**SYMPOSIUM: Syphilitic Manifestations in the Upper Air
Passages.***

**American Laryngological, Rhinological and Otological Association.—
Boston Meeting.**

Syphilis of the Nose and Accessory Sinuses.

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Syphilis of the Nasopharynx, Ear and Buccal Cavity.

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Syphilis of the Larynx and Trachea.

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SYPHILIS OF THE NOSE AND ACCESSORY SINUSES.*

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No subject in medical literature has been more thoroughly studied or more exhaustively written upon than Syphilis, and yet when we compare our knowledge of this, with that of many other diseases we find astonishing deficiencies. In diagnosis, symptomatology and treatment we are wonderfully proficient, while in pathology we are seriously lacking. It would require much more time than is allotted this paper, to discuss the pathology of general syphilis, though it would afford interesting reading. No greater honor has ever been accorded a man in our noble profession than will be given to him, who discovers the true original etiological factor in this most dreaded malady, and no one will ever render a greater service to mankind.

Primary nasal syphilis is of rare occurrence, and we wonder that more cases are not reported, when we consider the uncleanly habits of the class of people in which this disease mostly abounds.

Buckley, from an analysis of 9058 cases of extra-genital syphilis found 95 primary lesions in the nose—he personally found one case in 113 reported. In 2244 cases observed by Bassereau, Clerq, Lefort, Fournier and Ricord, primary nasal lesions were found in two. In 292 cases of extra-genital reported by Fournier and Martineau, not a single one exhibited a primary sore in the nose.

The favorite site for the nasal chancre is upon the cartilaginous septum, which is probably due to the fact that in this locality there is often an abrasion of the mucous membrane. Some have been found

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on the under surface of the alæ, and a few have been observed higher up in the vestibule. The finger nail seems to have been the most frequent means of conveying the infection—infected instruments have been regarded as the offending agents in some instances.

The initial nasal lesion does not differ essentially in character from that found elsewhere. Diagnosis may at times be difficult. Before the breaking down of the papule, which may require several days, the condition may be readily mistaken for an ordinary *furuncle*. The principle factors in determining this are the question of *time*, together with the amount of lymphatic involvement. Forty-eight to sixty hours will usually conclude the formative stage of a furuncle, while the chancre will be slow—sometimes requiring a week or more to develop.

The furuncular process invades the surrounding lymphatics but slightly, while the chancre will extend to glands not only close by, but to those situated some distance from the seat of infection—such as the submaxillary, the sublingual and even to the post-auricular and cervical regions. The furuncle is usually located in and about the hair follicles, while the chancre is most often found upon the septum or upon the membrane lining the vestibule or turbinates.

The chancre may be confounded with the *tubercle*.

Nasal tuberculosis is very rare indeed and the writer is not aware of a case reported as one of primary invasion.

The symptoms of pulmonary involvement are nearly always present, and if any doubt exists the microscope will easily determine the presence of the tuberculous bacillus.

It may be difficult at times to differentiate between a chancre and some form of malignant disease—such as carcinoma or sarcoma.

The symptomatology of malignancy usually points to pain—repeated hemorrhage and slow development without febrile manifestations:—whereas the chancre seldom causes pain—rarely bleeds and often exhibits temperature changes. The microscope will again offer a sure solution of the difficulty.

The *Secondary* stage of nasal syphilis is hard to recognize, due to the fact that but few and very indefinite symptoms are manifest during this period of the disease. But few patients fail to suffer from the so-called "Secondary Coryza," though not many would be willing to venture a diagnosis based upon this fact alone, or indeed upon any nasal symptoms liable to be observed during this time.

Intuition is often treacherous, but many times have we all seen cases of Coryza with reddened alæ—watery acrid discharge and said to ourselves that we had a Specific Condition—there is that "un-

seen something" that tells us this, but it would be most unwise to give heed to this impulse without a careful survey of every symptom. Happily our resources are many and we resort to them for further confirmation. It is at this time that Syphilides of distinctive characteristics, general lymphatic involvement—mucous patches in the mouth, and the like, are present, serving to strengthen the evidences found in the nose.

It has been noted by some writers that in those cases where secondary nasal symptoms are distinctly evident there often coexists palmar psoriasis a manifestation of some rarity in the earlier stages. The writer has especially noticed this in one case.

TERTIARY PERIOD.

This is the particularly interesting stage of nasal syphilis. The writer has often ventured the statement before his medical students that the nose will more frequently and more delicately reflect the presence of a specific infection of long standing than any other organ in the body. This is rather easy of explanation when we consider that the nasal bones are most fragile as well as being richly endowed with blood, and it would be very natural that such a process, however slight, might invade these delicate structures. Notwithstanding the fact that this susceptibility exists, we seldom see tertiary manifestations in the nose till late in the history of the disease. Those cases that have undergone spasmodic treatment seem especially liable to nasal complications—such, for instance, that go to the various hot springs throughout the country and pass through the secondary stages with comparative rapidity.

In married women whose husbands have transmitted the infection, and where the attending physician has been over-cautious in keeping secret the real condition for fear of possible scandal, one will notice the remarkable prevalence of nasal involvement. The writer could report many such cases.

The lesions of this stage are extensive and oftentimes very destructive. But few diseases offer symptoms with which these might be confounded—lupus, tubercular necrosis and malignant neoplasms might present some difficulties in diagnosis. Lupus is distinctly a skin disease and such evidences are usually present. Tuberculous pulmonary symptoms will rarely fail to clear this obstacle, while malignancy can almost always be excluded by the ever present symptoms of pain. The microscope will give valuable aid.

PATHOLOGY.

The submucosa, which serves as the periosteum of the bone, is primarily affected, followed by diffuse inflammatory processes developing in the bony framework.

Differing from some authorities upon this point the writer believes that the bony structures are affected before changes in the mucous membrane are noticeable. The breaking down of the membrane is due to the cutting off of the circulation by pressure on the blood channels, rather than to inflammatory infiltration into the connective tissue. The gummatous nodule develops in the space between the periosteum or perichondrium and the bone or cartilage primarily, and not in the mucous membrane. Pressure due to this focus of inflammatory deposit produces necrosis of the bone or cartilage. A gummatous node undisturbed by pressure, such as we find in the brain, lungs, larynx, etc., grows to large proportions and sooner or later undergoes fatty degeneration. Histologically these tumors consist of small round cells surrounded by giant cells. Some of these cells reveal the presence of the Lustgarten bacillus. The adjacent tissues show inflammatory proliferation and the walls of the blood vessels are hyperplastic. Any part of the bony framework may be attacked by this disease, but the vomer and perpendicular plate of the ethmoid are especially predisposed to incipient necrosis. In the experience of the writer a large majority of cases have exhibited this fact.

The next in point of frequency are the turbinates—the inferior being usually first to give evidence. The membrane covering these bodies presents a blanched expression, such as we find in a vasomotor coryza, discharging a purulent secretion. The tissues are highly congested with venous blood due to stasis from underlying pressure. This engorgement is more or less permanent, that is to say, it does not disappear until the bony structure gives way and necrosis takes place. If the septal conditions are not checked the floor of the nose will surely become involved and extensive destruction of the hard palate takes place. The nasal bones together with the nasal processes of the superior maxillary are likewise very early affected, a condition, which if allowed to progress, results in the characteristic “saddle nose.”

It is hardly necessary to enter into any detailed account of the conditions resulting from this disease. Every thing depends upon the time at which we see the case, the general condition of the patient and the willingness of the individual to carry out a vigorous course of treatment.

ACCESSORY SINUSES.

Primary infection of the sinuses adjacent to the nose is hardly likely to occur. We fail to find mention of such condition unless the orbit be considered accessory.

The same may be said of the secondary period excepting the coryzal symptoms manifest also in the nose. Tertiary bones necrosis is very common. The fragile walls and cell partitions are very surely involved if the disease is allowed to progress. The frontal and ethmoidal are the first to be invaded and later the sphenoidal body.

A very interesting case has lately come under the observation of the writer which will serve to verify the statement previously made that the nose was a fertile field for reflecting a latent infection, exhibiting also a sphenoidal sinus complication without involvement of the frontal or ethmoidal bodies.

H., age 64 years—surgeon—was infected upon the finger two years ago while operating.

Treatment during secondary period consisted of injections of gray oil and inunctions of mercurial ointment covering a space of eighteen months—symptoms disappeared and patient considered himself free from danger. Six months later he applied to me for treatment of his nose—complaining of soreness and pain located about the septum, and closure of the right nostril causing difficult breathing—examination showed a small ulcer located at the junction of the cartilaginous and bony septum. Treatment was applied locally and the patient urged to take iodide of potash to full effect and continue same indefinitely. Imbued with the true surgeon's spirit he proceeded to take this drug without regard to size of dose or stomachtic endurance.

In due time the nasal symptoms disappeared and very shortly thereafter the stomach refused to serve its purpose. He discontinued his medicine. Ten weeks ago patient suffered what was supposed to be an attack of la grippe—complained of violent post occipital pains—had little or no temperature—lost flesh rapidly—grew steadily weaker. I was called in to examine him and soon discovered a large necrozing ulcer at the juncture of the basilar process with the sphenoid—extending down the posterior border of the septum and invading the nasal surface of the soft palate.

HEREDITARY SYPHILIS.

A very interesting question regarding the "Infecting Period" of the parent has been discussed at great length by Syphilographers, and it is a matter of the greatest importance to the surgeon.

Many times we are asked when is marriage permissible. Without going into detail upon this phase of the subject—you will pardon the digression of the writer when he says that never should a surgeon encourage such a step until every possible chance of infection has disappeared. Three years under the most favorable condition is none too soon. At least a year should elapse after every symptom of the disease has vanished.

Most syphilitic children are born into the world with secondary symptoms. The skin manifestations are most prominent and are usually unmistakable—mucous membrane especially of the mouth and nose are nearly always affected at birth or soon after. The secondary Coryza or “snuffles” is usually present, together with mucous patches of the pharynx and mouth.

Children born of this misfortune often present a characteristic physiognomy. The flattened bridge, the illy developed alæ, the sunken face all go to make up a diagnosis which is beyond question.

The tertiary conditions in patients of hereditary infection are similar to those found in the acquired type.

Upon the question of treatment, the writer desires to offer a few suggestions.

First—Waste no time in preparing a patient's general condition to be followed later by specific medication. Tertiary destruction is too rapid to admit of any delay.

General anæmia, a disordered digestive apparatus, in fact all disturbed functions will respond under proper attention devoted to the dominant malady. No medication directed to the relief of a patient's general health will avail any thing when a specific infection is destroying the physiological function of every organ in the body.

Second—Iodide of potash is the great potential agent in the hands of the physician. A careful study of the physiological effect of this drug must be made upon each patient. It is seldom that any two individuals can be treated alike.

Third—Never push the drug to its full physiological effect—that is, to the point of producing a catarrhal condition of the nasal mucous membrane and conjunctiva—nor to a point where the stomach will refuse to act. This can usually be avoided by giving it in gradually increasing doses. The method invariably employed by me is to begin with ten grain doses to an adult one hour after each meal, increasing one grain to each dose every other day. I employ an aqueous solution in which one drop represents one grain. The time at which the medicine is taken is a most important point. Any

sooner than an hour after meals will surely bring the stomach to an early refusal of the drug. The best results are not obtainable by giving the dose an hour or less before meals.

A catarrhal condition of the stomach will likely result from this method.

You will pardon the writer for indulging in this rehash of treatment, but it is surely a fact that failure in these cases is attributable more to the mismanagement of our therapeutic agent than to its inefficiency.

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The Tonsils as Portals of Infection—M. W. FREDRICK (San Francisco)—*Calif. State Med. Journ.*, Sacramento, Feb., 1905.

Following the paper of Dr. Frederick A. Packard, of Philadelphia, read in 1899, Frederick gives a valuable résumé of the present knowledge of the tonsils as portals of toxemia, both by bacteria and their toxins. By "tonsils" he means the whole of Waldeyer's lymphoid ring.

The only really good function of the tonsils, he thinks, is the elaboration of a small amount of young leukocytes, and the effect of these is quite overbalanced by the constantly recognized constitutional conditions caused by the absorbed toxins.

In May, 1899, Packard reported five cases of endocarditis following acute angina, in three of which the heart was known to be sound before the angina, and stated that he had been astonished at the frequency of attacks of endocarditis without rheumatism which gave a history of one or more attacks of acute and severe sore throat.

Other conditions of tonsillar origin are: pleuritis, chorea, rheumatism, etc., and Frederick is inclined to look upon the peculiar formation of the tonsillar tissue as the thing inherited, rather than rheumatism and the other diseases referred to.

He refers also to the chronic toxemia which exists in those persons who have certain chronic conditions of the tonsillar ring.

EATON.