

CARBONATE OF AMMONIA IN LARGE DOSES IN THE SUFFOCATING STAGES OF PULMONARY DISEASES.

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I wish to call attention to a remedy capable of rendering valuable service in a time of dire extremity—an old remedy, but one among many in this class whose merits are not fully appreciated. In this day of energetic search after new remedies, it is to be feared that the well-attested merits of the old ones may sink temporarily into undeserved obscurity. While by no means opposing any effort to improve our *materia medica*, still I may question the soundness of the policy which would desert a reliable remedy for one which may *perhaps* be better.

It has been known all the time that carbonate of ammonia had a decided stimulant and supporting action to the heart; that it enabled this organ, in asthenic conditions, to propel the blood, with increased force, through the lungs and the extremities. Still, its merits were so little known that it was generally given as a forlorn hope late in diseases, and so timed that it failed of good, and warranted the remark of an intelligent druggist, that "when the carbonate of ammonia prescription came in, he next expected to be informed of the death of the patient." This censure was more due to the misappreciation of the powers of the drug than to an inherent want of power.

Let me assure you that in the suffocative stages of bronchitis of the smaller bronchial tubes (capillary bronchitis, or suffocative catarrh of some authors), and of pneumonia, we possess no more efficient or reliable remedial agent than carbonate of ammonia, given in large doses and at short intervals. It is especially useful in these pulmonary complications of the exanthemata.

My attention was first called to the use of this agent in these disorders by Dr. J. P. Thomas, of Pembroke, Ky. His valuable suggestion has stood me well in hand on some trying occasions. Once, I remember, a fond father came to my office, barely able to articulate from distress, and asked me to go to his house immediately, as he believed his little son was dying. I had seen the infant, of six months of age, late the preceding afternoon, and had prescribed a purgative dose of castor oil to be followed by a muriate of ammonia expectorant mixture, the hot foot-bath and derivatives to the chest. Early next morning this hasty summons came, and I repaired to the house to find the child suffocating, drowning from pulmonary engorgement; his head thrown back and spinal column bent backwards like a bow to take pressure off the chest; the face pallid, with a purplish tinge to the cheeks; lips white; nostrils distended; eyes of pearly whiteness; finger-nails purple; respiration rapid and panting, and pulse quick, frequent, and feeble; temperature in the axilla, 105°. Here was a case of pulmonary congestion, resulting from

acute bronchial catarrh of the smaller bronchial tubes. The treatment adopted to relieve this child was attended with marked success; he is now hearty and well, over fourteen months after his attack. I gave him, a child six months old, two grains of ammonia carbonate, dissolved in water, every two hours, in doses of two grains every thirty minutes interval, the hot mustard foot-bath every two hours, and repeated mustard plasters to the chest. In order to give an infant of this tender age two grains of carbonate of ammonia every two hours, I have found it best to give it in this way: Send to the drug store your prescription for a solution of two grains to the drachm, and direct the attendants to put one teaspoonful of the solution in a wineglass, and add three spoonfuls of pure water thereto, and give the child one teaspoonful of this weakened solution every thirty minutes, by the watch, thus, you get the two grains every two hours.

In these distressing cases there is much satisfaction to be obtained by giving the remedy in this way. It is hardly ever necessary to give it longer than twenty-four or thirty-six hours in this way, as this stage of the disease rarely lasts longer than twenty-four hours.

In the congestive stages of acute bronchitis and pneumonia of adults the remedy acts equally well. The average dose for the adult is twenty grains dissolved in water and taken every two hours. Twenty grains to the tablespoonful of water, added to a wineglassful of water, is not an unpleasant dose. Carbonate of ammonia, in these large doses, acts as a heart stimulant, increasing the *vis a tergo*, it acts on the bowels and kidneys, and produces a flow of perspiration.

It will be observed that I do not claim that this drug will cure bronchitis or pneumonia, but that it has a well defined place in the treatment of these and allied pulmonary affections, and that the help it then gives us is effective, permanent and brilliant.

Give it in twenty-grain doses every two hours to the adult, and to the child in proportion, according to the usual rule.

There are some objections to the use of the medicine in these large doses. In many infants, even diluted as above, it produces stomatitis—the inside of the lips and cheeks become inflamed. This does not, however, supervene in less than twelve or fourteen hours, nor does it occur at all in some infants, and it soon passes away on discontinuing the remedy, which you may now safely do, and the use of some mild astringent mouth wash or powder. Again, in giving it, it will be necessary to use a silver spoon, as the common cheap spoons we meet with seem to contain an alloy of copper, which, on coming in contact with the ammonia, changes the solution to a blue color, and becomes very irritating to the stomach from the resulting raw compound of ammoniated copper (cuprum ammoniatum). Again, thirty grains is laid down as the emetic dose of carbonate of ammonia; twenty grains act thus in some adults, and in some very irritable stomachs. It produces vomiting and