

in the room; this is especially important in all cases of so-called dry bronchitis.

With reference to the use of *digitalis*, he believed that two or three large doses in twenty-four hours were preferable to small doses frequently repeated. A child one year of age would take one grain of *digitalis* three times a day, for as many days as would be required, and the effect would be much better than if the remedy was usually employed.

Another exceedingly valuable expectorant was *camphor*, the effect of which was permanent, and it was more easily taken than carbonate of ammonia. A child one year of age might take one-quarter, one-half, or even one grain of camphor, rubbed up with glycerin as often as every hour or every two hours, and in bad cases of bronchitis or pneumonia, where expectoration was wanted, he had not seen any expectorant which had served him a better purpose.

Turpentine also, by inhalation, was an excellent expectorant. Put a tablespoonful or two tablespoonfuls of spirits of turpentine into the kettle of water which is kept in the room to moisten the atmosphere, and the air will be impregnated with the vapor of turpentine, which will greatly benefit the patient.

Dr. John C. Peters was asked to continue the discussion, and said that one remedy, which was the best of all expectorants, and which allayed the cough, had not been mentioned, and that was potassium. The form in which he usually prescribed it was the liquor potassæ, one drachm to four ounces of water, which of itself was somewhat soothing. All of the alkalies, but more particularly potash, increased the ciliary movement of the bronchial epithelia, the only way in which expectoration was brought forward where it could be reached by cough. Besides, a solution of potassium would dissolve mucin, while simple water would not. He had almost abandoned the use of ipecac, except, perhaps, in small tonic doses. When there was great congestion and dyspnoea the administration of small doses of calomel, sufficiently large, however, to move the bowels, would relieve the heart and lungs, and render *digitalis* more active than it otherwise would be.

With reference to external treatment, he had used flannel chiefly, perhaps covering the chest with cotton. He thought that the frequent changing of poultices exposed the infant too much.

With reference to change of position, he had been in the habit of placing the child on the face, and had found it very beneficial.

He never used quinine as an antipyretic, but thought it beneficial in preventing the migration of leucocytes.

Dr. Joseph E. Winters said that while, perhaps, acute bronchitis could not be aborted, the inflammation certainly could be minimized. During the time when the congestion was limited to the bronchial artery, remedies which would reduce the force and frequency of the heart's action would

reduce the inflammation, and for this purpose he employed veratrum viride, already mentioned by Dr. Ripley, or aconite; as a reliable article of veratrum viride was somewhat difficult to obtain, he frequently used the latter agent. This expectation, however, was realized only in cases of acute primary bronchitis.

After this his method of treatment was to use derivatives, and then mild cathartics consisting chiefly of alkaline mixtures.

The second indication was to prevent accumulation of catarrhal secretion, as here occurred all the deaths. For the prevention of the accumulation of this secretion he used stimulating expectorants, and they varied according as to whether the expectoration was thin or viscid. In this condition cough also become remedial. During the catarrhal stage he combined camphor with other agents in a sufficiently concentrated form to excite a cough, which would, in part, be voluntary. Besides, he applied stimulating liniments to the surface of the chest, which would provoke deep inspiration. For this reason he thought that large poultices were dangerous, and that putting a pound of flax-seed, mixed with water, upon the chest of a child one year of age, would materially interfere with respiration. He preferred the oil-silk jacket, or, perhaps, spongiopylin, with cotton batting and oil-silk. The oil-silk was generally sufficient, with the use of a stimulating liniment, applied by putting the hand under the jacket, without exposing the chest of the child at all. He always insisted upon the following order in most of these cases: First, make the external application, then administer the expectorant, which would excite a cough, and then administer an emetic, and do all this at bedtime.

Opium became a dangerous remedy in young children, and he thought chloral did equally as well. When the secretion was watery and excessive, camphorated tincture of opium might diminish cough and secure rest, but it was not often indicated.

As to whether capillary bronchitis existed independently of broncho-pneumonia, he had his doubts because when capillary bronchitis was found at autopsy it was associated with more or less of broncho-pneumonia.

Dr. H. D. Chapin made special reference to the use of bromide of sodium, which he had used with good results. The use of opium had been pretty well condemned by the speakers by whom he had been preceded; and even in the doses recommended he had seen, it seemed to him, unfortunate results due to its use. In rachitic children he had noticed a more rapid and a more marked narcotic action produced by opium than in otherwise healthy children. In one case he felt quite certain that the brown mixture, regarded as perfectly safe in ordinary cases, nearly caused the death of his patient. For some time, therefore, he had used the bromide of sodium, and, although it did not act rapidly, yet by giving it continuously