TUBERCULAR AND SYPHILITIC GRANULOMATA OF THE NOSE.*

WILLIAM LINCOLN, M. D., CLEVELAND, OHIO.

In the literature of tuberculosis and syphilis of the nasal mucosa not much study has been devoted to the form of tumor described by pathologists as infectious granulomata, and in the few histological reports made of the granulomata it has generally been assumed that the tumors which showed under the microscope the presence of giant cells were to be classed as tuberculous in origin and not syphilitic. I thought it therefore of sufficient interest to report to the Association these two cases which I had under observation at the same time, in which granulation tumors exactly similar, not only in their gross appearance and situation, but in their histological structure as well, had these different specific diseases as their causative factors. Of interest also is the appearance upon the nasal mucosa of a granuloma as an evidence of syphilis, the lesions of this disease observed by rhinologist being almost always ulcerative and not neoplastic.

Case I.—Lakeside Hospital Dispensary, March 6, 1896. E. C. Female, aged forty; unmarried, puella publica. Family history negative. History of disease: Contracted lues five years ago. Treated for a short time and discontinued after disappearance of skin manifestations. One year ago ulcers began to form upon the hard palate. These were sluggish and painless. Six months ago she began to have slight obstruction to free breathing through the right nostril. This gradually increased and was accompanied by occasional slight epistaxis and seropurulent discharge, but no pain. To-day there exists almost complete occlusion of the right nostril and for this condition the patient applies for relief.

Examination.—Shows a mammillated tumor on cartilaginous septum in right nostril, rounded in contour, and measuring 20 to 25 mm. across the base. It is non-pedunculated, arising abruptly from the surrounding mucosa which is apparently healthy. This tumor bleeds easily, is firmly attached upon the septal tissue and presses upon the inferior turbinal. The color is similar to

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the surrounding mucosa. A probe passes freely above and below and to the outside of the mass, which is not painful to the touch. No sign of ulceration on the surface or about the edges of the tumor. On the hard palate are several ulcers 5 to 10 mm. across, characteristically syphilitic in appearance, and the scarred sites of many others. Other parts of the nose and throat are normal in appearance.

A piece of tumor removed for microscopical examination shows a structure typical of tubercular granulation tissue with the presence of giant cells.

Physical examination of the chest entirely negative. No subjective or objective symptoms of other trouble.

Treatment K. I. in increasing doses.

March 20.—Ulcers in mouth healing rapidly. Nasal mass decidedly less. Taking 45 gtt. of saturated solution of K. I., t. i. d.

April 10.—Ulcers in mouth healed, leaving scars. Septal tumor appears shrunken and whitish and about one-third of the original size. K. I. continued.

May 10.—Granuloma of septum disappeared, leaving slight depression at its site.

December 15.—Since the last date the patient was seen once or twice at intervals of a month or so, but has not reported now for about six months.

Case II.—Lakeside Hospital Dispensary, May 22, 1896. C. S. Widow, aged 45. Family history: Maternal grandfather died of cancer, otherwise family history good. Patient is nervous and hysterical, has lost considerable flesh. Has occasional night sweats. One year ago had grippe followed by pneumonia.

Disease history: For the last eighteen months patient has been increasingly troubled with nasal occlusion in right nostril, accompanied by quite severe pain in and about the nose. Discharge somewhat profuse and of a muco-purulent character has been present almost all the time. Has been told she has a nasal polyp, and has come to have it removed.

Examination.—Pale red mass situated upon the cartilaginous septum by a broad base, 25 to 30 mm. across. The tumor is sessile, with mammillated surface, bathed in muco-purulent secretion. Tumor presses against the outer wall of the nose, and the probe is passed by the outer surface with difficulty and causes bleeding, but passes freely above and below the mass. The tumor seems imbedded in the mucosa which is slightly raised around it, but not

inflamed. No ulceration is seen on the surface or about the tumor. No other lesion is observable in the nose, mouth, pharynx or larynx. There is no lymphatic swelling. No history of lues.

Physical and bacteriological examination did not reveal tuberculosis of the lungs or elsewhere.

A small piece of tumor removed for microscopical examination shows the ordinary structure of a tubercular granuloma with giant cells, no bacilli could be found in these sections. Administration of K. I. and of K. I. combined with mercury for one month produced no diminution of the tumor, and therefore the whole mass was removed by means of a sharp curette. The scraping was carried well into the surrounding healthy mucosa and down to the cartilage. Three months after this operation nothing remained but a small ridge of indurated scar tissue opposite the middle turbinated bone. The site of the tumor, however, is now a slight concavity covered by apparently healthy mucosa. About eight months after the operation above described the patient returned with an exactly similar condition in the left nostril. The granuloma which has been growing for about four months according to the patient, and which is therefore not so large as the one removed, occupies an exactly similar site on the opposite side of the cartilage. The patient now gives unmistakable signs, both by physical and bacteriological examination of tuberculosis of the lungs. She has lost much flesh, night sweats are very frequent, and muco-purulent expectoration profuse. This second nasal tumor was removed by the cold snare, and a strong solution of lactic acid applied to its site. The patient was also given appropriate remedies and attention for her condition, but died of tuberculosis in four months. The ulcer resulting from the removal of the second tumor proved most rebellious to treatment.

In this case it seemed to me from these later developments that we had in the first instance to do with a case of primary tubercle of the nose, for at the time of its first appearance the most careful examination failed to reveal any tuberculosis of the lungs or elsewhere. The attack of tuberculosis to which she succumbed was of a very acute and virulent type, affecting not only the nose but the lungs and peritoneum as well.

In these two cases we have similar tumors whose sites were identical and giving rise in their first stages to similar symptoms which by physical examination and by bacteriological provings as well as by therapeutic tests, proved to be due in one case to syph-

ilis, and in the other to tuberculosis. The microscopical examination, however, in each tumor was alike. We had the typical granulation tissue containing here and there giant cells which is described by nearly all authorities as being peculiar to tubercular granuloma. Here, however, in our first case was a granuloma containing giant cells, which was undoubtedly due to syphilis.

I have examined a number of articles written by authorities upon these subjects. In one written by Manasse in 1893, there is a very exhaustive report of five cases of syphilitic granulomata of the nose with careful histological study of each case. Giant cells were found by this observer in all of the sections examined.

Seiler has also reported two cases of syphilitic tumors in the nose.

Major, in Burnett's System, cites, besides twenty-seven cases of tuberculosis of the nose, collected by Bosworth, seven of which are doubtful, twenty-three cases from various observers, twenty-two of which he believes correctly diagnosed. Since that date, due to more careful observation and histological study, many undoubted cases of nasal tuberculosis have been reported. Notwithstanding this, however, tuberculosis of the nose still remains one of the diseases rarely seen by the rhinologist, and granuloma is one of its less frequent forms.

Herzog in 1893, in a resume of the subject of nasal tuberculosis, published ten new cases and tabulated seventy already reported. Since then the subject has been treated and other cases reported by many observers, notably Hajek, Farlow, Chiari, Woblewski Theisen, Baurowicz, Koschier, Hasslauer, Wright and others. In Herzog's report a case is mentioned which illustrates very well the point which I consider of importance in my own cases, namely, that we can more certainly determine by physical examination and by therapeutic tests than by histological examination whether these tumors are due to syphilis or to tuberculosis. The case referred to was one in which a granuloma with other symptoms had been diagnosed as tubercular. The tumor as well as the other symptoms, however, rapidly disappeared under the administration of K. I. Herzog, however, states in the same paper that the presence of giant cells in a granuloma may be considered diagnostic of tuberculosis. This conclusion would not seem permissible when the findings of Manasse's cases and my own are considered. Zuckerkandl, in his description of syphilitic lesions of the nose, makes no mention of granulomata with giant cells, although he

notes the occasional occurrence of granulation tissue in connection with ulcerative changes. These granulomata containing giant cells he considers as occurring only in tuberculosis, and asserts that they sooner or later break down into ulcers, causing softening and loss of tissue. The local symptoms of these growths are alike whether the cause is syphilitic or tubercular. The masses bleed readily and cause a hypersecretion of mucus, or, if slightly ulcerated, a thin muco-purulent secretion may be present. Nasal obstruction causes its usual inconvenience, but is accompanied usually by very little pain. Concurrent signs of the specific disease causing the tumor were present in only one of these cases at first, the syphilitic one, but in the second case, the tubercular one, abundant signs of tubercular infection were present at the time of the second tumor. The appearance of the tumors with their mammillated surfaces raised sharply from the surrounding apparently normal mucosa is sufficiently distinctive to assure of their not being confused with other intranasal neoplasm except, perhaps, papillomata, which are sometimes quite sessile. These latter tumors, like the granulomata, are rare in the nose, but their site has generally been noted as on the turbinated bodies, usually the inferior, while the infectious granulomata have in nearly all cases been observed upon the septum. Microscopically, while it is hard to distinguish the specific granulomata from each other, their histological structure is unlike papilloma or any other form of malignant or non-malignant neoplasm.

To differentiate between the granulation tumors due to syphilis and those due to tuberculosis we will be helped as I have stated, more by the results of physical and bacteriological examination than by the examination of the histological structure. The treatment of tubercular granulomata should be the removal of the growth as completely as possible; this is indicated not only to rid the patient of a focus of bacterial invasion and activity, but also to remedy the local disturbance caused by its presence. The removal is probably best accomplished by means of a sharp curette, being careful to scrape down to the cartilage and well into the surrounding healthy mucous membrane. The syphilitic granulomata will yield to the usual treatment of late syphilis, but surgical interference is, I think, not contraindicated if the growth is sufficiently large to cause considerable obstruction, and this surgical

interference may be carried out in conjunction with antisyphilitic treatment.

Lakeside Hospital.

REFERENCES.

- P. Manasse. *Archiv. Pathol. Anatomy*, Band. 147, p. 23.
 Major. *Durnett's System*.
 M. Herzog. *Amer. Journal Med. Sciences*. Vol. CVI. p. 677.
 M. Hajek. *Internl. Klin. Rundschau*. 1892. VI.
 J. W. Farlow. *N. Y. Med. Journal*. Vol. LVII. p. 525.
 O. Chlari. *Archiv. fur Laryngol.* Band. I. p. 121.
 Woblewski. *Gaz. lek Warsaw*. 2-3-XIII.
 Barowicz. *Przegl. lek Krakow*. XXXIV. 357.
 Koschier. *Wiener Klin. Wochenschrift*. 1895. VIII.
 C. F. Theisen. *Laryngoscope*. Feb., 1898.
 Hasslauer. *Archiv. fur Laryngol.* Band. X. Heft. I.

DR. A. GOUGUENHEIM.

Dr. A. Gouguenheim, senior editor of the "*Annales des Malades de l'Oreille*," was born at Metz on the 9th of January, 1839. He studied at Paris at the Charlemagne Lyceum. He commenced the study of medicine in 1857 and received his degree in 1861. In 1866 his first dissertation, "Aneurism of the arteries of the brain," received the silver medal of honor, an exceptional distinction at that time, and one accorded only to four theses during the year. This work has become a classic. His appointment to the medical staff at the Conservatory of Music and Declamation in 1873 suggested the idea to him that he devote himself more exclusively to the study of laryngology.

He practiced in the hospitals until 1877, when he began to study the specialty with Fauvel. He served in the hospital of Lourcine and two years after this published a remarkable work on "Secondary Syphilis of the Larynx."

In 1882 he worked at the hospital of Bichat, where was organized in his charge a chair of laryngology. In 1887 he was given the direction of the laryngological clinic founded at the Hospital of Lariboisiere by Ismbart and continued by MM. Raynaud and Proust.

Gouguenheim gave a great impulse to the study of laryngology in these hospitals. Always alive to new ideas, he did not hesitate to encourage those tendencies which led the specialty more and more towards surgery. For many years his clinic at the Hospital Lariboisiere attracted numbers of French students and those of other countries, of whom many have become well known.

At the Conservatory Gouguenheim instituted in this establishment in 1893 a course of physiology and hygiene of the voice, afterwards published in the *Annales des Mal. de l'Or.* "The Singing and Speaking Voice," and later presented in book form.

Gouguenheim is dead and in the hospitals and the clinics where he labored for so many years he will be missed. To the world of science he leaves a large heritage, the results of his diffused knowledge of the specialty which he practiced so untriflingly.

As senior editor of the "*Annales des Maladies de l'Oreille*," he exhibited an active and constant interest and influence in the progress of laryngology.