

11. A married lady, dysmenorrhœic. After several years of marriage, a still-born child.

12. Two ladies—aunt and niece. The former a widow, metrorrhagic and dysmenorrhœic, no children. Says that no member of her family ever escaped gout. Tendency to bronchitis. Niece metrorrhagic only.

I have on two occasions been called to see young ladies who were almost cyanotic in paroxysms of asthma. One of these was a dysmenorrhœic, with gouty heredity, and I was surprised to find that the only treatment for her asthma had been stramonium, or datura tatula cigarettes, and a cough mixture. As she was about twenty-six years of age, and had been subject to these attacks for about ten years, I am afraid that the disease had taken too strong a hold to be easily cured. The other case was in a rheumatic patient, who was about sixteen. She had had a few scanty periods with much suffering, and always accompanied by severe asthmatic attacks. Cough mixture, and hot gin, or whisky and water, had been considered sufficient treatment for her.

I cannot, unfortunately, offer any suggestions derived from my own experience as to successful treatment, as I have never, except in one case (No. 3), seen the patient again. As a general rule, cinchona, iron, and abstinence from sweets, acids, and, above all, milk and cheese, may be found of service, and, where practicable, recourse should be had to those mineral waters which are of service in gouty and rheumatic cases. Turkish baths are serviceable, and salt-water baths, under proper precautions, most beneficial. Flannel should always be worn next the skin. I must not omit, however, what is perhaps of equal importance with iron—cod-liver oil. It should enter into the daily diet of these patients, and be as familiar an article of food as toast, potatoes, or tea.

ARTICLE III.—*Notes on a Case of Chronic Chloral Poisoning.* By T. INGLIS, M.R.C.P.E., Royal Edinburgh Asylum.

F. S. P., æt. 47, shopkeeper, admitted to the Royal Edinburgh Asylum, under certificates certifying that he was labouring under "great mental debility, impaired memory, was noisy, at times violent, and had delusions."

Family History.—Patient's father died of kidney disease at an advanced age. Mother "nervous," died of paralysis. Two sisters neurotic and eccentric. A brother was a confirmed dipsomaniac, and died of brain softening. Patient is a man of average intelligence and business capacity, of a neurotic temperament. Had generally enjoyed good health, but has been subject to asthma. His habits were temperate, and till three weeks before admission had been "teetotal" for ten years.

History of Present Attack.—About seven years ago patient was ordered by his medical attendant a mixture containing the hydrate of chloral and the bromide of potassium in order to relieve a spasmodic retention of urine, of which he then complained. He took about a drachm of each of these drugs daily for six years regularly, and during that time neither he nor his friends observed any hurtful effects, either mental or bodily. Patient confesses, however, that the drug had enslaved him to some extent, as he felt a desire for its sedative effect apart from its medicinal action, somewhat akin to the drink-craving of the habitual tippler.

Six years after patient began taking chloral he had an attack of bronchitis, and was ordered a mixture containing chloral (no bromide this time) to allay the breathlessness and procure sleep. The recovery from the bronchitis was rapid, but at the same time extra business cares, and the death of his brother, brought on some mental depression, and he sought oblivion in chloral. At first a 60-grain dose was the quantity taken, but was gradually increased till he took 180 grains per diem. Till six months before admission he was able to attend to and transact business, carrying the bottle with solution of chloral in his pocket, and taking a dose every hour, or even every half-hour. The sedative effect of the chloral was produced in from five or ten minutes, and lasted from half-an-hour to an hour. He never exceeded a dose of ten grains at a time, or took a larger one at night, but if he chanced to waken he repeated the dose. Sleep was not induced, but a calmative soothing feeling; and with each dose a dreamy sense of comfort and *bien-être* stole over him, seeming to raise him above the cares and anxieties of life. The effect seemed to be somewhat akin to that of opium, except that there was no tendency to sleep. He complained of no headache, vertigo, or active sense of depression as result of the drug, but a feeling of lassitude and nervous debility and exhaustion arose, together with an inaptitude for work, and incapacity for continuous thought. He became irritable and peevish, and when anything occurred to annoy him chloral was his sole panacea.

There was also a permanent weakening of the digestive powers, his appetite declined, food lost its relish, and he took little nourishment. Nausea and sour eructations were complained of, and vomiting occurred frequently. He began to be troubled with piles, and the *faeces* became hard and white. He had slight jaundice, but no flushings, cutaneous congestion, or rush. During all this time he took no stimulants.

As he abandoned himself to the fascination of chloral eating, and the "tyrant custom" grew upon him, his friends observed, together with the intellectual infeeblement, a distinct moral alienation, a perversion of his whole affective life and character. He became untruthful, deceitful, the natural affection for his wife and children became blunted, a diseased dislike taking its place. He

grew irritable and passionate, and at times threatened violence to his wife. In spite of her entreaties, he would leave the house and wander aimlessly about the streets, not knowing whither he went. He became regardless of duty and self-respect—in short, he had drifted imperceptibly into moral insanity.

Three weeks before admission he discontinued using the chloral, and took to whisky instead. He did not drink enough to produce complete intoxication, but sufficient to keep himself in a chronic condition of muddle and confusion. In a day or two he became restless, excited, and quite unmanageable. Diarrhoea set in, and was followed by a great discharge of blood from the bowels. He grew violent and impulsive and threatened suicide. Then he got into a state resembling delirium tremens. The special senses became perverted, imaginary voices mocked him, while spectral snakes and loathsome animals surrounded him. Sleep almost deserted him, and was broken by haunted dreams “with dreadful faces throng’d and fiery arms.”

This terrible condition was terminated by three severe epileptiform attacks, following each other at intervals of four hours. The paroxysms were of the true epileptoid type, and were attended with complete unconsciousness, arrested respiration, clonic convulsion, and tonic spasm. He foamed at the mouth, and bit his tongue severely. The after-stage of stupor succeeded, leaving him in an extremely weak and precarious condition. Rallying he again became noisy and excited, and was sent to the hospital, but was discharged as the maniacal outbreak was transient, and as not being a fit patient for a hospital. He was then sent to the asylum.

State on Admission.—Patient is a man of average height and development, and appears prematurely old and broken-down. Is in a very weak anæmic state, being unable to speak above an undertone, and can hardly walk. Expression blank and vacant. Eyes dull and meaningless.

Mental.—The predominant mental symptom was great enfeeblement of mind. He was perfectly silly and childish, and almost imbecile in manner. There was no excitement, but rather slight depression of mind. He was very emotional, and would laugh and cry alternately without adequate cause. He took no interest in what was going on around him. His replies to questions were rambling, disconnected, and often incoherent, he being unable to sustain a conversation of any length, or carry out a consecutive line of thought. Memory was much impaired, indeed almost obliterated, he could not tell his age, or where he came from. Had vague fleeting delusions on various subjects, as that the Queen took a special interest in him.

Bodily Nervous System.—There was persistent muscular tremulousness of the upper and lower extremities, causing great unsteadiness, so that he required assistance to be able to walk, and the finer acts of co-ordinative power, as writing, whistling, could

not be performed at all. The tongue was furred in the centre, tremulous throughout, with fibrillary twitchings at the edges, and it was pointed markedly to the right side. Articulation was impaired, being thick and indistinct. The pupils were equal, dilated, irregular at the margins, and insensible to light.

The right side of the face was partially paralyzed and wanting expression. The reflex action of the cord was much impaired. Common sensation was acute, verging on hyperæsthesia. He complained of sleeplessness and exhaustion, but had no headache or neuralgic pains.

There was no cutaneous eruption. Muscularity poor and flabby. Conjunctivæ yellow. Respiratory and circulatory systems normal. Pulse 67, weak and thready. Temperature 97°. Urine, specific gravity, 1005. No albumen, sugar, bile, or tube casts. Could only make water at night, when it was passed in large quantity, was clear and limpid, resembling the urine of hysteria. Bowels were again confined, fæces hard, and of a white colour.

Progress of Case.—No chloral or any narcotic was given after admission, and, in spite of the patient's pleadings for soporifics, they were entirely withheld. For some nights he hardly slept, but had short snatches of sleep during the day. Was ordered a tonic mixture containing strychnine, strengthening diet, and as much exercise in the open air as he could bear. The regular action of the bowels was promoted by gentle aperients, active purgation being avoided, it being considered that the constipation resulted from the partial paralysis of the trophic centres.

The appetite for food returned slowly, but he gained in flesh and appearance very rapidly. Pulse increased in strength, and the temperature rose to 98°·4 F. in a few days. The motor tremulousness and the paralytic symptoms disappeared in an astonishingly short time, the disturbance of the articulation and the facial paresis passing off first, while the reflex action and sensation more gradually recovered their normal tone. Pupils remained dilated for about three weeks, but their outline became regular, and they contracted normally under the influence of light in a few days.

Mentally his convalescence was equally speedy. The delusions were dissipated in a day or two. Memory and coherence soon returned, the recollection of the events during the latter part of his illness remaining a perfect blank. After a short stage of stupor and confusion his intellect regained strength by degrees, and his emotions and affections resumed their natural condition. He was discharged "recovered" three months after admission.

Remarks.—Although chloral has now been extensively used by the public as a popular hypnotic for some years, and frequently cases of acute poisoning following an excessive dose, taken inadvertently or with suicidal intent, are recorded in the

medical journals, cases of chronic poisoning by chloral are much rarer, and the symptoms recorded in these are variable. Generally, however, habitual chloral drinking has been found to cause bodily disorders such as paralysis and neuralgia, and to act prejudicially on the mental powers. Insanity is sometimes caused by its abuse, but few such cases find their way to asylums, as the disorder is generally transient, and the class of patients using chloral can afford to be treated at their own homes. The patient in this case was by family history and diathesis predisposed to nerve-tissue degeneration. The exciting cause of his illness was chloralism. The drinking outburst is to be regarded as a symptom which concurred with the other causes, "producing a progressive effect, the end of which was the evolution of madness."

Dr B. W. Richardson, in Report on Toxicology (*Medico-Chirurgical Review*, January 1872), has noted some of the symptoms of chronic chloral poisoning—viz., sleeplessness, mental irritability, muscular prostration, uncertainty of movement, caprice of appetite, and frequent nausea. "In some cases there is injection of the conjunctivæ, and in other cases yellowness. The urine in extreme cases contains albumen, and the bowels are commonly constipated, the evacuations being white and hard. Chloral hydrate does not produce the ecstatic dream or delirium caused by opium or haschish; on the contrary, it causes, through all the stages of its action, a sense rather of depression than of elevation of mental faculty."

The greater number of the symptoms were present in this case, along with others of even graver import than those recorded by Dr Richardson, as the delirium, paralysis, etc., which have been also observed by other writers.

Dr Grainger Stewart (*Edinburgh Medical Journal*, June 1870) mentions a case of temporary insanity, accompanied by delirium, caused by chloralism, the patient fancying he saw rats and mice running about him.

A case resembling this one in some particulars is recorded, in the *American Journal of Insanity*, of a lady, who, in consequence of the protracted use of chloral was utterly prostrated by the urgent dyspnoea; facial paralysis, and all the signs of cerebral effusion, were present.

Schüle¹ was the first to demonstrate by means of the ophthalmoscope the congested state of the interior of the brain in a chloralized patient, and showed that after a quantity of alcohol had been injected, the congestion was increased, and continued for some days. The paralyzing influence of the chloral on the vasomotor nervous system was also recorded, causing insufficient innervation of the cutaneous vessels, producing the flushings, erythema, and petechiæ generally observed, and in this instance bleeding from the nose, hæmorrhage from the bowel, etc., involv-

¹ *Allgemeine Zeitschrift für Psychiatrie*, bd. 28, heft 1.

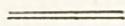
ing also the higher centres in the brain and medulla, and so causing the delirium and paralysis. It has been proved that chloral exercises a powerful action on the par vagum, causing dyspnoea and palpitation.

The paralytic effect on the pneumogastric and the gastric branches of the sympathetic in this instance produced the nausea, eructations, and vomiting complained of. The symptoms of hepatic disorder, viz., the yellow conjunctivæ, the slight jaundice, hard white fæces, and secondarily the hæmorrhoids, are to be traced to the paresis of the nervous supply to the portal system (the cœliac plexus and pneumogastric), causing paralysis, relaxation, and passive congestion of the bloodvessels. Chloralism also invariably reduces the temperature — the temperature of F. S. P. being considerably below the normal standard.

The neuralgic pains, frequently complained of, were absent in this instance, but were present in two patients, who had been treated with chloral in the asylum, which ceased when the habitual dose was discontinued.

The paralyzing effect on the mental faculties, and the moral deterioration produced by the drug, bear a striking resemblance to the psychical changes observed in dipsomania. The symptoms are, in fact, almost identical, with, however, this exception, that while in this case at the same time the bodily disturbances evanesced, the patient appeared to get rid of the mental derangement. This does not occur in the dipsomaniac, he retaining all the deceitful and lying tendencies and moral alienation of his disease when sober, thus rendering the prognosis of chloralism as regards relapse in a measure more hopeful.

The total discontinuance of the chloral, the alterative and tonic effect of strychnine (which is regarded by some as an antidote for chloral), and the physiological life enforced by asylum discipline, all no doubt contributed materially to the recovery of the patient.



ARTICLE IV.—*Notes and Remarks on Three Cases of Puerperal Convulsions.* By T. M. LOWNDS, M.D., Egham, Surrey.

CASE I. occurred at Mt. Aboo, Rajpootana, Bengal.

Mrs —, the mother of several children, was prematurely confined of a stillborn child, 27th April 1855, and had progressed fairly well until the 4th May, when she was attacked with an hysteric fit when sitting up in bed. It should be mentioned that, before and after her confinement, she had suffered from headaches, not of a severe character, which were always relieved by stimulants. She had also had diarrhœa for three days before confinement. On the morning of the seizure, she had remarked she was better than usual, but just before the fit had sent away her children, saying,