

Possible Local Adverse Effects of Amalgam Restorations

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Background

Dental amalgam has proven useful for well over 150 years with considerable longevity in a wide range of clinical situations. Despite the increasing use of tooth-coloured materials, with advantages of adhesion and aesthetics, amalgam is still one of the most widely used dental restorative materials.

One of the principal disadvantages of amalgam, apart from aesthetics and lack of adhesion, is that it may have local adverse effects in a minority of patients. These include amalgam tattoos, erythematous lesion due to rough surfaces of the restorations on the adjacent oral soft tissues (tongue and buccal mucosa), and oral lichenoid reactions.

Statement

- Amalgam tattoos cause tissue discoloration but are otherwise benign. No treatment is necessary.
- In rare instances, oral lichenoid lesions may result where soft tissues are in contact with poorly contoured, corroded and biofilm-covered amalgam restorations where the surface properties or the acquired biofilm, may be more important than the constituents of the amalgam per se.
- In such patients who are also positive to skin patch test for allergic reactions to mercury or other components of amalgam and have no other lichenoid lesions either intra-orally or elsewhere on the body, replacement of the restorations may improve their mucosal lesion.
- Further research is required to investigate the relationship between oral lichenoid lesions and amalgam.
- In the vast majority of patients, amalgam is a safe dental restorative material with proven effectiveness and longevity.

Reference

- McCullough MJ, Tyas MJ. Local Adverse Effects of Amalgam Restorations, *Inter Dental J*