

## THE TREATMENT OF TYPHOID FEVER.

Dr. N. S. Davis, in speaking of his treatment of typhoid fever at the Mercy Hospital, Chicago, recognizes fever indications to be fulfilled, or objects to be accomplished.

First, it is desirable to suspend, as far as practicable, the further action upon the patient of all the causes that may have contributed to the development of the disease.

Second, to restore the natural condition of the general properties of the tissues, and thereby retard or arrest those perverted molecular movements which constitute the disturbances of nutrition, secretion, excretion, etc.

Third, to promote the action of certain excretory organs, and thereby deterioration of the blood by the accumulation of the products of tissue-changes or waste matter.

Fourth, to counteract the development of important local diseases, either in the head, chest, or abdomen.

Fifth, to sustain the patient with nourishment suitably adjusted, both in quality and quantity, to the different stages of the disease.

The first indication is fulfilled by proper regulation of the patient's hygienic surroundings, and the exhibition of *potassium chlorate* in dilute acidulated solution. If this indication be fulfilled, and if the patient be supplied with "proper nourishment, in proper quantities," twenty-nine out of every thirty will recover without medication of any kind.

To fulfill the second indication, chief reliance is placed upon the "exciters of vital affinity," oxygen, potassium chlorate, sodium chloride, mercury bichloride, iodine, the mineral acids and cold water.

The third indication is met by nitrous ether, *liquor ammonii acetatis*, and digitalis.

Under the fourth indication, attention must be directed to a number of organs.

1. The impairment of the functions of the brain and important nervous centres, "more especially those centres that govern the action of the vaso-motor, cardiac and respiratory nerves," is best remedied by the selection of those agents which increase the oxygenation and decarbonization of the blood. Strychnine and the mineral acids are the most effective drugs in this connection.

2. Hypostatic congestion of the lungs, muscular weakness of the heart, capillary bronchitis, and broncho-pneumonia are conditions which contraindicate alcohol in any form. Milk, beer, tea, eggs, coffee meet the indication.

3. The changes in the alimentary canal, mesentery, spleen and liver demand the most rigid scrutiny.

The pathological changes in the glands of Peyer and Brunner are of greatest importance.

The mineral acids, nitrate of silver, oil of turpentine, and strychnine "improve the tonicity of the smaller vessels, lessen passive congestion and exudation, and arrest the tendency to softening

and disintegration by increasing the general property of the tissues, called vital affinity, or by increasing the vaso-motor nervous influence, or by both.

The fifth indication is fulfilled by the administration of proper food. Three propositions may govern the practitioner in this matter.

"First, choose such articles for nourishment as, either separately or conjoined, shall contain all the elementary constituents entering into the composition of the blood and organized structures of the human body.

"Second, the article or articles selected should be so prepared that when taken into the stomach they are capable of being taken up and assimilated with but little influence from the gastric and other secretions usually required for the digestion and absorption of ordinary food in health, because these secretions are generally much diminished, especially during the middle and later stages of the disease.

"Third, the quantity given at any one time should be so limited that it will be all absorbed or assimilated before any part of it has time to undergo fermentation or putrefactive changes, by which tympanites and the irritation of the glandular patches in the ileum might be increased, sufficient to afford the patient a fair degree of support."

Meat broths, from either mutton, beef, or chicken, seasoned with salt, milk, buttermilk, milk-whey, tea, coffee and water, correspond to these conditions.—*Ther. Gaz.*

## TREATMENT OF CROUP WITH MURIATE OF PILOCARPINE.

Charles Ultes, M.D., Lansing, Mich., communicates the following to the *Therapeutic Gazette*:

I have treated in all five cases of the membranous variety, four cases of mild or night croup, and three cases of diphtheritic croup (laryngeal stenosis), all of which recovered, with the exception of one, the child being attacked the two previous nights, playing during the day. On the morning of the third night I was called and found the child in a condition in which neither tracheotomy nor pilocarpine would be effective; the child died with convulsions two hours after my arrival.

In severe cases it sometimes takes from four to five days until the severe symptoms are passed. The medicine must be used vigorously until relief is obtained.

When the bronchial tubes are filled up, and cyanosis and choking sensations prevail, a dose of syrup or the powder of ipecac should be used to throw off the partially-dissolved membrane and accumulated phlegm. The nausea caused by the ipecac passes off as soon as the vomiting is over, leaving no debility whatever.

It is astonishing what large doses of ipecac may be taken sometimes by children without producing emesis.