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Some Practical Points on Sana= torium Treatment of Pul= monary Tuberculosis,

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(Continued from page 279.)

Treatment .- Now is exploded the idea that climate alone is capable of curing pulmonary tuberculosis, just as years ago we banished the theory that treatment alone was efficacious. To be successful with our patients, we must use various methods of treatment as auxiliaries to climatic and hygienic influences. No general line of treatment can be laid down for even a small majority of tuberculosis patients. We must not expect successfully to treat pulmonary tuberculosis in the abstract, but every case must, in justice, be treated in accordance with its individual manifestations of disease, idiosyncrasies, and complications. Probably it is this individualising of patients that is largely responsible for the comparatively flattering results obtained among sanatorium patients over those attainable in private practice in the same climate. In very incipient cases, climate and outof-door life are generally all that is necessary to ensure recovery. Patients frequently present complications of one sort or another demanding treatment in order to remove conditions which, if allowed to remain, will greatly interfere with the fight for life and restoration to health.

I will refer here only to some of the more common phases of this disease and its complications requiring such auxiliary treatment:

Upper air passages.—It is astonishing how a large percentage of even incipient cases of pulmonary tuberculosis present lesions of more or less severity in the upper air passages, and it is a question whether quite a number of patients may not attribute their trouble primarily to conditions of the nose or pharynx which have, by reflex irritation, created a nidus for pulmonary infection. Chronic congestion or infiltration of the arytenoids, if discovered early, may be easily cured by prompt local treatment. Unrecognised and left to itself and climate, such a case—at least in a fair majority either leads to fatal laryngeal conditions, or is the indirect cause of prevention of cure of incipient pulmonary lesions.

Statistics show that not less than 25 per cent. of persons suffering from pulmonary tuberculosis have more or less involvement of the larynx and nasopharynx. Of this number 38 per cent. present congestion or infiltration of the arytenoid cartilages inter-arytenoid space, ventricular bands, or vocal cords; 32 per cent. show ulceration in one or more of these places, most frequently on the cords or inter-arytenoid space; 30 per cent. have some abnormal condition of the naso-pharynx.

The naso-pharynx should be put in the best possible condition by frequent spraying with albolin solutions, followed by sprays containing such appli-cations as may be individually indicated. Polypi must be removed, hypertrophic mucosa or turbinated bones may be reduced by fused nitrate, chromic acid, or supra-renal extract. Excressence of a bony nature must be removed by operation. Slight laryngeal congestions yield readily to a cleansing spray, followed by a solution of alumnol, ten to twenty grains to the ounce, or silver nitrate, four to ten grains to the ounce. Chronic congestion and infiltration require, beside the cleansing by Dobell's solution, a local application of strong alumnol, 25 per cent. solution ; silver nitrate, thirty grains to the ounce, or the fused crystals. For ulcerations good results have been attained by a spray of hydrogen peroxide, 50 per cent., followed by Dobell's to remove secretions. After this a direct application of either lactic acid, 20 to 25 per cent., or Chappell's creosote mixture. Sluggish granulations should be stimulated by fused nitrate. Mucus tags, remain-ing after removal of papilloma, disappear under treatment with supra-renal extract. Tracheal ulcerations do well with intra-tracheal injections of argonin, five grains to the ounce, or a weak solution of silver nitrate.

Then, again, we have a condition of sepsis, indicated by elevation of temperature, rapid pulse, night sweats and loss of flesh. Temperature is best controlled by rest, cold sponging or inunctions of guaiacol applied to the axillæ or the groins. In selected cases we can administer fever capsules composed of the following :—Phenacetin, acetanilid and quinin āā grs. ii. As for the "rest" treatment, it will be found very valuable when the temperature reaches 100 degrees in the evening. Night sweats are best controlled by the old-fashioned remedy atropin. Agaracin has been used in many instances with favourable results, but has more often failed in my hands.

With respect to night sweats and temperature, it must be noted that these are, generally speaking, due to sepsis from mixed infection, and we can often control the amount of secretion by antiseptic inhalations of ichthyol, creosote, or any of its derivatives (see formulæ).

The following formulæ I have found to be very beneficial when used in the hot air inspirator, once or twice daily :---

B. Oil, Camphori, Eucalyptol, and Terebene.....aa 5ii. Sg. gtt. V q. five minutes or fifteen minutes.

R Ichthyol (Merck's) Ammonium Sulpho-

Ichthyolate	3i.
Terebene	žiss.
Aanæ	žigg

Sg. gtt. V q. five minutes or fifteen or twenty minutes.



