

At first the mucous membrane becomes swollen, each recurrence enhancing the swelling. The repeated congestions cause enlargement of the blood-vessels until a true varicose condition and great relaxation of the membrane result, with later an increase of connective tissue and hypertrophy. When this stage is reached the condition is called chronic catarrh. The secretions now often become greatly changed in character and usually more profuse. Later on, owing to impaired and perverted nutrition, the epithelial cells undergo degenerative changes, and the mucous membrane changes color, and becomes opaque and uneven. In some places it is covered with a thick layer of mucus or pus, while in others, where the epithelium is destroyed, it is dry and devoid of secretion, with a frequent formation of scabs and crusts, which often adhere firmly to the membrane beneath. At this stage the discharge may be thick or thin, scanty or profuse, and may resemble in appearance boiled starch, or may be of almost any shade of green, yellow, brown, or even black; occasionally it is bloody. If the secretion undergoes a special decomposition, a peculiar, penetrating stench is developed, and the condition is called ozena.

Age, occupation, habits of life, and sex have a very marked and strongly modifying or selective determining effect, as may be noticed in the tendency of infancy to croupous laryngitis, of childhood and adolescence to tonsillitis, etc. These occupations which are accompanied by noxious exhalations, or entail the necessity of breathing during working hours an irritating vapor or dust, are notably productive of asthma, bronchitis, and even of disease of the lung tissue itself, as is continually observed in furriers, stone-cutters, workers in dye-factories, gas-houses, woollen mills, etc. Most tobacco smokers develop more or less post-nasal or pharyngeal catarrh.

Mode of life as regards clothing may also be considered as having a powerful etiological influence in the production of catarrh. When we observe the careless exposure of head, neck, bust, arms, limbs, and feet of the young of both sexes, and of the female adult, almost regardless of season or climate, the wonder is that the very prevalent condition now under consideration is not universal instead of only general.

For the sake of brevity the pathology, diagnosis, and symptoms may be omitted, and for the same reason also the question whether catarrh is a constitutional or a purely local disease, need not be discussed here, because it has no practical bearing when therapeutically considered.

Acute catarrh occurring in a vigorous subject, if properly managed will result in complete recovery, but if neglected, mis-