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THYROIDITIS ACUTA SIMPLEX.[1]

By HOLGER MYGIND, M.D.

ACUTE inflammation of a previously hypertrophied thyroid gland, to which disease alone the name of *strumitis acuta* should be applied, is not uncommon, especially in those districts where goitre is endemic. It is, on the contrary, extremely rare to meet with an acute inflammation of a previously healthy thyroid gland. The most correct name for this latter disease is undoubtedly *thyroiditis acuta*. Besides this name, which Joseph Frank first made use of in his large work, "Praxeos Medicæ Universæ præceptæ" (*thyreitis nobis est inflammatio acuta corporis thyroidei, vel cellulosæ annexæ, stipata tumoris partis affectæ, attactum respuentis, respiratione difficili, deglutione dolorifica ac febre*, numerous others have been used in reference to the acute inflammation of the healthy thyroid gland; for instance, *inflammatio glandulæ thyroideæ* (Baillie), *cynanche thyroidea* (Ph. Fr. Walther), *thyreophyma acutum* (J. P. Frank), *angina thyroidea* (Weitenweber), and acute enlargement of the thyroid gland (Barlow[2]), and also, though incorrectly, the terms *struma inflammatoria*, and *strumitis acuta*. Finally, several authors have erroneously made use of the term *thyroiditis acuta* in describing cases of acute inflammation of a struma, *i.e.*, cases of *strumitis acuta*.

Lücke is the author who gives the most detailed description of acute inflammations of the healthy thyroid gland. He divides them according

[1] Read before the Copenhagen Medical Society, November 6th, 1894.

[2] Barlow, however, spoke of the case which he described in the Clinical Society under the name of "acute enlargement of the thyroid gland," as being an "acute inflammatory swelling of the thyroid gland," in which diagnosis Sir James Paget concurred after having examined the patient in question.

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to their etiology into three forms, (1) the idiopathic, (2) the traumatic, and (3) the metastatic. It seems to me, however, that a classification based upon pronounced clinical and morbid anatomical peculiarities would be more practical, as it is often difficult to decide in individual cases how far the one or the other etiological factor has made itself felt. I purpose, therefore, in the following pages to divide the acute inflammation of the previously healthy thyroid gland into two varieties, viz., the more frequently met with *thyroiditis acuta suppurativa*, which terminates with the formation of an abscess; and *thyroiditis acuta simplex*, which terminates in resolution. This latter variety is more rare, and is identical with the cases described by Lebert as "Entzündungen der Schilddrüse mit Ausgang in Zertheilung bei vorher nicht bestehende Kropf."

Thyroiditis acuta simplex is, as mentioned above, a rare disease. Bardeleben in "Eulenburg's Encyclopædia" declares that he has never met with a case of it. I have, however, succeeded in collecting altogether seventeen cases from literature, which are tolerably exhaustively described, and which must be considered as having been undoubted cases of acute inflammation of a previously healthy thyroid gland ending in resolution. These cases were observed respectively by Bishoff (1825), Günther (1846), Cruveilhier (1849), Merchie (1852), Bauchet (1837, besides two doubtful cases), Koppe (1868), Vulpian and Raymond (1877), Brieger (1881), Zesas (1885, besides a doubtful case), Zouiovitch (1885), Barlow (1888), Tomkins[1] (1888), Charcot (1890), Given (1892), and Koranyi[1] (1892, three undoubted cases, besides one doubtful, briefly described). To these may be added one observed by myself in 1893.

C. M., a gardener, aged thirty-eight had previously suffered from the following diseases: A protracted chest trouble (phthisis?), which left a slight hoarseness, still remaining. In the course of the last four years the patient has thrice had a (rheumatic?) iritis in both eyes, lasting from three to six weeks. Last year the patient had a gonorrhœa, but denies syphilis, of which also there is no symptom. No *abusus spirituosorum.*

On the 18th of August, 1893, the patient, who for some time had suffered from a fissure at the external orifice of the nose, accompanied by eczema, was taken suddenly ill, with violent rigors, and a redness and swelling of the right side of the face in the neighbourhood of the aperture of the nose. On the 19th I found an erysipelas of the right side of the face, which afterwards spread over the whole face to the hairy part of the head, and to the neck. The temperature was about 104°, and the patient was delirious. The delirium became so violent as to resemble delirium tremens (it was, however, proved beyond a doubt that the patient hardly ever took spirits), so that on the 22nd it was necessary to send him to Blegdam's Hospital in Copenhagen, where he was put into a strait-jacket on account of his violence.

The following notes are taken from the case-books of the hospital:—

Aug. 24th: No tremor or agility. Quiet, conscious of place, but not of time. Speaks in a low voice. Redness and tenderness on both sides of the face, especially the left.

Aug. 26th: Temp. $\frac{98{\cdot}7}{100{\cdot}4}$ (in the rectum). Pulse 100. Delirious last evening, quiet now. Considerable cough; brings up bronchial mucus. Sthoscopia

[1] The author is very much indebted to Dr. Harding Tomkins, of Hove, and to Prof. F. Koranyi, of Budapest, for furnishing him with all the details of the respective cases observed by them.

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normal. Considerable desquamation of the face. Under the right eye a small cutaneous abscess, which is opened. Albumen in small quantity in the urine. Has not been able to sleep. Chloral in the evening.

Aug. 27th: Temp. $\frac{99\cdot0}{98\cdot7}$. Is clear.

Aug. 29th: Temp. $\frac{102\cdot3}{99\cdot0}$. Continuous cough.

Aug. 30th: Temp. $\frac{100\cdot7}{98\cdot6}$. Cough less.

Aug. 31st: Temp. $\frac{101\cdot8}{98\cdot6}$. Continuous cough.

Pronounced debility. Considerable acceleration of the respiration. Respiration in front weaker on the left side than on the right. There is a distinct and tender swelling of the superior part of the front of the neck, accompanied by pseudo-fluctuating sensation, especially on the left side;[1] tenderness lower down on the neck, and at the anterior border of the left sterno-cleido-mastoideus, there seems to be a swelling.[2] Skin normal, easily movable against the underlying tissue.

Sept. 1st: Temp. $\frac{103\cdot0}{98\cdot6}$. Tenderness of the neck less, otherwise the same as yesterday.

Sept. 2nd: Temp. $\frac{101\cdot0}{100\cdot9}$. Tenderness of the front of the neck continues, but no fluctuation. Coughs and brings up a white frothy expectorate. Slightly hoarse.

Sept. 3rd: Temp. $\frac{102\cdot6}{99\cdot2}$. Pulse 100. Cough continues. Swelling of the whole front of the neck reaching down to the jugulum, and present on both sides of the middle line. Upwards on the left side on the border of the submaxillary region pseudo-fluctuation more distinct than before.

Sept. 4th: Temp. $\frac{102\cdot0}{99\cdot1}$. Swelling unchanged. Slight tenderness. No distinct fluctuation.

Sept. 5th: Temp. $\frac{102\cdot0}{99\cdot0}$. Desquamation of the face finished. The swelling of the neck considerably reduced upwards, but increased downwards where pseudo-fluctuation is perceptible. Urine normal.

On the same day the patient, by his own desire, was dismissed from the hospital. On the day following I saw him in his home, his condition being as follows:—

Sept. 6th: Temp. 102·2. Pulse 92, compressible. The patient has become very thin; is perfectly clear, but speaks in gasps and is perfectly hoarse. Coughs constantly, and brings up a frothy, watery expectorate. All liquid food is gulped up as soon as swallowed, under fits of coughing; it is impossible to swallow solid food. The patient sits half upright in bed, as he feels he would be choked if he lay down. The skin of the head and neck desquamates considerably. In the front of the neck there is a considerable swelling which, upwards, goes as far as the os hyoideum, and downwards is sharply defined towards the incisura sternalis, though a finger can be inserted between the upper edge of the sternum and the edge of the swelling. On either side the swelling is bounded by musculi sterno-cleido-mastoidei. It is most prominent on a level with the position of the first and third tracheal ring, decreases gradually all round, but is somewhat more prominent on the inner margin of the left musculus sterno-cleido-mastoideus than on the corresponding spot on the right side. The skin over the swelling is of normal colour and not remarkably hot; it can also be folded, though not as easily as the

[1] This swelling is best explained by the presence of an adenitis in the submaxillary region. On the 23rd of August a small tender glandular swelling was discovered close to the left angulus maxillæ.

[2] This is probably the commencement of the enlargement of the left lobe of the thyroid gland.

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normal skin of this part. No decided movement of the swelling can be seen when the patient swallows. The whole swelling is very tender, especially on the inner margin of the left musculus sterno-cleido-mastoideus.

The pharynx is the seat of a slight acute redness and swelling.

The stethoscopic examination of the lungs showed diffused moist rhonci.

Urine normal. The objective examination showed no other changes excepting those of the larynx described below.

Laryngoscopic examination shows the whole mucous membrane of the larynx of a bright red colour, and slightly swollen; the redness is faintest above, but increases downwards, and is deepest in the upper part of the trachea, especially on the left side. The vocal cords slightly red; the movement of the right vocal cord is normal, while the left vocal cord is fixed in "cadaveric position" during deep respiration, and only moves slightly towards the middle line during phonation, the rima glottidis forming a triangle during phonation.

Sept. 7th: Temp. $\frac{102{\cdot}6}{101{\cdot}3}$, pulse 104, resp. 30. The patient is obliged to sit upright to prevent choking sensations. Only sleeps in short snatches. Coughs frequently, and brings up a frothy, white expectorate. Cannot swallow solid food, liquid with difficulty, and only in a certain way, viz., by drinking a large quantity quickly, and by pressing it down, so to speak. Not only is deglutition painful, but the patient feels as if the food were stopped in the upper part of the œsophagus, consequently he takes as little nourishment as possible. The swelling in the front part of the neck is now sharply defined in its circumference, and is considerably narrower in the middle line than at the sides, assuming the clear outlines of an extremely enlarged thyroid gland. The skin is now slightly red, especially to the left of the middle line, and is so tender here that the slightest touch is painful. Pseudo-fluctuation can be felt here in the depths. The skin of the swelling cannot be folded so easily as before. Laryngoscopic examination yields the same results as before.

Sept. 8th: Temp. $\frac{102{\cdot}1}{100{\cdot}4}$, pulse 96, resp. 20. General condition considerably better, cough less, swallowing easier. The swelling of the neck considerably diminished; the outlines of the normal thyroid gland very distinct. Voice the same, as also result of laryngoscopic examination.

Sept. 9th: Temp. $\frac{100{\cdot}4}{99{\cdot}0}$, pulse 92, resp. 16, cough slight. Swallows liquid food without difficulty. The swelling diminished considerably. Skin normal in colour, somewhat pasty. Voice still hoarse.

Sept. 10th: Temp. normal, pulse 86, resp. 16. Feels perfectly well. Swallows solid food without difficulty. Cough very slight. The enlargement of the thyroid gland much diminished and sharply defined. No tenderness.

Sept. 11th: Up and well. No cough. Voice normal. Swelling of thyroid gland very slight. Laryngoscopic examination shows natural movements of the left vocal cord, and but slight redness of the trachea.

Sept. 15th: Perfectly well. Swelling of the thyroid gland scarcely perceptible.

Sept. 17th: Thyroid gland of normal size.

The patient has since enjoyed perfect health with the exception of an iritis lasting two months. There has never since been the least trace of enlargement of the thyroid gland.

Besides the above-mentioned cases there are in literature twenty-one other reports of cases described as cases of acute thyroiditis, ending in resolution; they are all, however, either so shortly or so defectively reported that it is impossible to come to any satisfactory opinion as to whether they have been true cases of the disease under discussion in this

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article, or whether they have not rather been cases of hæmorrhage of the thyroid gland, or of strumitis. It is not, however, likely that the majority of these cases were other than *thyroiditis acuta simplex*, as it is most probable that the diagnosis generally was correct, but where such necessary information, as for instance, as to temperature, the duration of the disease, etc., is absent, it is at all events impossible to make use of them as a basis for a detailed description of the disease. The cases here referred to were published by Thilenius (1799), Ph. Fr. Walther (1817, three cases), Hedenus (1824), Conradi (1826), Schöninger (1823, two cases, of which the one was doubtless hæmorrhage of the gland), Weitenweber (1845; the case ended in death, but there was no *post-mortem* examination to verify the diagnosis), Bauchet (1857, two cases relating to respectively a woman of thirty, and a woman of twenty, whilst a third case, relating to a woman of thirty, is included in the true cases on page 182), Eulenberg (1860, two cases), Heidenreich (1860, quoted by Eulenberg), Guyon (1866, probably strumitis), Greco (1872), Moliere (1873) Berger and Verneuil (1876, a case of strumitis), Zesas (1885, one case), Matignon (1890), and Koranyi (1892, one case).

Finally, there are in literature several descriptions of acute thyroiditis, in which the form of that disease, ending in resolution, is mentioned. Of these attention may be drawn to those by Ph. Fr. Walther, J. P. Frank, Hedenus, Hüpenden, Weitenweber, and especially to those by Lebert and Lücke, as also the French theses by Roellinger, Simon, Galthier, Rascol, and Bosco, are worthy of mention.

ETIOLOGY.—Thyroiditis acuta simplex, like the chronic hypertrophy of thyroid gland, goitre, is most frequently met with in *females*, whose thyroid gland is, as is well known, larger than that of males. Thus eleven of the cases in the first group, containing eighteen patients with tolerably minute histories of the case and reliable diagnosis, referred to females and seven to males.

Age seems also to play some part in the etiology of this disease, as it attacks preferably individuals between twenty and forty, and of these especially those between twenty and thirty years of age; in the first group of cases there is thus only one relating to a younger patient, viz., a child three years old (Barlow), and one to an older patient, viz., a female of forty-two (Günther).

As to how far *other predisposing causes* affect simple acute inflammation of the thyroid gland, it may be stated that, in the first group of cases several of the patients were stated as being weakened by various previous diseases; but others were said to have been perfectly healthy and strong individuals before the inflammation of thyroid gland developed.

Neither was it shown that any of the patients in question were born in parts where goitre was endemic, neither was there any case in which it was proved that there were relations with goitre. In none of the cases is mention made of a subsequent development of goitre.

As far as the more *immediate causes* of thyroiditis acuta simplex are concerned, it seems that this disease often appears without any visible direct cause—that is to say, as a purely idiopathic disease—or at all events without other more direct causes than such as are of very undecided

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nature, for instance, "cold," "draught," etc. That "cold" is often mentioned as a cause, is, doubtless, partially owing to the fact that the inflammation of the thyroid gland begins often with the same symptoms as a catarrhal fever, and, particularly, can have a most deceptive resemblance to a severe tonsillar angina.

Rheumatic fever is the immediate cause which has been most frequently met with (Vulpian, Zouiovitch, Charcot, Given). Zouiovitch describes a *thyroidite aigue rheumatismale*, the characteristics of which were that it appeared during or after an attack of rheumatic fever, that it developed rapidly, and was of short duration, that it was not accompanied by suppuration, that its prognosis was favourable, and that it yielded to treatment with salicylate of sodium, qualities, which, as will be seen from the following, differ in no respects from those which accompany simple acute thyroiditis. Barlow's case, in which inflammation of the thyroid gland developed after a slight attack of erythema nodosum, should perhaps also be included in this group, although Barlow himself was not inclined to do so. It was in the discussion upon this case in the Clinical Society, that Angel Money stated that he had had a patient under observation, with what I have proposed to call thyroiditis acuta simplex, who had previously suffered from erythema, arthritis, and heart disease.

Two cases reported respectively by Eulenberg and Molière may possibly also be cases of rheumatic thyroiditis, but the histories published are too brief for us to be able to decide with certainty whether they should be considered as cases of inflammation, or only as such of hyperæmia of the thyroid gland. It may be mentioned further that diphtheria (Brieger), influenza (Koranyi), typhoid fever (Koranyi), malaria (Zesas), and erysipelas (case published, p. 182), may act as causes of thyroiditis acuta simplex. Further, Koranyi describes a case in which thyroiditis ending in resolution appeared during puerperal fever, together with parotitis, but as the case is but briefly described, and as it was not accompanied by pronounced difficulties in swallowing, or dyspnœa, it is doubtful whether it was not one of simple hyperæmia. This remark holds good also in reference to a case observed by Matignon, in which parotitis epidemica was complicated with orchitis, and to one described by Eulenberg where orchitis was stated to have been the cause. Finally, single cases of traumatic acute simple thyroiditis have been described (Walther, Schöninger). It is, however, most probable that these were cases of hæmorrhage of the thyroid gland.

MORBID ANATOMY.—As none of the cases reported in literature ended fatally, there have been no *post-mortem* examinations of cases of the disease in question. Luigi Porta, however, without mentioning the individual cases, states that he has, on *post-mortem* examinations of persons dead from "thyroiditis" (by which he distinctly states he understands an inflammation of the previously healthy gland), found the lobes of the thyroid gland enlarged, the capillaries injected, the veins enormously swollen, and the capsule thickened. This author also makes mention of a copious exudation of a plastic or gelatinous exudate over and under the capsule of the gland, and everywhere in the interstitial tissue, and in severe cases he also found pus.

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SYMPTOMS.—The symptoms of simple acute inflammation of the healthy thyroid gland develop, as a rule, with great rapidity and severity. In general they commence by general malaise accompanied by feverish symptoms, which latter might express themselves by rigors. There are at first no distinct local symptoms, except pain in the front of the neck. As these latter are frequently of a somewhat vague character, the disease is often at first mistaken for an angina, or a catarrhal fever. The characteristic enlargement of the thyroid gland develops itself in the course of the following days, seldom later. It is at first somewhat diffuse, without sharp boundaries, the tissue around the gland being more or less infiltrated, as is plainly seen from the history of the case published (page 182). The gland enlarges rapidly, with an increase of pain and of the other symptoms, which will be described below, its outlines at the same time becoming more and more distinct. When its outlines have become quite distinct, its close connection with the trachea becomes evident, as it moves up and down with the trachea when the patient swallows. This symptom is, however, far from being invariable, or is at least not always to be observed. The size of the swelling is very different in the different cases, varying from that of a hen's egg to that of a goose's egg, but can attain such dimensions as to occupy the whole front of the neck from the maxilla inferior to the incisura sternalis—indeed, in some cases it has been impossible to fix its limits below, as it has extended down behind the sternum (Koranyi), or the clavicula (Günther). On either side the swelling extends to the inner margin of the musculi sterno-cleido-mastoidei, and it is exceptional for it to go beyond these. The skin over the gland is not rarely the seat of infiltration, which, together with the excessive tenderness, can prevent a distinct palpation of the enlargement, but the skin is seldom œdematously swollen (Given); its temperature is often increased, whilst its colour is, as a rule, normal; it can, however, be decidedly red (Brieger, Barlow, Tomkins, own case). When this redness and a distinctly circumscribed tenderness is found on one spot where the enlargement is especially prominent, it will be readily understood that an abscess may be suspected, especially if the enlargement of the thyroid gland is elastic or pseudo-fluctuating, which is the consistency it is generally reported to have exhibited. It is seldom that the inflammation confines itself to a single lobe of the gland (Bauchet); in the majority of cases the whole of the thyroid gland is involved, the inflammation, however, as a rule, commencing or being especially developed in one of the lobes, as also in a few cases the isthmus has been first or especially attacked. It must finally be pointed out that these acute enlargements of the thyroid gland are always the seat of excessive tenderness to touch or movement; this tenderness has in some cases been so pronounced that the least palpation has given pain, and that even slight movements of head and neck have been painful, on which account the patient's way of holding his head and also his dislike to moving are often very characteristic. Spontaneous pains in the swelling appear not only in the beginning, but also sometimes later on in the disease, but the latter are, as a rule, not so severe.

The inflammatory enlargement of the thyroid gland, described above,

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develops, as a rule, so rapidly, that it on the first or second day of the disease reaches a considerable size, and often attains its maximum during that time. It is not, however, rare for the swelling to increase still more in the course of the following days. Its decrease commences but seldom in the course of the second day, most frequently in the course of the third or fourth day, and but exceptionally later on; in one case only the enlargement began to diminish after the eighth day of the disease (Koranyi). The other symptoms decrease together with the swelling, and often disappear so suddenly that the course of the disease reminds one of a pneumonia ending in crisis. The last traces of the enlargement of the thyroid gland can disappear in the course of a few days (Koppe); as a rule, however, the disease lasts from ten to fourteen days from its commencement, but seldom longer (Merchie, Given, Koranyi). In most cases the inflammation leaves no infiltration, and it is but exceptionally that it leaves small, hard lumps (Koranyi). The inflammation has, in some cases, been observed to break out again after it had begun to disappear (Bishoff, Tomkins).

The situation of the thyroid gland in the near neighbourhood of several important organs (trachea, œsophagus, the large vessels of the neck, etc.) gives rise to acute thyroiditis being accompanied by distinct symptoms from these. These symptoms are principally dysphagia, dyspnœa, cough, and hoarseness.

Dysphagia is an absolutely constant symptom in thyroiditis acuta simplex, as it has been observed in all the true cases mentioned on p. 182, and it is a prominent sign of the disease. Most frequently dysphagia expresses itself by pains accompanying the act of deglutition, which symptom is often an early and pronounced phenomenon, which can at first give rise to the disease being mistaken for angina. Frequently it is absolutely impossible for the patient to swallow solid food, and even the swallowing of liquids can be extremely difficult—a circumstance which is clearly shown by the history of the case, p. 182, and which renders acute thyroiditis a most painful disease for the patient. There can be no doubt that this symptom is caused by the immediate pressure of the enlargement on the soft and pliant walls of the œsophagus, and it would seem that the cases in which the left lobe of the thyroid gland is most swollen are accompanied by the greatest difficulties of swallowing, as the œsophagus is situated nearer to the left than the right lobe of the thyroid gland. The close connection of the swelling to the trachea during its upward and downward movement in swallowing, doubtless increases the pain which accompanies this act. Finally, it is possible that the dysphagia is partially due to the infiltration which takes place in the tissue surrounding the thyroid gland. The dysphagia decreases with the enlargement of the gland, and its intensity seems to be in direct proportion to the size of the latter.

Dyspnœa is a less constant symptom, being only mentioned in about one-half of the cases reported. It is seldom very severe, generally appearing as an increase in the frequency of respiration, which is out of proportion to the temperature, and accompanied by slight sensations of choking. Occasionally, however, the dyspnœa is accompanied by

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cyanosis (Brieger), or even by stridor (Günther, Given, Koranyi), which latter symptom, in one case only, was so severe that tracheotomy was thought of. Dyspnœa doubtless results from the compression of the trachea by the swelling, but perhaps the tracheo-bronchitis thus caused has something to do with it.

Cough is a much more rare symptom (Günther, Merchie, Tomkins, Koranyi, and my own case). It is, as a rule, frequent, dry, or accompanied by a slimy expectoration, and also somewhat painful from the pressure upon the tender swelling of the thyroid gland, which the cough gives rise to. It is doubtless owing to tracheo-bronchitis caused by compression, and perhaps also to propagation of the inflammation.

Hoarseness is also exceptional (Günther, Brieger, Charcot, and my own case). This symptom can naturally be referred to the above-mentioned causes, but that its origin may be another is evident from the case reported on p. 182. In this the hoarseness was mainly due to paresis of the left vocal cord. The etiology of this paresis will easily be understood when we remember that the enlargement of the left lobe of the thyroid gland was especially considerable, and that the inferior laryngeal nerve is normally situated between the lobes of the gland and the œsophagus ; also that it is more exposed to pressure on the left side, because it is situated on that part of the front surface of the œsophagus which stretches to the left of the trachea. This is the only case in literature in which any mention is made of paresis of the recurrent nerve, and Galtier alone mentions the possibility of that nerve being compressed by the enlarged thyroid gland.

Finally, it might be expected that compression of the large vessels of the neck might give rise to certain symptoms in cases of acute thyroiditis. In all the general descriptions of thyroiditis acuta simplex mention is also made of cyanosis of the face, enlargement of the subcutaneous veins, giddiness, buzzing in the ears, bleeding from the nose, etc. (Walther, J. P. Frank, Hüpenden, Weitenweber, Lebert, and Lücke). These symptoms, the description of which has evidently descended from the one author to the other, are not, however, mentioned in the more detailed reports of thyroiditis acuta simplex. On the other hand, there is reason to suppose that compression of the vessels of the neck is of some significance in the frequently reported congestion of the face, also in other symptoms such as headache, restlessness, etc., although their importance has been doubtless much exaggerated.

Besides the above-mentioned symptoms, some others have been occasionally observed, especially pronounced gastric disturbances : coated tongue, want of appetite, nausea, sickness, and diarrhœa, also "catarrhal" symptoms in the form of slight nasal and pharyngeal catarrh. Rheumatic pains in different parts are mentioned now and then.

The *fever* which accompanies the disease is worthy of a more particular mention. Acute simple thyroiditis can begin, as already mentioned, with rigors (Merchie, Koppe, Zouiovitch). As a rule, however, the temperature does not rise so high and so suddenly as to give cause to this symptom. Most frequently the temperature in the rectum varies from 100·4° to 102·2°, with pronounced matutinal remissions, and

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it is the exception for it to rise beyond 102·2° (Brieger, Barlow, Charcot, my own case). The highest temperature observed was 103° in the armpit (Barlow), but in this case the patient was a child aged three. The degree of temperature seems to stand in immediate connection with the size of the swelling, as it also becomes normal, or almost normal, as soon as the swelling begins to decrease. The frequency and quality of the pulse does not seem to be in direct proportion to the degree of fever. This is doubtless because the patient's general condition is, as a rule, much influenced by the tenderness of the enlargement, the dysphagia, dyspnœa, insufficient nourishment and sleep, etc. The frequency of respiration is also most frequently out of proportion to the degree of temperature, the compression of the trachea, the tracheo-bronchitis, and the patient's uncomfortable position causing a comparatively considerable acceleration of the respiration.

DIAGNOSIS.—As the symptoms of simple acute thyroiditis are exactly the same as those exhibited by acute suppurative thyroiditis in its commencement, it is often very difficult, indeed sometimes perfectly impossible, to distinguish between these two forms of inflammation in the first stages of the disease. In Barlow's, Given's, and my own case the respective observers were fully prepared for the appearance of an abscess in the gland. In my opinion, the etiology of the disease is the most important basis upon which to found a diagnosis; should there appear signs of an acute thyroiditis in the course of diseases which are known to lead to metastatic suppuration, it is highly probable that the inflammation of the thyroid gland will not terminate in resolution but in the formation of an abscess. Among such diseases puerperal fever is especially noticeable, acute suppurative thyroiditis being particularly frequently caused by that infectious disease. Pyæmia has often been found to be the cause of thyroiditis acuta suppurativa, but never of thyroiditis acuta simplex, whilst typhoid fever can give rise to either form. Rheumatic fever speaks decidedly, and no special cause or a cold, strongly in favour of an eventual inflammation ending in resolution and not in an abscess. The presence of initial rigors, high temperature, great prominence of a particular part of the gland, also redness, increased temperature, and infiltration of the skin indicate abscess; but thyroiditis may end in resolution, even when all these symptoms are present in a high degree, and in some cases it will be first possible to diagnose thyroiditis suppurativa when they have existed more than seven or twelve days.

A still greater resemblance exists between simple acute thyroiditis and strumitis ending in resolution (see page 186), the only difference indeed being that the latter attacks a previously hypertrophied gland. As it is in many cases difficult to ascertain whether the patient has suffered from goitre previous to the appearance of thyroiditis, information as to the appearance of goitre in the patient's birthplace, or among his relatives, etc., is of importance. Should an acute inflammation of the thyroid gland leave behind a diffuse infiltration, which does not disappear after a short time, it is doubtless correct to consider the case in question as having been one of strumitis, even if no information can be obtained as to a previous characteristic thyroid swelling.

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Differential diagnosis as to other diseases of the thyroid gland can also present considerable difficulty. Hyperæmia of the thyroid gland in particular seems to have been frequently mistaken for inflammation of the same. Thus Eulenberg mentions the case of a man, aged fifty-five, suffering from orchitis, which disappeared simultaneously with the appearance of enlargement and tenderness of the left lobe of the thyroid gland. This enlargement also disappeared, and was followed by a swelling of the testicles, and these symptoms repeated themselves once more in the same manner. Hyperæmia of the thyroid gland, also known as *struma acuta*, does not appear to be uncommon, especially in parts where goitre is endemic (Lücke), and may be caused by over-exertion, by anomalies of menstruation, or by acute infectious diseases. Demme speaks of an epidemic of measles in Berne, in which hyperæmic enlargement of the thyroid gland was a frequent symptom. Acute hyperæmia of the thyroid gland differs from simple acute thyroiditis in so far that the swelling does not attain so great a size, that the disease does not attack the whole gland equally, and that it is not accompanied by local or general inflammatory symptoms. Finally, hæmorrhage in the thyroid gland may also be mistaken for thyroiditis acuta simplex. Thus Walther and Schöninger each report a case of traumatic "inflammation of the thyroid gland," which doubtless belong to that form of acute enlargement of the thyroid gland, the differential diagnostic peculiarities of which are the same as those described under hyperæmia.

PROGNOSIS.—The prognosis of simple acute thyroiditis is always favourable, both as to life and as to *restitutio ad integram*. Goitre has never been known to result from the inflammation, and it is the exception, as has been seen above, for it to give rise to a permanent small nodulous infiltration. Weitenweber, it is true, mentions a case of inflammation of the thyroid gland resulting in death without the formation of an abscess, but as there was no autopsy the case is doubtful.

TREATMENT.—Some authors are of opinion that an energetic, antiphlogistic treatment, with ice, leeches, mercury, ointment, etc., prevents suppuration, or so great a swelling as to cause suffocation. In the case observed by me antiphlogistic treatment was also employed. It is, however, probable that it is the character of the inflammation which is decisive, although it must always be a matter of course in this disease to make use of energetic local antiphlogosis.

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SOCIETY MEETINGS.

THE NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, held on Wednesday Evening, December 26th, 1894.

Dr. D. BRYSON DELAVAN, *Chairman.*

SECTION OF LARYNGOLOGY AND RHINOLOGY.

A Case of Fibroma of the Nasal Fossa. Presented by Dr. CHARLES H. KNIGHT.

A male, aged twenty-one years, first came under observation in 1889, complaining of the usual symptoms of nasal catarrh. There was no pain, no hæmorrhage, olfaction not impaired. The left nostril was particularly obstructed. On inspection the septum was found to be somewhat deflected to the left, and far back there was a smooth, movable tumour attached to the posterior end of the inferior turbinated body. Its removal, which was easily accomplished by means of the cold wire snare, was followed by considerable improvement in the general catarrhal symptoms. There has been no recurrence of the growth. Under the microscope, it proved to be a pure fibroma. In connection with his case, Dr. Knight exhibited the specimen removed.

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