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Original Communications.

ON THE INTERNAL ADMINISTRATION OF  
CHLOROFORM IN CONGESTIONS.

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THE two following cases are reported to illustrate the almost instantaneous action of chloroform in controlling congestions:—

CASE I.—*Congestion of Lungs and Brain.*  
L. H., bachelor, aged 25; workman in glass-works in summer, music-teacher in winter; temperament nervo-sanguine, constitution strong. In 1863, having previously been a sailor, he enlisted in the navy, and was attached to an iron-clad. During an engagement, as he was standing between decks, with his back against an iron stanchion, a shell struck the upper deck, directly over his head; and the thrill communicated to the stanchion threw him forward upon the deck, insensible. For five months, he was disabled, being partially paralyzed, and unable to straighten himself. On his recovery he enlisted in the cavalry, but, after a short time, while on the march in a hot sun, he fell from his horse insensible, and was supposed to have a sunstroke. This was followed by a prolonged sickness, in consequence of which he was discharged. Since then, he has had good general health, but has had two attacks of violent convulsions and delirium, beginning with hæmorrhage from the lungs, and each followed by an alarming illness of several weeks, judged from the account of symptoms to have been brain fever. He has also been subject to severe headaches, accompanied with numbness of the left side.

On June 8th, 1869, he was well until 1, P.M., when he was attacked with headache, and went to bed. Shortly after, he felt great oppression at the chest, and expectorated a little frothy blood. He then became convulsed and delirious.

Was first seen by me two hours after the first attack. Was then wildly delirious, requiring to be held by several men; struggling for breath; clutching at the chest; face and lips livid; pulse 100, very full and

hard; pupils slightly and equally dilated, not sensitive to light; patient entirely insensible to all external impressions. On auscultation, respiration was found to be chiefly tubular. This condition soon gave place to an epileptiform convulsion, with total insensibility, opisthotonos, but no frothing at the mouth. After some minutes, relaxation took place, he became partly conscious, and, after dozing a few minutes, again became wildly delirious. This alternation, I was told, had continued from the first. Had also short, convulsive cough, without expectoration. These symptoms leading me to a diagnosis of congestion of the lungs and brain, I gave, by the mouth, chloroform 3ss., with fl. ext. ergotæ (Squibb's), 3ss., applied mustard to the chest and ice to the head, after cutting the hair short. In less than five minutes the breathing became deep and natural, he ceased to clutch at the chest, the lividity of the face disappeared, and the pulse became softer. From this time he had no convulsion, but was actively delirious, at intervals shouting and struggling, for two hours longer, during which time the same dose of chloroform and ergot was repeated every half hour. At 5, P.M., he had ceased to be delirious, and slept naturally. I gave a cathartic, and left him till 7, P.M. On my return, he was awake, quiet and rational; pupils normal; breathing naturally; feeling extreme exhaustion; left arm and leg completely paralyzed. Pulse very soft, 120. From this time there was no return of the symptoms. At 9, P.M. he was given a pill of morph. sulph., ext. belladon., aa gr. ½. He slept pretty well, vomiting once and having one dejection during the night. The next morning the paralysis had disappeared; and, in the afternoon, he sat up, but felt very weak, and had nausea and occasional vomiting. This was entirely relieved by one five-grain dose of subnitrate of bismuth. He also had one grain of sulphate of quinine every three hours. On the sixth day he walked out and came to my office, and soon afterwards returned to work. Since then he has had excellent health and no cough; but has had occa-

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sional headaches, especially after violent exertion. A thorough examination of the lungs has shown them to be free from disease. This attack was said by the patient and his friends to be precisely similar to the two he has had since leaving the army, beginning with hæmoptysis, and going on to convulsions and delirium; but they were each followed by several weeks illness, with symptoms described like brain fever, and a tedious convalescence. The instant relief of the pulmonary and cerebral congestion I attribute to the chloroform, which was aided a little later by the ergot, my experience of whose value in convulsions has been most happy. It is probable that, by this early relief of cerebral congestion, an attack of cerebral inflammation was evaded.

CASE II.—*Hæmoptysis*.—W. B., widower; aged 51; commercial traveller; temperament nervo-bilious; of phthisical family; constitution originally very strong, but now broken by hard work and dissipation. For several years has suffered with asthmatic cough and dyspnoea, but has not had hæmoptysis.

On the morning of July 16th, 1869, did not feel very well, and drank some hot spirits. Soon after, profuse hæmoptysis came on. When I saw him, shortly after, he had lost a full pint of bright, frothy blood, mixed with clots, and was still bleeding; felt great oppression across the chest, and said he could feel the blood flowing from a point in the lower portion and front of the left lung. I gave him immediately chloroform 3ss. The bleeding ceased, almost instantaneously, and he said the oppression at the chest was removed, as soon as he had swallowed the medicine. The chloroform was repeated three times, at intervals of half an hour, combined, after the first dose, with acid. sulph. arom. 3ss. Patient soon slept and perspired very profusely; had occasional slight cough, but no bleeding till evening, when another attack came on, almost as profuse as the first; and the next day there were two others. They were all treated in the same way as the first, with the same immediate arrest of the hæmorrhage. During the intervals, acid. sulph. arom. and acid. gallic. were given. After the fourth attack, patient was extremely exhausted, having lost nearly if not quite a pint of blood, at each attack. He was then given pills of plumb. acet. and opium, and has since had no hæmoptysis, though he has had cough and expectoration, with general debility. On auscultation, the lower half of the left lung was found full of tubercles.

The action of the chloroform, in this case, seemed to be, to relieve the pulmonary congestion, as shown by the immediate cessation of the "oppressed" sensation, and arrest of the hæmorrhage. It therefore seems to me an invaluable remedy in hæmoptysis. I have never heard of its being so used before, and would be glad to hear of similar cases.

I have also treated several cases of colic, some of them of extreme severity, with chloroform, in doses of from 3½ to 3j.; and always with immediate and complete relief. These doses are always followed by profuse sweating, and, after a few hours, by more or less nausea and vomiting, which is always, in my experience, relieved by a little bismuth. In minute doses, I have found chloroform the best of all remedies for irritating bronchial cough, and, in these cases, use it largely.

#### A CONTRIBUTION TO THE PHYSIOLOGICAL STUDY OF VERATRUM VIRIDE AND VERATRIA, WITH EXPERIMENTS.

(Concluded from page 187.)

The first peculiar effect produced by this drug, it may be noticed, is salivation; and this is followed by retching, movement of the bowels, vomiting, &c.; after this, the respiratory efforts are hurried, muscular actions are imperfectly performed, spasm of the bladder causes ejection of urine. Finally, death occurs, preceded by tetanic spasms.

Exp. V.—We will now compare with these another experiment, upon a small rabbit weighing only 15 ounces Troy.

<i>h.m.s.</i>	<i>Resp.</i>	<i>Condition of Pupil.</i>	<i>Circulation.</i>	<i>General Symptoms, Remarks, &amp;c.</i>
0.00	92	carefully examined.	240	1 centigr. inserted under skin of back, which made the animal cry out in a few seconds.
0.02 0.05	slow & jerk'g.	contract'd.	144	Animal now quiet. Champing of jaws.
0.07 0.09		dilated.	108	Large quantity of saliva oozes from the mouth.
0.11			no pulse.	Ears very cold and pale. Chest opened; heart pulsates feebly; r. ventricle and auricle distended with blood. The contraction of auricle more rapid than that of ventricle (96:48) (120:30). Pulsation of each becomes more and more feeble and irregular, although the heart is kept moist. In 33 min., there is no pulsation visible.

Examination of the body, made immediately, showed the veins turgid, fauces and œsophagus pale, no peristalsis of bowels to