

I.

DISEASES OF THE TRACHEA.

TRACHEITIS.

Definition.—Tracheitis is a catarrhal inflammation of the mucous membrane lining the trachea. It may be acute or chronic and is usually associated with a similar inflammation in the larynx or bronchi, but may exist independently.

Etiology.—It is caused by the same influences—exposure with lack of resistance or the inhalation of irritating matter—that would excite a laryngitis or bronchitis, or may occur secondarily by extension of either of the latter.

Pathology.—Tracheitis passes through the usual phases common to catarrhal inflammations elsewhere. A first stage of dry congested and swollen mucosa and the second stage of relaxation, free mucous or muco-purulent secretion, with which the inflammation subsides.

Physical Signs.—Auscultation reveals a greatly increased harshness, roughness and strident quality to the tracheal breathing. Later there are coarse rattling rales.

Diagnosis.—Interference with vocalization, hoarseness or aphonia supplemented by a laryngoscopic examination will reveal whether the larynx is involved or

not and auscultation will show if there be associated bronchitis. The constitutional disturbance is more pronounced in the latter.

Symptoms.—In the early stage, chilliness, fever, shifting pains, thirst and headache. The tracheal cough is characteristic—deep, hollow, tubular and rough, sounding as if something was being torn out, but not as painful as it sounds. There may be tracheal soreness and sensitiveness to touch or inhalation of cold air. In the later stage secretion is abundant as a rule and easily expectorated. The so-called “death rattle” so often heard just before death in a variety of conditions is merely an excess of secretion in the trachea, due to relaxation of the mucosa, and which the patient is too weak to expectorate. The “tickling in the throat pit” and “tickling behind the sternum,” so often quoted as causing cough, does not necessarily indicate tracheitis, but is usually a nervous reflex symptom, exciting a bronchial rather than a tracheal cough.

General Treatment.—The management of tracheitis should be the same as of acute bronchitis. There are several remedies, however, especially indicated.

Remedies.—*Bryonia*.—Dry, hard cough of rough tearing quality. Scanty expectoration, but much tracheal soreness, rawness and pain. The cough causes bursting frontal headache. The first remedy to be thought of in the early stage.

Drosera.—Deep, hoarse cough, rather paroxysmal, with muco-purulent expectoration and rough, scraped sensation in the trachea.

Hepar sulphur.—Dry, rough, hoarse cough with audible wheezing. The dry stage is merging into the looser condition. Patient very sensitive to cold.

Iodine.—Hollow, croupy cough with rawness and pain in the trachea and wheezing, difficult respiration. Scrofulous, catarrhal subjects.

Kali bichromicum.—Hoarse cough with coarse, rattling tracheal rales and the expectoration, with much effort, of quantities of tenacious, yellow mucus. Late stages. Weak, phlegmatic, hepatic people.

Spongia.—Early stages. Great dryness. Hoarseness or aphonia with constriction. Dry, barking, croupy cough. Respiration short and labored, especially inspiration; nightly aggravation.

STENOSIS OF THE TRACHEA.

Definition.—Tracheal stenosis is a contraction of the trachea from changes in its own walls or the pressure of diseased conditions in neighboring structures.

Etiology.—The most usual causes are goitre, enlarged lymphatic glands, aneurism of the arch of the aorta, tumors, abscesses, or cancer in the mediastinum, or cancer of the lung.

Symptoms.—The cardinal symptom of tracheal stenosis is dyspnoea of an inspiratory character. All the accessory respiratory muscles may be brought into play during inspiration, while expiration is smooth and unobstructed. There is a peculiar whistling, crowing note produced during inspiration and the vibration of the column of air imparts a distinct thrill to the trachea. The vesicular sounds are diminished and masked by the tracheal sounds. The voice is weak and muffled, because the air is interrupted and lessened in force while passing

the vocal chords. The laryngoscope is the best aid to diagnosis, in locating and determining the cause. Respiratory distress gradually increases with the increase of the underlying cause of obstruction. There may be periods of acute exacerbation also, with alarming symptoms. The usual symptoms of dyspnoea are present, *i. e.*, face anxious, pale and covered with sweat, or cyanotic, with movement of the alæ nasi, the pulse rapid and weak, all those well known symptoms indicating distress for need of air. The course, duration and ultimate outcome depend upon the nature and progress of the causative factor.

Treatment.—This depends wholly upon the cause of the stenosis.

II.

Diseases of the Bronchi.