

Caries.*

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When the source from which osseous structures derive their nourishment and vitality is destroyed, death follows as a necessary consequence.

This occurrence is called necrosis, or mortification of the bone, and sometimes authors speak of it as caries.

But, as caries of the bone is generally classified as a separate disease, I will speak on that subject later on in my paper. Necrosis may occur in any part of the body, but I will confine myself to that part most necessary to the dental surgeon: the oral cavity, and principally the alveolar.

The trouble may occur in the alveolar of either jaw, but is more liable to take place in the lower than in the upper. This, no doubt, is caused by the smaller blood and nerve supply in the lower jaw, thus weakening its vitality under that of the upper.

Though it is a plain fact that the alveolar process in either jaw, although like other bones, supplied with bloodvessels and nerves, their recuperative powers are weaker; and then to be deprived of a portion of its delicate, life-giving substance, by necrosis and exfoliation, or other causes, the injury is not so readily, as is often in other osseous tissues, repaired by the restoring efforts of nature. Again, necrosis may be confined to the socket of a single tooth, but more frequently it extends to several, and often through a portion of the alveolar border, and occasionally the entire alveolar, penetrating a part or the whole of the jaw.

When teeth are subjected to necrosed loosening, as is plainly shown by the natural necrosis that nature supplies for the expulsion of the temporary, they become dark by the destruction of their pulp, and are ultimately removed and fall out. Exceptionally, a number can be made to remain firm, and become useful.

Of all these cases the condition of the pulp-chamber of such teeth as have lost their pulps should receive prompt attention, to prevent the discharge of poisonous matter by way of the apical foramen, as such sources of irritation will, until it is removed, prevent a proper and perfect healing.

At first, the indications of trouble in the jaw that precede necrosis is not to be distinguished from maxillary or alveolar periostitis. The necrosed portion may be limited to bone in direct relation with inflamed periosteum, frequently excited by scurvy, syphilis, certain eruptive fevers, mercurialization and action of phosphorus, or, extending deeper, it may involve the entire alveolar border, and perhaps the palate and into the Highmore antrum, if it be the upper jaw affected. As it progresses, instead of confining

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