

eration of tissue, albumen, urea and cardiac complications of a serious nature. Koch does not regard slight heart disease as an obstacle, the pulse being increased long before the rise of T. I have seen hæmoptysis caused by the lymph in several instances, but after waiting three or four days, and no further indications, treatment was resumed without bad effect.

In Hamburg the treatment of tubercle was carried on effectively at the large general hospital there, and the results were most encouraging. All conditions and stages of phthisis pulmon. were treated, consequently ill effects presented themselves as well as good. In cases that were not too far advanced the patients showed unmistakable signs of benefit. At first the effect of reaction was loss in weight and strength, but that was very temporary, for a permanent gain in strength and flesh generally followed, with a relish and desire for food previously unknown. Owing to the fact that the good effects of this remedy are mostly confined to cases of the early stages of consumption, and to the fact that many cases in this condition when removed from the hardships of their every day life to where they are warmly housed and abundantly fed with what is wholesome and nourishing, frequently improve, it has been asserted that the effect of Koch's lymph is really secondary to the effect of the improved hygienic surroundings. Against that assertion we have emphatic statements from most of the leading medical men of our generation in praise of the remedy, and these men are well known to give stint praise where it is not merited. I think it may safely be said that this remedy to be successfully handled calls for a more accurate estimate of the patient's physical condition than any other known means of cure, and several days careful observation of the patient's condition are a necessary preliminary to treatment; a rule that is without exception. Then the continuance of this strict observation during reaction is as called for as the treatment itself, and this work must be carried out by competent trained assistants in order that every detail in the progress of the case may be noted. When as in this treatment the temperature has to be taken every two hours it would be unwise to trust to the assistance of a patient's relatives as a rule.

In local tuberculosis the results are regarded as generally beneficial. As in lung tubercle, so it is here foolish to look for markedly good results in every case treated. We are fairly well able now, however, to indicate from experience thus far afforded what kind of cases are most amenable to this treatment. In cases of chronic enlargements of joints I have seen after the subsidence of reaction a decided diminution of the morbid material, but surgery must still hold its own in such cases, and the necrotic material removed by drainage or otherwise. In chronic enlarged strumous glands remarkably good

results have been produced after two week's treatment.

Again, a case of chron. tubercular diarrhoea in the Charité Hospital, which had resisted every remedy they had given yielded in about a week to the lymph. No other remedy being employed while the lymph was given it was at least reasonable to suppose this agent effected the cure. The case progressed well subsequently under the same treatment.

In *Laryngeal tuberculosis*, I saw some excellent results without the evil effects that were dreaded so much at first when it was known the reactions were accompanied by various cedematous conditions. In Krause's clinic some interesting throat cases were treated with good effect. One instance in this clinic, where both laryngeal and lung tubercle were well developed, I would like to bring to your notice briefly. Wende, æt. 38, fair complexion, medium height, good family history, merchant, had symptoms of lung and throat trouble two years. On entering hospital the records show that he had severe cough with purulent sputum, smothered breathing, moist rales and dull percussion extending from apices of both lungs as far as fourth intercostal space; on left side a subclavicular cavity was found. Body shows general emaciation, and night-sweating was troublesome. Voice very hoarse, and throat showed a chronic laryngitis, with infiltration of left vocal cord, presence of bacilli in considerable amount demonstrated. Patient given full diet and put on lymph treatment by injection of 0.001 c.c. This small dose caused T. 103, P. 112. and respir. 40. This subsided but rose next day to 102° T., again becoming normal following day. Next injection given forty-eight hours after first, was increased to 0.0014 c.c., or an increase of about half a milligram. This gave sharp reaction, T. rising to 104° F. in about six hours, then dropping to normal, and next day rising to 103° and subsiding. The doses were gradually increased until in six weeks he was receiving 0.075 c.c. Results: night sweats arrested, laryngitis cured, improved percussion, diminished rales, patient claims to be greatly better and as cheerful as possible regarding his condition, cough much less, sputum less purulent and less in amount; formerly could not lie on right side, now comfortable in any position. The hoarseness was still marked but the generally improved condition of this patient was not only most gratifying to himself but satisfactory to his physician, for the case gave promise of best results even in the presence of fairly well advanced disease. In taking this patient's private address he promised to write me in a couple of months regarding his condition, for he was quite sanguine that about three months of the same treatment would enable him to work again and return home.

*Diagnostic value of the Lymph.* Although the remedy has been shown to be most insidious