legal sense, this account could not stand good. He spoke of the circumstance of himself and his brother being in the company of a man who some time before made use of a threat towards them; who, moreover, had certain reasons to do so; of taking from this man, who possessed a knowledge of drugs, some whisky and tea—a small glass of the former; and of remembering no more since taking the tea and whisky until he found himself on the way to the asylum, when he felt, as he did now, that he was being brought to some place of confinement, but what its character, or for what reason he was conveyed hither, his perception was too dull to realise. Altogether his nervous system was in a state of depression following upon an undue excitement of it. The pulse was quick, and showed diminished tension, with sudden ascent. Like that of his brother, not only was the tongue extremely red at the margins and tip, with a white centre, but there were the further evidences of irritation afforded by a marked abdominal tenderness. However, there were no vomiting and diarrhoea.

The police who brought the men stated that they were seen proceeding in a cart from a small village (where the last-mentioned patient said they partook of refreshments) in a highly excited state, which appeared so like intoxication that they were arrested and confined in barracks. However, this condition not passing away as intoxication should, a medical man was summoned, and the men were sent to the asylum.

But it is the after-progress which is interesting. Up to this they suffered from what may have been the ordinary effects of some combined poisons.

For some days the condition of the elder brother appeared to improve; the tongue cleaned, the pulse got normal, and the only apparent mental aberration was an unusual solicitude for the welfare of his brother, with a corresponding melancholy, and a want of an intelligent realisation as to circumstances and surroundings.

Then, psychologically considered, as if the emotional and ideational faculties of the mind became morbidly exalted by these very circumstances, with accompanying enfeeblement of its inhibitory intellect, or that the effects of toxic influence continued to react on the nutritive processes of the brain, fraternal solicitude grew to dread of impending evil, and this to well-marked melancholia. Thus, after the lapse of some few days, the patient used to say, "Whatever you are going to do with me, good people, do it now; but don't injure my friends or my brother." Later on he refused his

food, would not speak, had to be forcibly taken about, and his eyes and expression betrayed an inward terror when he was approached, but it was not the expression of intellectual insanity. He remained in this condition for twelve months, during which time he had to be fed with a tube. He grew much emaciated, all the bodily functions were performed languidly, and a fair trial of medicine had no effect on his acquired fatuity. At the end of these twelve months his bodily health improved; he was got to work gently on the farm, and was now and then prevailed upon to eat by the food being first introduced to his mouth. A month afterwards he escaped to his home; he was brought back by an attendant, to whom he narrated all the preceding incidents of his asylum experience, but ceased to talk on coming near the institution. Very soon afterwards, guided by this action, the superintendent wisely allowed the patient to go home, who, in some weeks after, enjoyed his former health and feelings.

After the disappearance of the peculiar somnolent state which the younger brother suffered from on admission, his progress presented no difference to that of his brother, which constitution could not account for. He made use of the same expression relative to his mysterious and impending fate; however there was no one concerned in it but the "ego," and this alone would point out the similarity of their insanity. Naturally possessed of less exalted emotion, younger, and, judging from the state on admission, perhaps the subject of a larger dose of the deliriant, the poison had a more general effect and disturbed the cerebrum and sensorium alike. Thus, whilst continual claspings of the hands, certain religious acts and use of the foregoing expression pointed to the emotion,—an inability to recognise his brother, to tell his own name, and the exaction of a promise from the attendants to have him released in five years and so many days, and this on their knees too, proved to my mind intellectual insanity. He continued for six months in this condition, during which time he had once to be forcibly fed. All along his bodily health was good, but on many occasions his pulse, usually slow, went as low as 38. His mental state never varied in character, though now and again in degree, until July of the same year, when he caught typhoid fever, which was free from delirium, and which, though followed by pyæmia of an aggravated type, left the mind in a restored condition.

The temporary nature of mental derangement occasioned by drugs is the chief distinguishing feature between it and ordinary insanity. That a single dose, at all events, of a poison causes symptoms only so long as it is present in the system, these symptoms ceasing almost with its elimination, is the prevailing idea. But in the preceding cases a single dose caused an aberration in one case which lasted over a year, and in the other an almost similar condition, which would in all probability have lasted as long did not the zymosis of a fever cause some counteracting change in the nutrition of the brain. In these cases, therefore, the idea of mental perturbation depending on the presence of a poison in, or its effect on, the blood, so as in the first case to cause persistent irritation of the brain cells, or in the second to prevent healthy assimilation, is untenable. It seems, then, probable that the poison effected some change directly in the nervous tissue itself; and whether the persistence of the effects depended on the hindering or alteration of metabolic processes, or the prevention of the removal of the chemical products of unusual brain force, and so the interruption of harmonious relation and uniform discharge, is interesting to consider. Again, neither scientifically nor clinically considered, would at least one of the preceding cases find a place in the generally useful classification of Esquirol, or in the intellectual or emotional forms of insanity of some writers, for this case was equally emotional and intellectual. Possibly it might be classed as an ideomotor form of insanity, with depression. And here I would with deference suggest that were we to make better use of metaphysics—which takes the student so many weary hours to conquer—in the way of adaptation towards the clinical phenomena of diseased mind, insanity would be placed not only on a more scientific footing, but on a more progressive one, and it is only to express my meaning that I adopt the above nomenclature. Granting the existence of an "ego," it seems to me to be quite possible to study clinically the component parts of the mind. At least, an attempt in such a direction might make this worthy study more interesting, and help to cause it to keep pace with the other branches of medicine, and so elevate it from its long-

standing, almost stationary condition and meaningless etiological classifications.

With regard to the drugs given in the preceding cases I have no idea, except that *cocculus indicus* might have been procured; but with this it is highly probable there was some irritant mixed.

Park-lane-terrace, N.

ON A CASE OF PROLONGED ENDURANCE; AMPUTATION AT SHOULDER; RECOVERY.

By JAMES ARTHUR, L.R.C.P. & L.R.C.S.E.

ON May 3rd, 1881, I was summoned to attend S. B—, aged forty, who had sustained an accident in a coal mine. Learning that the injury was serious, and that the man could not be got out, I descended the shaft, about a thousand feet in depth, and after travelling more than a mile into the mine, the last fifteen yards crawling over fallen *débris* in a space twenty-two inches in height, I found the man sitting in a crouching position with the thighs flexed on the body and the legs flexed on the thighs, by the side of a "tub," an iron box about three feet square and eighteen inches deep mounted on four small wheels. A huge stone in the roof about twelve feet square had come down and caught his right arm while resting it over the edge of the tub close to the shoulder, at the same time his hand was resting over the tub in front. In this position he was held fast by the hand and near to the shoulder, the arm being inside the tub and his head bent forward on to his chest. My first effort was to stop the hæmorrhage, and for this purpose I tied a piece of tarred rope (the only thing in the shape of an antiseptic ligature I could lay my hands on) round the arm, compressing the artery against the head of the humerus. The accident occurred at 8 A.M., and at 11 A.M., notwithstanding the utmost exertions of the workmen under the personal superintendence of the manager, the prospect of extrication seemed more remote than ever. This is not to be wondered at when it is remembered that the unfortunate man was hemmed in on both sides and behind, and that only two men could take part in the work at a time, in a narrow space, twenty-two inches in height, with the probability of a further fall of stone crushing all present. I then advised the man to allow me to amputate then and there, which would permit his immediate removal and end his suffering, which was becoming more acute as he was recovering from the state of shock. To this he agreed on condition that I would give him chloroform; but that I considered could not be risked in his doubled-up position. Even without chloroform the risk of operating was great in such a small space, lying as I was on my stomach, in a hot and stifling atmosphere, with only the light of a few "Davy" lamps, each equal to about a wax vesta; I therefore gave him some brandy-and-water and the work was proceeded with. At 4 P.M. I was joined by Dr. Wilson, who agreed with me that a rough amputation at first was freer from danger than the delay. At 5 P.M. he was liberated, after enduring nine hours of agony in an immovable position. Beyond seeing to the security of the ligature, nothing was done until the man was taken out of the pit and conveyed to his own house. The hand at the middle of the metacarpus was hanging by a few shreds; there was a compound fracture at the surgical neck of the humerus; the floor of the axilla was opened, and there was fracture of the third, fourth, and fifth ribs. The attention of Dr. Wilson was wholly engaged with the administration of chloroform, rendered more difficult by the disturbed respiration and increasing dyspnoea; there was then no professional assistance to whom the controlling of the hæmorrhage might be entrusted. I therefore first performed the ordinary operation of ligature of the axillary artery and vein, and then amputated at the shoulder-joint by an outer semilunar flap. The head of the humerus was disarticulated with some difficulty, owing to the shortness of the fragment. There was not sufficient skin to form the lower flap perfectly, and the edges were brought into apposition with slight stretching, and maintained by wire sutures. The after-treatment was complicated by the supervention of broncho-pneumonia with hæmoptysis from the damage done to the lung by the fractured ribs. On the sixth day the temperature reached 103°, on the twelfth it was normal and the sutures were removed;

union had taken place at the anterior and posterior fourths of the wound, while at the middle and lower part the flap had retracted, leaving a granulating surface, which very much lengthened the period of convalescence. Antiseptic precautions were observed throughout; two grains of quinine given thrice daily for the first week, opiates and expectorants for the lung affection, the most nutritious foods, but no stimulants until the end of the first month, when a glass of beer to dinner was allowed. Excepting a surface the size of a sixpence, which is rapidly cicatrising, the patient is now (July 30th) quite well.

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CASE OF ACCIDENTAL POISONING BY SULPHATE OF ATROPIA; RECOVERY.

By THOMAS FITZMAURICE, L.R.C.S.I., &c.

AT 7 P.M. on Wednesday, August 3rd, I was called to Minsterley to see a female child, E. J—, aged two years, who had been on a visit with friends at the above village, and who was taken suddenly ill two hours previously. On the road I was met by a second messenger, telling me to ride as quickly as possible, that the child had taken poison and was dying. On my arrival I found the little sufferer in a very grave state. It seems the child's aunt, with whom she lived, had been suffering from iritis, and on the day in question emptied her eye-drops (although marked "poison") into a tea-cup, the contents of which the child drank, with the following results: Violent clonic spasms, recurring at intervals of five minutes; pupils dilated till the iris had almost disappeared; skin hot and dry, but I could not observe the eruption supposed to be present in poisoning by this drug. One symptom which was most painful to witness was the mirthful delirium; in the intervals of repose she laughed, called at imaginary objects, and at times for her mother, whom she could not recognise on presenting herself.

Although this was the first case of the sort I had seen, it was not difficult of diagnosis. I administered an emetic of one teaspoonful of mustard in a cup of tepid water; this having no effect was repeated in ten minutes, but with the same result; then two teaspoonfuls of castor oil. I heard afterwards she was given the same quantity of oil before I saw her. Having sent for other emetics, a stomach-pump, &c., and seeing the case becoming more serious, I gave another teaspoonful of mustard in water without avail. I may mention the child swallowed each cupful ravenously, which plainly showed the parched state of the mouth and fauces. In a quarter of an hour after the last emetic she was given thirty minims of ipecacuanha wine, which was repeated in ten minutes, when she showed signs of nausea, and soon afterwards, to the delight of her friends and myself, vomiting commenced, when the stomach was emptied of a pint of fluid mixed with undigested food. Then the temperature fell. A copious perspiration broke out on the skin, which before was hot and dry, the spasms became less frequent and of shorter duration, but the pupils still remained dilated. At 10 P.M., in consultation with Mr. Elmslie, I gave her solution of potash and tincture of opium, of each two minims, to be repeated every hour till morning, with soda-water and milk to drink.

On calling next day most of the symptoms had disappeared, except one, which I did not discover before—viz., a peculiar dragging of the left lower extremity, resembling that of paraplegia. Whether this will remain permanent I cannot say, as mother and child left for their home at Birkenhead on the 7th inst.

On inquiring from the chemist who compounded the drops, I found that they consisted of liq. atropia sulph. (B.P.); and as the child's friends were confident that she took at least a teaspoonful of the fluid, it would represent a half-grain of the alkaloid, which I believe is an unusually large quantity to recover from.

The points I consider important in this case are—(1) The persistence of the stomach, skin, or bowels to act, and how the first being emptied the other two in the order named were called into action. (2) The difficulty to use a stomach-pump with safety from the frequent recurrence of spasms. (3) The affection remaining in the lower extremity.

Pontesbury, Shrewsbury.