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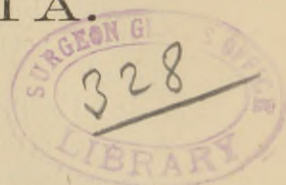
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LOCAL TREATMENT
IN
DIPHTHERIA.



THE presentation of this subject to the New York Academy of Medicine last winter by Dr. C. E. Billington, and the discussion which it elicited, are a cause for gratification, inasmuch as they were most opportune. The subject was *à propos* because by many local treatment, if not avowedly discarded in the management of this disease, has been either tacitly neglected or imperfectly practised of late. To borrow a phrase from the science of political economy, this *laissez-faire* policy is the result of what Dr. Billington has aptly stigmatized as an "optimistic" reliance upon the favorable issue in exceptional instances of the disease which had not undergone topical treatment.

It will not be controverted that diphtheria presents both local and constitutional symptoms, but the disputed question whether it is primarily a local affection followed by secondary constitutional symptoms or *vice versa* will not be discussed here.

If, then, we have these two factors presented to us in the evolution of the disease, our logical conclusion must be that we ought to treat these cases both locally and constitutionally, irrespective of whatever theory concerning the nature and development of the disease may be correct.

Most of the remedies used with the intention of producing constitutional effects also, to a certain extent, act locally. I need but mention the muriated tincture of iron, chlorate of potash, and the bichloride of mercury as among the most prominent. You doubtless will be able to recall some others.

presented by the author.

In the act of deglutition these remedies always come in contact with the vault of the pharynx, including the upper portion of the fauces, the tonsils, and the immediately-adjacent parts. I always advise the patient, when he or she is old enough to do so, to retain the dose in the buccal cavity for several minutes before swallowing it, in order to get a more prolonged local action from the medicine. In the exercise of this manœuvre I tell the patient to draw the dose as far back in the mouth as possible before swallowing. It is to be observed that this method is not that of gargling exactly, but rather an extension thereof.

In all of the recent discussions one remedy, which had been employed in this and other zymotic diseases formerly for its constitutional effect *alone*, but which I have used for its local action, has not been mentioned. I refer to the hyposulphite of soda.

Though, as I have just remarked, this remedy had already been used in the past for its constitutional effect, it is only recently that I learned of its efficacy as a local remedial agent. It is but just to say that the remedy was suggested to me by Dr. Brickelmaier, a laryngologist of repute in this city, in an informal conversation anent the various remedies which were used to act upon deposits and exudations in the throat. The doctor spoke so flatteringly of the hyposulphite of soda that I determined to employ it in the next cases that I should be called upon to treat.

In the past year I have treated about thirty cases with this remedy, in the strength of $\mathfrak{z}\text{i}$ ad $\mathfrak{z}\text{ii}$ aquæ, of which the dose was $\mathfrak{z}\text{i}$ for children under twelve months old, and to older children $\mathfrak{z}\text{i}$ has been administered of a solution of the strength of $\mathfrak{z}\text{ss}$ of the medicine to $\mathfrak{z}\text{ii}$ of water. The remedy was administered every two hours. Several adults were among those afflicted, and the solution in their cases was of the strength of $\mathfrak{z}\text{ii}$ to the $\mathfrak{z}\text{ii}$ of water, of which the dose was $\mathfrak{z}\text{i}$. In the most of these cases I will say that the pseudo-membrane appeared in the upper portion of the pharynx or on the tonsils and uvula. In a few it extended a short distance down into the larynx. In these last cases the hyposulphite of soda was used sometimes in a spray atomizer, and in older children it was applied to the part affected with a brush. Where the patient

is too young to comprehend the direction to hold the dose in the mouth, and the deposit is confined to the buccal cavity, here, also, it can be used in the atomizer.

What has thus far been said about the hyposulphite of soda has had reference to its use as a local remedy, but the medicine also has most probably a constitutional action. The hyposulphites, in common with the sulphites and bisulphites, have been used in medicine in consequence of their hostility, by virtue of their acid component, to the lower forms of animal and vegetable life. Hence this group of remedies would seem to have a special action against zymotic diseases, under which category diphtheria is embraced; and, reasoning from these premises, physicians were led to its use in such constitutional diseases, and as a corollary thereto to regard it as a local antiseptic or germicide. But it is to its use as a topical agent that I would specially direct attention, disclaiming, however, that it will always cure and never fail, for there will always occur cases which will inevitably result fatally, no matter what may be done for them. Among my thirty cases, alluded to above, two deaths occurred. Of course, strict attention should be paid to the constitutional treatment as well. The local and general treatment should reinforce each other and proceed hand-in-hand. The nutrition should be watched and improved, and no case of diphtheria should ever be deprived of iron. To treat the local manifestations only would be illogical, and to employ constitutional measures only would be to ignore a dangerous and insidious foe.

In regard to the method of making local applications, it will be conceded that all rude and forcible manipulation must be shunned. The brush, sponge, and cotton pledget, as ordinarily used, must be condemned. In intelligent hands it may be permissible to employ them, but even then with extreme caution, lest a solution of continuity in the tissues be produced which may become the site of autosepsis. The gentler the application the more favorable is it to be considered; hence the spray atomizer is to be preferred in nearly all cases for the buccal and laryngeal varieties of the disease, and a suitable syringe carefully used for the nares and post-pharynx.

