

endings of the sensory nerves. This fact is well illustrated in cavities in the occluding surfaces of molars which are almost always more sensitive at their margins.

In the case of cavities partially filled with a soft leathery decay, the zone of highest sensitiveness is generally found immediately beneath the softened portion of decay. After this point is passed the pain generally becomes less acute and in some instances approaches the normal.

It also must be remembered that the condition of the fluids of the mouth exert a direct influence on the sensitiveness of the teeth. One authority states it as an axiom that "no cause is so active as a primary influence in inducing dentinal sensitivity as a constant slightly acid state of these fluids," and conversely that a neutral or slightly alkaline state is non-irritating.

Also in dealing with this subject we must continually bear in mind that constitutional disturbance, especially in the nerve system, contribute greatly to the high degree of sensitiveness to be found in the dentinal structure.

The element of the dentine specially concerned with its sensitiveness is that contained within the tubuli. The exact nature of this matter has not yet been clearly determined, but our experience and observation has shown us that it is capable of extension and contraction, and in looking over all the facts in connection with hypersensitive dentine it is not difficult to conclude that this exaltation is directly connected with an irritated or diseased condition of the contents of these tubuli. The older theory was, that the sensation was carried from the point of contact through this medium to the nerve centre by wavelike motions or vibrations. But when we consider such facts as, that different parts of the same cavity vary in degree of sensitiveness—that in the case of deep leathery decay (as before stated) it is more sensitive immediately beneath than it is a short distance beyond—that in some instances local sedatives modify the degree of pain—and that coagulents generally decrease materially the capacity of these contents to convey impressions, then we must conclude that such a theory is not well grounded, and that these tubular contents are more vitally connected with the nerve centre than was at first supposed.

Having considered the general conditions governing the hypersensitiveness, we will look for a few moments at the general methods of treatment.

The matter of instrumentation is of first importance. In this our motto should be "Avoid pressure." Our burrs should be keen and smooth so that they will cut smoothly and noiselessly. Our excavators should not be thick and dull as many are when received from the factories, but should be so sharp and thin that the razor-like edge will slide under the decay and peel it off in layers.