A Note on Dental Restoration: Replacement of Tooth Structure by Dental Implants

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DESCRIPTION

Dental restorations, sometimes known as dental fillings or just fillings, are procedures that are used to restore the function, integrity, and morphology of lost tooth structure caused by caries or external injuries, as well as to replace such structure with dental implants. Cutting the tooth with a rotary dental hand piece and dental burrs or a dental laser to make place for the restorative materials and remove any dental decay or structurally unsound components of the tooth is usually part of the preparation process. Temporary restoration may be used if permanent restoration cannot be completed immediately after tooth preparation.

Tooth preparation

A tooth preparation is a prepared tooth that is ready for the implantation of restorative materials. Gold, amalgam, dental composites, glass ionomer cement, and porcelain, among other materials, may be employed. Intra coronal or extra coronal preparations are possible. Restorative material is kept inside the confines of the crown of a tooth's structure using intra coronal preparations. Cavity preparations for composite or amalgam fillings, as well as gold and porcelain inlays, are all examples. Female recipients are also constructed intracoronally to receive the masculine components of removable partial dentures. Crowns and on lays, as well as veneers, are examples of restorative dentistry.

A lot of factors will influence the type and quantity of preparation while preparing a tooth for a restoration. The most significant consideration is deterioration. The amount of the degradation will, for the most part, determine the scope of the preparation and, as a result, the restoration method and materials. Unsupported tooth structure is another factor to consider. Unsupported enamel is removed to provide a more predictable repair when preparing the tooth for restoration. Enamel is the toughest component in the human body, yet it is also the most brittle, and supporting enamel is quickly fractured.

According to a systematic review, putting an off-the-shelf metal crown over the tooth (Hall technique) or only partially removing decay (also known as "selective removal") before placing a filling may be better than the traditional treatment of removing all decay before filling for decayed baby (primary) teeth. Partial removal (also known as "selective removal") of decay before filling a decayed adult (permanent) tooth, or adding a second stage to this treatment where further decay is removed after several months, may be better than traditional treatment for decayed adult (permanent) teeth.

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Direct restorations

This approach entails filling the prepared tooth with a soft or pliable filling and then restoring the tooth. After that, the material is hardened and the tooth is repaired. When a tooth's wall is missing and needs to be reconstructed, a matrix should be used first to reproduce the tooth's shape, making it easier to clean and preventing the teeth from sticking together. When installing composite restorations, sectional matrices are recommended over circumferential matrices because they promote the creation of a contact point. Food impaction between the teeth is a common complaint among patients, thus this is crucial. Sectional matrices, on the other hand, can be more technique sensitive, necessitating more caution and skill to avoid issues in the final restoration. Direct restorations have the advantage of setting quickly and being installed in a single process. The dentist can provide you with a number of filling solutions. The location and severity of the related cavities are usually taken into account while making a decision.

Indirect restorations

In this method, the restoration is created outside of the mouth using dental imprints of the prepared tooth. Inlays and onlays, crowns, bridges, and veneers are all examples of indirect restorations. The indirect restoration is usually made by a dental technician using records provided by the dentist. Dental cement is frequently used to permanently attach the complete restoration. It's usually done in two visits to the dentist. Gold or ceramics are commonly used in indirect restorations. A provisory/temporary restoration is occasionally utilised to cover the prepared tooth while the indirect restoration is being produced to assist maintain the surrounding dental tissues.

Because they are meant to replace missing teeth, removable dental prostheses (mostly dentures) are sometimes considered as a sort of indirect dental repair. Precision attachments (also known as integrated restorations) include magnets, clips, hooks, and implants, which might be considered as a type of dental restoration in and of itself.

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