

Heryng reports that in 35 cases he obtained cicatrization, lasting a longer or shorter time in 27. In three of these the duration was respectively 9, 2 and 1 years; and in five cases $\frac{1}{2}$ to 3 years. He says the larynx cured, the lung is improved, the voice becomes better, and general improvement results.

In the Hospital of the Holy Ghost at Warsaw 21 out of 50 cases cicatrized.

The best prognosis is in those cases in which there is a good general condition, with little or no interstitial changes in the lungs, and the patient living in good social conditions.

Roughly the indications for treatment are :

- (1) To counteract the general phthisical process.
- (2) To give as much as possible, functional rest.
- (3) To relieve the pain in swallowing.
- (4) To administer suitable nourishment.
- (5) To heal the ulcerations, and reduce the infiltrations.

As a rule solutions should be applied by brush under the guidance of the laryngeal mirror, and the application be made to the part affected, and to that only.

Now, as to the most important of the remedies employed.

Class (a).—Medicines principally anodyne or anæsthetic in their action. *(b)* Antiseptics. *(c)* The surgical treatment.

In the first class, the most useful is cocaine. It is an excellent analgesic remedy in painful, difficult swallowing, and as a local anæsthetic, it facilitates laryngeal examination, applications, and surgical operations. Solutions are used in strengths from 5 to 25 per cent., the stronger for operating purposes, absolute anæsthesia lasting probably from 10 to 20 minutes, relative anæsthesia up to 2 or 3 hours. Some surgeons combine morphia or carbolic acid, and a few use it in powder or hypodermically.

Menthol.—I place it amongst the first-class, but it also belongs to the second, as it is not only anæsthetic and analgesic, but also antiseptic. It can be employed in spray, inhaler, syringe, or by the brush. Ulcers submit much better to its treatment than infiltrations. While I was working in London, I noticed the throat surgeons there as a rule, gave this drug the highest preference. Lennox Browne says it is decidedly of greater value than lactic acid. He has seen cases in which after a few days treatment, emaciation has been arrested, deglutition im-

proved, cough and amount of local secretion diminished, and lastly an actual regain of lost weight. He also employed in these cases, the oronasal inhaler with menthol. or eucalyptus, oleo pini Sylvestris, carbolic acid, or creasote.

Brum recommends it in delicate, nervous persons, and in robust cases, lactic acid. Chloral hydrate is sometimes used.

Morphia, either in glycerine solution, or powder with a vehicle as starch or magnesia or sugar, or combined with other medicines, and applied to the part affected, generally acts well in relieving pain.

(Class b).—Drugs, especially antiseptic, locally applied.

Many laryngologists now give priority to lactic acid. Krause regards it as a specific for tubercular ulcers. It is used in watery solutions, beginning with the weaker, 10 per cent., and increasing the strength quickly up to 80 per cent. or even the pure acid. It acts energetically upon pathological tissues, but has very little or no effect on sound tissues. It is an advantage to use friction, and rub the acid well into the ulcer, or even to thoroughly scrape it with a curette before its application; and in hard infiltrations to scarify or introduce the acid by hypodermic needle. It seems to be more useful in ulcerative than infiltrative processes.

Iodoform has many advocates. Prof. Schmitzler, of Vienna, believes it is better than lactic acid. While working in his clinic I used it in several cases daily for some time, the patients always saying they were relieved or improving; but we know how hopeful the phthisical patient is and I must say that I never noticed much improvement in the objective symptoms. He uses insufflations in quantities of one to three grains for each application.

Iodol used in the same way, seems to me to be a better drug. It has the antiseptic qualities of iodoform without its disagreeable smell or taste, and further, it does not act as an irritant, and is less obnoxious to the stomach.

Creasote.—Cadier, of Paris, applied it by brush, in the proportions of creasote 1, spirits vini 4, glycerine 60. Schmidth, of Heidelberg, thinks creasote when brushed on, irritates ulcers, and gave Cadier's solution (10-20 drops) on the base of the tongue, advising the patient not to swallow, but to breathe freely during phonation. It is a strong