

in the larynx; the metallic cough becomes moister, softer; the retractions of the soft parts of the chest become less marked; the aphonia gives place to hoarseness. The membrane having ceased to extend, has become disintegrated, soft; suppuration has separated it from the underlying mucous membrane, it has been expelled by the cough, either piecemeal or *in toto*, and slowly but surely a "restitutio ad integrum" occurs in the larynx.

The remedy, which experience has shown to have the effect on the membrane of liquefying or softening it, is therefore the great desideratum; medicated steam inhalations (lactic acid, lime-water, turpentine), and sublimed calomel (Dillon Brown) have been given with this object in view.

Calomel administered internally, in the manner to be hereafter described, has, in my experience, seemed to have this effect; and the results have been so satisfactory, that this method of treatment seems to me worthy of the highest commendation.

To a child under two and a half years, 0.05 of pure calomel is given hourly, sleeping and waking; for each year above two and a half years, add 0.02 of calomel to the hourly dose. A child of five years would therefore take 0.10 of calomel every hour. The calomel must be absolutely pure and undeteriorated; it should be given without the admixture of sugar of milk or of any sugar whatever; it may be administered, either floating on a teaspoonful of water, or if the child refuses this, because he knows it to be medicine, it may be given in milk, entirely unnoticed by the patient.

The case should be under the watchful care of a trained nurse, who must keep an accurate record, noting the slightest perceptible change in any of the characteristic signs; after one or two grammes of calomel have been given, a change in the laryngeal breathing sound should be noticed. The treatment should, and can, be instituted at the earliest possible moment after the diagnosis is made.

The writer has given a child of two and a half years, 0.05 of calomel hourly, until four grammes were taken; the patient recovered. To another child of three and a half years, five grammes were given with success. A stimulating and supporting regimen to combat the sepsis was adhered to—beef soup, white of egg, milk; Tokay wine, or whisky, were administered alternately, at very frequent intervals.

The administration of nourishment and stimulants, half-hourly, to sustain the heart power, is of the highest importance; everything given the little patient should be palatable and easily taken, as every struggle of the child against taking food or medicine increases the laryngeal stridor, and perhaps causes the membrane to extend downward.

The use of mercury in plastic inflammations is one of the traditions of medicine; its praises have been sung by medical writers for more than a hundred years; whether its so-called antiplogistic

properties are explicable by reason of its destructiveness of germ-life, it is not for me to say. The action of calomel in croup, given as above described, bears out the old belief, in actual experience. Under its use I have seen the stridor, the aphonia, the cough, in short all the symptoms, slowly abate, showing that the membrane was gradually loosening its hold and becoming innocuous.

The advantages of calomel over sublimate are self-evident; the former is mild, non-irritating, can be taken for the necessary length of time without any other effect than a passing diarrhoea, perhaps; while the sublimate is a pronounced irritant poison which, taken in frequent doses, will cause pronounced gastro-intestinal irritation, necessitating an interruption in the treatment at a critical period.

The powder of calomel of six centigrammes is small, tasteless, and easily administered to the most obstreperous child; not so with the bichloride mixture, when given hourly. If inunctions with blue ointment have been attended by the success claimed for them in diphtheria, then mercury *absorbed into the circulation* seems to have a controlling influence over the diphtheritic infection, and its local manifestations.

For administration to children, calomel must be preferred to all other preparations of mercury, for reasons that are obvious. The danger of salivation, in my experience, is minimal; I haven't seen a case of pyralism among the children that I have treated with calomel.

Severe diarrhoea has also been very rare. Three, four, or even five movements a day under the calomel therapy I should consider rather an advantage in this disease, provided the patient take nourishment; the sepsis is, to a certain degree, mitigated by the free action of the bowels.

Should the diarrhoea assume a severe or alarming character, the dose of calomel may be diminished, or the intervals between doses prolonged; or a starch injection, with or without a little paretic, may be given; and if the laryngeal obstruction seems to be lessening, I would not stop the calomel altogether under any circumstances.

A very strong argument, from a pathological standpoint, in favor of the antiplastic treatment by calomel, or by mercury in any form, is found in the statistics and post-mortem examinations of Prudden and Northrup. In 151 fatal cases, pneumonia was found in 104. In Northrup's article in Keating, in 87 cases, the larynx alone was affected in only one case; in another the membrane extended from the pharynx to the middle of the trachea; between this point and the bronchi of the fourth division nothing was to be found; from these to the finest bronchi, membrane was present; in 34 cases the membrane extended from the pharynx down to the finest bronchi. In view of this extensive growth of membrane, of what use can