

Cheyne says, "The term caries was originally applied to all destructive or ulcerative changes of the surface of bone, but of late it has been restricted to those changes of the superficial layers occurring in connection with tuberculosis and syphilis. In general surgery the term caries is applied to the infiltration of healthy bone by granulation tissue until it becomes a spongy mass. Caries never occurs except in the presence of a specific irritant, which is for the most part tubercular or syphilitic in its origin. The pure type of caries is connected entirely with the formation of granulation tissue, and its slow substitution for the original bone. So long as pyogenetic infection is avoided, it assumes the dry type and is known as "caries sicca;" but if the granulations become infected with pyogenetic or putrefactive germs suppuration occurs and the moist form intervenes—"caries humida." The surface is almost always irregular, tunnels or canals are formed, and the bone is often honeycombed. Along with this process of osteoporosis and disappearance of bone at one point, may be seen osteosclerosis in the adjoining area, and the bone which is apparently much weakened in one point by the destructive process, is strengthened in a compensatory way by the artificial density of the tissue undestroyed. Tubercular caries of the bones of the face are most frequent in children. The disease progresses very slowly. The alveolar process is occasionally the seat of the affection. When the disease occurs in this region the route of infection is usually through devitalized teeth. Garretson, Marshall and others, mention cases of very extensive caries as the result of alveolar abscess. At the present time there are three cases of tubercular alveolar caries in the Children's Hospital of this city. In all of these cases the probable route of infection was through decayed teeth. Cook has found tubercular bacilli in putrescent pulps, alveolar abscesses and enlarged glands in the region round about. Thus there are strong reasons for believing that general tubercular infection may and does occur through the teeth and jaws.

*Symptoms.*—Early symptoms may be acute. The symptoms of caries are not very marked, being of a low type, never acute. Locally there is the thickening and the softening of the bone, as is made out on examination.

*Diagnosis* is made out from the history, the general symptoms of tuberculosis, the softened bone and discharge, if granulations are infected.

*Treatment.*—General treatment for tuberculosis.

*Locally.*—Granulations should be scooped out and cavity swabbed out with chloride of zinc solution, or an iodine solution, and the cavity packed with iodoform gauze.