

## THE TREATMENT OF EARLY PHTHISIS.

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The leading characteristics of early phthisis are cough, emaciation, loss of flesh, night-sweats, and pyrexia, with more or less hemoptysis; each symptom indicating an appropriate line of treatment. For here it is essential to treat symptoms while doing our best to influence favorably the pathological process on which they causally depend. If asked the question, "What do you think the most important matter to attend to in the treatment of early phthisis?" my answer would be "To arrest the night-sweats." "The next most important?" "To keep the stomach and intestines in good order and attend to the assimilative processes." If these are not attended to all treatment is futile, or nearly so. If the sweats are not checked the blood-salts drain out as fast as supplied; if the digestive powers are not cared for, the food taken is not assimilated, and so the patient is no nearer more perfect nutrition and effective tissue repair.

To arrest night-sweats we must have recourse to some anhidrotic, as oxide of zinc, sulphate of copper, or one of the solanaceæ, as hyoscyamus, and still more belladonna. The first two act as astringents, generally affecting any part where there is an abnormally excessive flux; how, we do not know. Belladonna acts directly upon the secreting nerves of the sudoriparous glands, whether applied locally, or administered by the mouth. Probably hyoscyamus acts in an allied manner. Taken altogether there is no anhidrotic to be compared with belladonna: though in the few cases where it fails the other agents may be tried. But in order to get out the good effects of belladonna it is necessary to give it in sufficient dose. The ordinary dose of sulphate of atropia—for it is much better to use a solution of atropia of known strength than to give the tincture of belladonna, which may, and probably usually does, vary in strength—is in many cases quite insufficient. The variations of toleration of belladonna in individuals is as pronounced as is the case with Epsom salts; what is sufficient of the latter for one, exercises no influence over another person, while the dose some require to produce even a gentle action of the bowels would produce well-marked, nay, serious diarrhœa in others. I use atropia in doses varying from the seventy-fifth (75th) to the fiftieth (50th), and up to the twenty-fifth (25th) of a grain. A considerable proportion of patients are unaffected until the last dose is reached; and even then do not complain of much dryness of throat, or indistinctness of vision (effect upon the pupil as a guide to the administration of belladonna is utterly worthless). With many patients the seventy-fifth of a grain of atropia

will arrest the night-sweats, and in a certain number will affect the throat and eyesight; while others require the fiftieth to influence the night-sweats: and again a small proportion are uninfluenced till the twenty-fifth is reached. Thus we see the toleration of belladonna varies very much with different individuals. An impression exists in my mind that these large doses of belladonna are more frequently required in the case of Jews than of other patients. The practitioner then must not go away with the impression that belladonna had failed in any case until he has pushed the dose to decided dryness of the throat and distinct impairment of vision; flinging aside any effect upon the pupil as a fallacious test not to be trusted; for in my experience the pupil is rarely much affected; and yet in other cases a marked effect is occasionally produced on the pupil by placing a small belladonna plaster over the heart. To some other effects of belladonna reference will be made shortly.

The profuse night-sweats of phthisis, and at times of other maladies, are very exhausting. Sweat is a secretion which contains chlorides, phosphates, and sulphates of the alkalies, as well as urea, uric acid, traces of iron, and of fat or of fatty acid. Consequently, when the sweat is profuse in a person who is debilitated, it drains the body of its salts, and in doing so cripples the assimilative powers. Usually the first consequence of arresting the night-sweats of the phthisical is the return of the appetite—food is both relished and digested. So long as this drain goes on it is practically useless to give milk, phosphites, meat juice, &c., &c.—it is like pouring them through a sieve. The importance of checking the night-sweats cannot be overrated.

A few words as to the associations of night-sweats may not be out of place or without instructive value. It is well known that ordinarily the night-sweat comes on towards morning—in the deep morning sleep. Often, if the patient keeps awake the sweats do not come on. On the other hand, where deep sleep is produced by an opiate given to relieve the cough, profuse night-sweats are commonly the consequence. These associations of night-sweats are significant. They largely depend upon the relations which exist betwixt the pulmonary and the cutaneous respiration;—relations much more pronounced in human beings than is commonly supposed. Their relations in some of the lower animals are well-known. When the respiratory centre is depressed in deep sleep, and the pulmonary respiration is lowered very distinctly, the sudoriparous glands are thrown into action. When the blood is deficiently aerated, and there is an excess of carbonic acid in it, the sensory nerves of the sudoriparous glands are thrown into action and sweating follows. (Ott and