

afforded. The question then to be considered is, whether in such cases strong and continued compression, or amputation, performed as I have described, will ultimately give the most sightly and useful hand.

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ART. XVI.—*Observations on the Pathology and Treatment of Delirium Tremens.* By Hugh Mac Donald, M. D., Physician to the Cavan Fever Hospital.

[Read before the Cavan Medical Association, December, 1839.]

HAVING for some years past bestowed much attention on this disease, and not being able to find in books written on the subject, or in medical journals, any thing satisfactory, but on the contrary, with very few exceptions, confused and ill-digested notions, leading, as I have witnessed, to an empirical and dangerous practice, I came to the resolution of studying the disease with diligence, and consulting books, both ancient and modern; with what success you will judge, when I lay before you the result of my researches.

This disease, which has obtained the name of *Delirium Tremens*, has not found a place in any of our systems of physic. It is not mentioned by Hoffmann, Boerhaave, or by his illustrious commentator, Van Swiéten; nor is any mention of it found in Morgagni. It is clear to me that both Hippocrates and Galen have treated of it, sometimes as phrenitis, and sometimes as fever.

Hippocrates, in the third book of the *Epidemics*, has several cases of fever, that appear to me to be examples of this affection, particularly the fourth and fifth cases, and in this opinion Dr. Armstrong seems to concur, particularly with respect to the case of Chœrion, which is the fifth case. There is also a case by Galen, in the book *De Locis Affectis*, of a young man, who, after drinking freely of old wine, was taken with fever and pervigilium, and perished delirious. In the two cases from Hippocrates, before alluded to, both were ill of fever from drinking to excess; the

first of these became delirious early, was convulsed on the fourth day, and died convulsed on the fifth day. The other recovered on the twentieth day, after a severe disease; and this case Armstrong thinks the strongest example of the disease. It is not to me at all surprizing that the ancient physicians should have viewed the disease under the aspect of fever, when I hope that I shall be able to demonstrate that it exhibits the strongest resemblance to fever, both in its pathology and symptoms.

Dr. Armstrong says, "this disease is to be considered a strictly febrile one." Though I have not been able to find it treated as a disease *sui generis* in any of those authors I have mentioned, I find Sauvages has considered it a distinct disease under the name of Paraphrosyne tremulenta, sp. 1st; and he has another species, Paraphrosyne a pathemate, sp. 7th. I think this is a very proper arrangement of the disease, but I am of opinion that in the first species there are two distinct pathological conditions of the brain, while in the other there is but one. It is from want of this distinction that the bad practice, blunders, and confusion have arisen. The generality of practitioners prescribe only for the name of the disease, as if there was always only one pathological condition of the brain.

In the first species there is either congestion of the brain, or inflammation constituting real phrenitis. From my own observation, I would consider congestion as the more common form; but I think, and hope to be able to show that real inflammation of the brain is of frequent occurrence, and it must be of the utmost importance to distinguish it from the congestive, or asthenic form. Dr. Lendrick describes such a case, in the Dublin Journal of Medical Science, for September, 1832, which he cured by arteriotomy from the temple; a practice which I have repeatedly adopted with success. Dr. Lendrick was not correct in saying that mania was combined with delirium tremens, it was only the disease putting on its frequent condition of phrenitis, which disease often resembles the most furious mania. But on the whole, the article does great credit to Dr.

Lendrick ; it is one of the best I have seen upon the subject. He does not confound the different forms of the disease ; he does not erroneously recommend great depletion in all cases, nor opium indiscriminately. The disease has sometimes been called *mania a potu*, an improper name, but proving to my satisfaction that those who gave it that name, found it under the most highly inflammatory form.

It is not my intention to describe the general symptoms of the disease, but I may remark, that three symptoms are to be found in every species of the affection ; namely, *pervigilium* ; false vision, seeing objects that do not exist ; the *pseudoblepsis imaginaria* of Cullen ; and double vision ;—*diplopia pyretica* of Sauvages, sp. 1st.—a symptom often attendant on inflammation of the brain.

When phrenitis is present it may be easily known by the admirable description of Sauvages ; “ *capitis dolor, delirium audax, vis artuum, pulsusque major, pyrexia acuta.*” And the condition of the urine will assist the diagnosis, as I have myself remarked from the following observation from Hippocrates : “ *Quibus urinæ pellucidæ albæ malæ, maxime autem in phreniticis observantur.*” Sect. iv. Aph. 72. When this state is present, which Dr. Lendrick calls “ *the sthenic form combined with inflammation of the brain,*” the remedies recommended by him are the best, and the proper, safe, and rational practice, viz. arteriotomy, tartarized antimony, and acetum opii, with cold or tepid shower baths. In the congestive form great depletion will not be borne well, and may be highly dangerous ; but moderate bleeding from the arm, and leeches to the temples, or behind the ears, will be quite necessary, and will be well borne ; and when by these means the heat of head is abated, and the pulse moderated, opium may be cautiously administered to procure sleep.

In people advanced in life, and where the liver is affected, it would be well to put the patient under the influence of mercury, as recommended by Dr. Armstrong. In some cases of

the above pathological conditions of the brain there is often present a considerable degree of gastro-enteritis, which, from the exciting cause of the disease, is naturally to be expected. In that case, along with the proper degree of depletion, as above mentioned, instead of calomel or antimony, I would recommend hydrargyrum cum cretâ, with Dover's powder, and mercurial frictions till the mouth be affected ; and also the application of leeches to the stomach.

I think the proper name for the disease would be *Delirium*, or *Paraphrosyne ebriorum*, and that it might be divided into the inflammatory, the congestive, and the asthenic forms. This last term is used by Dr. Lendrick, in his admirable article in the *Dublin Journal* ; but I intend to restrict it to the *paraphrosyne a pathemate* of Sauvages, which is the only species of the disease in which stimulants or opium can be used from the beginning, because, in this case, the disease attacks those hard drinkers from whom the stimulus has been suddenly withdrawn ; for delirium may occur from collapse of the brain, from want of excitement as well as from over-excitement. Bichat says that the pulsation of the arteries in the brain stimulates it to the performance of its functions ; and therefore, if the stimulus is not sufficient, the brain will, and does fall into a state of collapse, in the above species, and therefore stimulants have been given in such a case with great success ! Sauvages states that persons addicted to the use of ardent spirits, wine, or other fermented liquors, when they suddenly give up their use, are attacked with delirium ; their pulse becomes small and frequent ; they are tormented with thirst and headach ;—all these symptoms, he says, cease at once, upon the exhibition of the usual stimulus, whether it be spirits or wine. A great number of examples of this kind will be found in the sixth vol. of the *Ed. Medical Essays*, article 46th, by Dr. Monro, primus. He states that several hard drinkers, who had met with accidents, came into hospital under his care, who became furiously delirious for want of their usual stimulus, To some of those persons he gave

a pint of spirits in the day, by which means he cured them of their delirium, their fever, and every bad symptom, and the wounds themselves looked better, and improved the more rapidly; and he adds, all these persons were great drunkards!

If the Profession shall consider these views just, it will prevent that empiricism which has prevailed in the treatment of this disease, perhaps more than in any other; for I have seen opium given in every form of the disease, sthenic and asthenic, with great detriment to the patient; and, on the other hand, I have seen much mischief by taking a great quantity of blood from the temporal artery, when there was only congestion, and not inflammation.

This last species, the asthenic, is the one in which opium can be given from the beginning, and it may supersede the use of wine or ardent spirits.

Dr. Armstrong admits that he committed several errors in this disease, sometimes by neglecting proper depletion in the beginning, and giving opium too soon: in one case where the person slept soundly after opium, he awoke with convulsions, and died!

How did this great physician fall into error? Because it is manifest that he had no just or correct notions of the pathology of the disease. The diagnosis between the congestive and inflammatory state of the brain is a matter of the utmost importance.

The state of the blood should not be overlooked, for in the inflammatory state I found both the venous and artificial blood buffy: in the congestive state the blood is not buffy at all. Convulsions sometimes occur in the highly inflammatory state. They are not uncommon in this disease, and I think that they may be considered as a sign of inflammation of the brain. They occurred in the two cases referred to in Hippocrates; and they have been considered as occurring in phrenitis, by Hippocrates, Galen, Aretæus, and Boerhaave, the latter of whom (Aphor. 712) has the following observation: "But if convulsions follow after signs of inflammation of the brain have preceded, they are commonly fatal!"

It is not my intention to enter upon a minute detail of all the symptoms, or the practice in this disease, nor do I think it at all necessary, after what I have stated; because, if I have succeeded in establishing the true pathology of the disease on sound general principles, the skilful physician will readily adopt the proper treatment in each individual case, duly weighing all the circumstances of age, constitution, and habits of living, and, above all, the peculiar form of the disease, distinguishing its true pathological condition.

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ART. XVII.—*Observations on the increased Friability of the Lungs in the first Stage of Pneumonia.* By ROBERT ELLIOTT LINDSAY.

THE only apology that may be requisite for the succeeding observations is, that, taking into consideration the highly important subject of pneumonia, either as connected with its pathology and treatment, or the partial obscurity with which some of its details are invested, that any remarks, however apparently trivial, or tending to illustrate a point of comparatively inferior importance, may be borne with when they have for their object an explanation of one of the pathological appearances of that disease. The particular subject to be briefly discussed is the essential cause of the increased friability of the lung in the first stage of pneumonia. This may appear at first of such inferior consequence, and so unworthy of attention, as not being calculated to promote either our knowledge of the intimate nature of the disease or to assist us in its treatment, as almost to prevent our bestowing upon it that attention which it will be found it merits, or cultivating the advantages which it is presumed will accrue from it. When we take into consideration that the above-mentioned effect of inflammatory engorgement was originally described by Andral, and cited by him at one period as a distinguishing mark between inflammation, properly so called,