

destroys the vitality of the pulp in a short time. Whether relief, equally *effectual* and *permanent*, can be obtained in these cases, by any process of treatment intended to maintain the vitality of the pulp, is a question which still calls forth a great deal of discussion. Reliable information on such a subject can only be obtained through long and patient observation of the facts.

When exposure of the pulp has been very recent, (as in accidental exposure in excavating, &c.,) unattended with pain, except perhaps slight shocks produced by external influences, we have more favourable circumstances for preserving the vitality of the pulp. Dr. Atkinson, of New York, has published his mode of treatment, as follows: "He dries the cavity perfectly, applies creosote, and then a little oxychloride of zinc, of a creamy consistence, which is adapted as a cap over the pulp by gently tapping it while soft. In a moment this sets sufficiently to permit the addition of the balance of the oxychloride. This temporary filling may remain some weeks or months, the major portion then cut out, and the cavity filled permanently. Should the pulp be inflamed or painful on presentation, or during examination and removal of the softened dentine over it, he quiets it with creosote, chloroform, or other remedy, before inserting the cap and temporary filling. He does not remove the temporary filling because pain recommences in the tooth after its insertion."

This is, probably, the best treatment that can be adopted in the direction of preserving the vitality of the pulp; but even this is admitted by some practitioners of undoubted ability to be so unsatisfactory, in many cases, owing to the continuance or recurrence of pain after the operation, that they are glad to remove the oxychloride, and apply arsenical paste. From the diversity of opinion, it appears that, for the present, each individual practitioner must be guided by the circumstances of the case, as to which course of treatment he will pursue—carefully recording the facts, as a basis of future decision on the merits of each plan.

Devitalisation is followed by extirpation of the dead pulp—an operation requiring delicacy and patience. This, again, is succeeded by root-filling, either with gold, or cotton soaked in creosote and tannin, and then filling of the outer cavity.

Too much stress cannot be laid on the importance of extreme care and tenderness in exploring and manipulating these complicated cavities. It is sometimes difficult to ascertain immediately whether actual exposure of the pulp exists; we, therefore, have recourse to certain tests, of which there are three:—1st. That of *direct vision*, with or without the aid of a mirror. 2nd. That of *touching*, with a probe defended by a bit of cotton. 3rd. That of *thermal influence*, by letting a drop of cold water