February 3, 1923

MODERN TECHNIQUE IN TREATMENT.

In the course of a series of articles published in the *Lancet*, on "Modern Technique in Treatment," T. Izod Bennett, M.D. (Lond.), M.R.C.P., discusses the treatment of whooping-cough, from which we quote as under :---

THE TREATMENT OF WHOOPING-COUGH.

PROPHYLACTIC TREATMENT.

1. Isolation.—Every case of whooping-cough should be immediately isolated and kept away from uninfected children for two months, or for fourteen days after all paroxysms have ceased. Parents should be instructed as to the infectious nature of the disease, and particularly of the enhanced risk of infection when a healthy child is in contact with an infected one in a confined space. For this reason while the paroxysms last, and for fourteen days later, infected children should be excluded from schools, clinics, omnibuses, trains, and trams. It may be desirable to get such a child away to the seaside or country, but precautions, such as a special carriage, which can afterwards be disinfected, should be taken. Particular care must be exercised in detecting and isolating those mild cases which often escape diagnosis; as a general rule, any child with a chronic or paroxysmal cough should be regarded as a case of whooping-cough if another member of the family is known to be affected with the disease. This rule applies especialy to infant welfare centres, creches, and infant schools which, in the absence of strict precautions, may readily become converted into breeding centres for disease.

2. Immunisation.—In the case of particularly delicate children, children with incipient tuberculosis, or the children of very anxious parents, an attempt to confer some degree of immunity may be made by giving a series of injections of vaccine. . . The parents must be warned that immunity cannot be guaranteed, but that such treatment affords reasonable hope of minimising the attack and preventing dangerous complications.

GENERAL TREATMENT.

I. Hygiene.—Exposure to severe weather must be avoided, but in uncomplicated cases there is no doubt that paroxysms are less frequent in the open air or in well-ventilated rooms than in hot and stuffy rooms. Dust and smoke even in minimal quantities may excite coughing, and provided that chill be avoided it is better that the child's temperature-regulating mechanism be exercised by adaptation to mild changes of temperature, than that his delicacy be increased by a perpetual artificial warmth. When going out of doors such children should be well clad, mothers should be discouraged from allowing them to have legs, arms, and necks exposed as they often are with modern clothing. At night flannel pyjamas afford a protection to the restless child who is apt to throw off his bedclothes.

2. Dietetic.—Nothing is more important in the treatment of whooping-cough than the diet. The disease is a serious one involving considerable physical exertion on the part of the patient, recovery cannot take place for some weeks at least, and at any moment complications may arise during which a few grammes of energy-producing food reserve may turn the scale in the patient's favour. For these reasons it is the duty of the medical attendant to see that the food-intake is adequate.

It is always risky to change the diet of a healthy infant, it is even more risky in the case of a sick one. If a baby has been thriving on any particular food up to the moment of infection it is not probable that a change will be for the better, but a change in the time of feeding may be advantageous. The giving of food to a baby or a child with whooping-cough often provokes a paroxysm; this makes the patient unwilling to feed, and fre-quently leads to the vomiting of that part of the meal which has already been swallowed. It is, therefore, better to give a feed about ten minutes after a paroxysm, at which time it will usually be comfortably retained. In the case of babies, the feed should be given after the first paroxysm occurring subsequent to the normal hour of feeding; if vomiting and loss of weight are taking place the intervals between feeds should be decreased, and the bulk of food at each feed diminished. With older children large meals must be avoided, and fluid foods such as milk, soups, &c., given between meals, the period following a paroxysm being chosen for each meal or feed.

3. Record of Progress.—The best record of progress in any case is given by a chart showing the number of paroxysms occurring each day. Mothers should be trained to make a note of each attack of coughing from 8 a.m. until 8 a.m. on the following day. In this way the practitioner can keep a chart which will give him a reliable index of progress.

VACCINE TREATMENT.

Vaccine treatment in whooping-cough, whether prophylactic or curative, is logical and harmless; it is not at present possible to say that it is invariably beneficial. I recommend it especially as an aid to the prevention of pulmonary complications.

AFTER TREATMENT.

With the exception of measles, no disease is more likely to be the forerunner of tuberculosis; convalescence should, therefore, be carefully supervised, and whenever possible a change of environment to a mild, sunny climate should be secured for a time. Iron and arsenic, alone or together with malt extract, are of value at this stage. Persistent infections of the naso-pharynx should be attended to, and the general resistance of the patient improved to the utmost extent by careful hygienic measures and a diet containing abundance of vitamins, and lipoids.



