She came to the hospital complaining of shortness of breath, which trouble had begun some ten years previously when she began to suffer from shortness of breath on slight exertion. This had been growing gradually worse, the attacks of dyspnea coming on every day, with more and more difficulty in getting her breath. She stated that she had lost fifteen or twenty pounds in weight during the last three years, and that she had had night sweats about once a month during that period. She had a moderate degree of hoarseness.

On January 4, 1915, she was referred by her family physician, for tuberculosis of the throat, and on January 11, she was admitted to the Manhattan Eye, Ear, and Throat Hospital in the service of Dr. Coffin. The Wassermann, von Pirquet, and sputum examinations were all negative.

Examination of the nose showed what appeared to be a marked atrophic rhinitis: there was extensive obstruction in both nostrils, the involvement including the nose, uvula, and right pillars, the principal involvement being in the larynx. The breathing space was only about 3 mm. wide and 7 or 8 mm. long. The tissue showed the characteristic pathological findings of scleroma.

DISCUSSION.

DR. GÜNTZER said that he had seen the case outside the clinic, and he understood that Dr. Held had had the patient under observation for some weeks. What seemed peculiar was that the nasal cavities had filled up in that short time. What we know of scleroma cases is that the growth is slow and insidious, as a rule. The rapid growth in this instance seems a very unusual phase of the disease.

DR. HELD replied that he could only repeat that the rapid development did occur. The growth was undoubtedly scleroma, both from its general appearance and according to the pathological findings. He did not claim to be sufficiently expert in the study of scleroma to argue the question of the rapid growth, but the condition of the patient during the first week in January showed both nostrils wide-open, having the appearance of a typical atrophic rhinitis. The condition was very pronounced and the narrowing of the right nostril had been noticed for the last four weeks. The change could be observed week by week. He could vouch for the manner of its occurrence. Whether this was a new phase of the condition, he could not say, for not much is known about it. The appearance of the growth was typical of scleroma, the laboratory tests proved it, and the condition was increasing rapidly, especially in the right nostril.

A Case of Endothelioma of the Trachea. DR. WOLFF FREUDENTHAL.

Dr. Freudenthal said that he had presented this patient before the Section two years previously. The young man now is 21 years of age, a native of Russian Poland. At the age of 14, he was tracheotomized on account of diphtheria. After that he felt perfectly well up to the time that he presented himself for treatment two years ago. Shortly before that he had suffered from dyspnea, especially on exertion.

Examination had revealed a web-like mass including the greater part of the trachea, with only a small opening anteriorly,—undoubtedly due to the former tracheotomy. An attempt was made to remove the web-like mass under suspension laryngoscopy, but this was not successful as the patient was too timid to allow any operation whatsoever. A few days later

another attempt was made under general anesthesia, but the patient became cyanotic to such a degree that a hurried tracheotomy had to be performed. All of the visible mass was removed and the space was thoroughly cauterized. The wound healed and the patient was discharged.

A year later, he returned in the same condition, and again under general anesthesia all the visible growth was removed.

Nine months later he showed up again, and Dr. Freudenthal began to be suspicious of the condition. The patient was put under rectal anesthesia, and with a straight tube an effort was made to remove all of the intra-laryngeal mass. The bleeding, however, was so profuse that the attempt had to be abandoned before any large quantity of the mass had been removed. A few days later, he was again put under general anesthesia, and the trachea was opened, this time opening three rings of the trachea in order to get free access to the tissue. Great masses of granulation tissue were found and removed with very little hemorrhage, and the pathologist reported the growth to be endothelioma.

It was then a question of what should be done,—whether to remove the trachea and then try radium, or give radium a trial first. After consultation with several colleagues, it was decided to apply radium to the parts for twenty hours. This seemed to have a very good effect, everything appeared normal, and the patient was discharged. He reported at the clinic regularly, and three weeks ago there was nothing abnormal to be seen in his trachea.

When seen four days ago, however, there was a new mass springing up from the lateral wall, and another one anteriorly. There is no doubt but that this is a recurrence of the endothelioma. The question again comes up whether we shall try radium or remove part of the trachea. It may be best to remove 4 or 5 cm. of the trachea, and then either tie the end-pieces together or, as Soerensen has recommended in the last number of the *Archiv fuer Laryngologie*, put in a tube and have nature form an artificial trachea. Soerensen works with Glück, and they have had more of such cases than anyone else. He describes the operation as very simple. There does not seem to be any reason why this growth could not be removed without danger, and then radium applied. There are very few such cases on record in literature.

DISCUSSION.

Dr. HARRIS said that he had seen an endothelioma of the trachea operated upon by Dr. Chiari's assistant in Vienna and had recalled Dr. Freudenthal's suggestion as to the ease with which the tracheal rings could be removed. The patient was a young woman, and it was decided that a radical operation was necessary. The operation was, indeed, a very simple one, and had every promise of success. The third day, however, the patient was seized with a hemorrhage and she died before he left the clinic.

Dr. Harris said that he did not wish to discourage Dr. Freudenthal from doing the operation, but only to warn him against complications. If he himself were the victim of such a condition, he would prefer to be let alone.

Dr. CARTER thought that such a case should be treated endo-tracheally, if possible, for as soon as these growths extend beyond the tracheal box they, as a rule, become unmanageable, even if the patient does not die

from the operation, which is a serious and extensive one. He thought it would be better to treat this patient with radium, which might prove at least palliative.

DR. HURD said that some weeks ago he was at the Croker laboratory where they had been making extensive experiments with radium, and their deductions were that it had never cured a case in either men or animals; that it is almost useless in the treatment of malignant disease, and is only useful in sterilizing an infected malignant field before operation. Other than that, it does not do more good than the old-fashioned hot iron treatment.

DR. G. E. DAVIS, referring to the question of anesthesia, thought that if, at the initial operation, concentrated cocaine adrenalin solution had been used, all reflexes would have been abolished and possibly the patient might not have been so terrified. It probably, also, would have averted the necessity of a tracheotomy. It is well known that in all cases about the upper respiratory tract that ether anesthesia increases the tendency to dyspnea; it dilates the blood vessels very much. The contrary is the effect of cocaine adrenalin local anesthesia.

DR. ABRAHAM endorsed what Dr. Hurd had just said about radium, which was confirmed by some cases which he had treated. A few months ago Dr. Coakley had reported some cases of malignancy of the larynx, and at the same time he himself had reported on two cases in which it had been tried and proved valueless. In one case of cancer of the tongue and larynx a very strong radium had been stitched into the growth at the side of the tongue and allowed to remain there for fifteen hours. Dr. Abraham said he reported relief of the pain and ear symptoms but a few weeks later patient died. This made the third case in which he had tried radium without any benefit.

DR. FREUDENTHAL, in response to an inquiry from Dr. Arrowsmith, said that the growth originated about an inch below the glottis.

Referring to Dr. Harris' remarks about hemorrhage, he said that that might occur at any operation. He had seen the most extensive hemorrhages after opening the maxillary sinus; but that feature would not keep him from operating. Of course, other things have to be considered, especially the danger of injuring the recurrent nerve. If that were cut on both sides, severe complications might arise.

As to what Dr. Carter had said about endotracheal treatment,—he had reproached himself that he had not operated immediately. Still, the application of radium endotracheally is somewhat different. The patients have reflexes and often commence to cough. He had had some trouble once with a little boy and was glad when he got the tube out.

Replying to Dr. Hurd and Dr. Abraham, he could only say that all the members knew that he was always conservative in his statements about radium. He had said repeatedly that radium will cure only a small percentage of cases; and he still adheres to that. At the last meeting of the German Laryngological Society at Kiel, several men presented positive proof of malignant neoplasms cured with radium,—men that could be relied upon.

Replying to Dr. Davis' remarks about the anesthesia, Dr. Freudenthal said that it was his experience that some patients will not let you do

anything at all,—no matter what may be given them, bromides, scopolamin, morphin or any amount of cocain. They will not stand it, for they have made up their minds that they will not stand it. That was the case with the boy he had spoken of. He generally uses cocain, as much as the patients can stand, and adrenalin afterward.

A Case of Papilloma of the Cord. DR. T. J. HARRIS.

Dr. Harris said that the case was not a particularly rare one, but that the papilloma was so large that he thought it would interest the members to see it. He himself was especially interested on account of the difficulties he anticipated in removing the growth.

Some time ago he had reported a somewhat similar case where the removal was a very simple procedure. In that case the patient was a school teacher, 24 years of age. The mass was so large that when it flopped into the glottis it almost obstructed the breathing. It was not particularly dense, although the blood vessels could be seen running over it. The diagnosis that he made first was fibroma, but the pathologist reported it to be an angioma. It was removed in two sittings, two weeks apart, with the cold wire snare. There was no difficulty in removing the first portion, which improved the voice; then the base was taken off.

The case now presented, however, offered all sorts of difficulties as compared with the earlier one. The patient had had three or four treatments. He had been examined by the indirect method, and an attempt had been made to make an examination by the direct method. The growth was far anterior on the right vocal cord. The young man's voice had been lost for some time. He gave a rather vague history.

Dr. Harris said that the case emphasized a point which he had always stood for,—that in many cases the direct method of examination is not called for. Those who have cultivated the indirect method seldom feel the need of any other. This case, however, promises a great deal of difficulty.

A third case to which he referred was interesting because of the fact that two meetings ago he had reported a fatal case of syphilis of the larynx in an Italian who had been under observation for some time, and whom they had hoped to cure by the aid of salvarsan, mercury, and iodids. The fatal result which ensued in the hospital, however, convinced them that a mistake had been made in deferring a tracheotomy. In that patient there was a very considerable stenosis, a thickening of the cord, and a limited motion of both cords, but especially of one. They had hoped that by keeping the case under close observation a tracheotomy could be done if necessary, but when the end came there was not sufficient warning to afford time for the tracheotomy. The present patient who is presented for inspection, is a woman, 34 years of age. Five years ago she was tracheotomized at the Manhattan Eye, Ear and Throat Hospital for dyspnea, and remained there under observation for five or six weeks. After the tube was taken out, she left, and had no trouble since until a week ago, when she began to experience some difficulty in breathing, and some hoarseness. The picture a week ago was the same as shown this evening. There was a distinct thickening of the left vocal cord, and reduced motility on that side. It is not a distinct paralysis, but the motion is decidedly restricted.