

headache. It should be given in small doses, and continuously for some weeks.

In many cases some ocular defect will be found which will require correction by glasses, and many cases of migraine in children have been cured by this means alone. In all cases of migraine we should look carefully into the condition of the teeth and have any unsound ones filled or removed."—*Western Medical Review, St. Louis, Mo.*

## THE TREATMENT OF BRONCHITIS.

By J. MILNER FOTHERGILL, M.D.,

Physician to the City of London Hospital for Diseases of the Chest.

Bronchitis in its varying degrees of gravity is a very common malady in general practice. In its acute form it is rarely serious with healthy adults; but when the powers are already enfeebled, and at the extremes of life, it is a malady which frequently proves fatal.

It has two distinct stages. (1) the first of dry, swollen mucous membrane, and (2) free secretion. The treatment of the first stage is widely different from that of the second stage. In the first stage our aim is to procure free secretion; in the second stage our chief object is to have the secretion coughed up. We want to follow Nature's processes and to hasten them, if possible, but not to traverse them. No ordinary malady requires this more certainly than bronchitis. In the first stage, the dry swollen, irritable bronchial lining membrane provokes a great deal of useless cough. The skin, too, is dry, though the temperature as a rule does not run high. There is often a good deal of pain down the sternum, and the patient complains of the chest "feeling raw." Say the patient is an adult, it will be well to give some Plummer's pills at bed time, with a grain of opium; and if the tongue be coated a Seiditz powder, or a black draught next morning. A good mixture will be found in.

R Vin. Antimon. Mx.

Liq. amm. acet. ʒj.—ter in die.

Steam inhaled soothes the dry bronchial membrane, and the steam can be medicated with advantage. A jug of boiling water with some terebene, or turpentine, or tincture of iodine, or Eriar's balsam poured on the top, will furnish an excellent inhalant. Sometimes the first stage is prolonged; and in one case seen long ago in general practice venesection only could relieve it. This occurred several times. Counter irritation over the front of the chest affords great relief; and nothing is better than croton oil liniment, provided proper precautions are taken to see that the liniment only touches the part it is intended for and nowhere else. Many and painful are the consequences of carelessness in this matter, so much so that it is rarely prudent to let a patient apply it to himself. If the skin can be acted upon

by vapour, the natural course can be materially hastened.

Such then is the line of attack in the first stage. If a bronchitis kettle is at hand, set it agoing at once. If not, put a kettle full of water on the fire, without a lid, so that the steam can escape into the room. Where the patient is of the nervous temperament, the congested mucous membrane often starts up a certain amount of true spasmodic asthma. The fuming remedies, so good in uncomplicated asthma, rarely agree here. They irritate the dry bronchial lining, and so do more harm than good. An emetic of a quarter of a grain of tartar emetic, with fifteen grains of ipecacuanha powder, taken about seven in the morning, will often produce a beneficial change, and start bronchial secretion.

In bronchitis the danger *par excellence* is exhaustion, and inability to cough up the phlegm which accumulates in the air tubes, and if not expelled suffocates the patient. Never let that fact escape the field of vision. A time of trial and endurance has to be undergone sooner or later, if the attack be at all severe. Consequently the patient must be fed; and especially is this the case with delicate children. Milk thoroughly well boiled (half an hour) is the food for either young or old. Then it may contain some Mellin's food, a table-spoonful to the pint of milk. Beef tea or mutton broth should be prepared with some broken biscuit, or, as of old, the sole of a loaf. This makes it a food which ordinary beef-tea is not. And if a little of the stringy muscular fibre, so constantly spoken of disrespectfully as "the remains of the beef," be pounded in a mortar and returned to the beef-tea, it will be all the better. The popular impression is that beef-tea is a nourishing food. This is a mistake, and a very murderous mistake it is. In the houses of the humble, treacle and milk may be boiled together, and is well taken by infants. Probably it is in the feeding of bronchitic persons, old and young, where the cases slip through the doctor's fingers. It is all very well to generate steam, give medicine, wrap the child up in cotton wool, or a linseed poultice; but it must be fed; its powers must be conserved for the time of trial; and it is well to remember that the remedial agents indicated in the first stage are of a depressant character.

When secretion has been secured, and the phlegm begins to come up readily, the aspect of the case changes. It is like a dissolving view with the magic lantern; one is seen passing into another. The skin becomes moist, like the bronchial lining membrane. Relaxant remedies, having served their turn, give place to stimulant expectorants. The carbonate of ammonia takes the place of the acetate. The sudorific is no longer needed; but the stimulant to the respiratory centre becomes essential. Carbonate of ammonia is a respiratory stimulant. So is strychnia. These are the main constituents of a cough mixture in the second stage of bronchitis.