Aim: the purpose of this study is to review the effect of amalgam on the oral mucosa and its clinical and histological views because of its mercury and tin content.

Content: Oral mucosa reflects in front of many noxious stimuli. One of these materials, in those who have restorations, is dental amalgam which contains mercury. The most common reaction to amalgam is the development of oral lichenoid reactions/lesions (OLR/OLL) involving mucosae in direct contact with amalgam restorations. This review focuses on the local toxic effects of amalgam and mercury from dental restorations. Components of amalgam may, in rare instances, cause local side-effects or allergic reactions referred to as oral lichenoid lesions (OLL). OLL to amalgams are recognised as hypersensitivity reactions to low-levels mercury exposure. The use of patch testing to identify those susceptible from OLL is explored and recommendations for removing amalgam fillings, when indicated are outlined.

Conclusion: We conclude that evidence does not show that exposure to mercury from amalgam restorations poses a serious health risk in humans, except for an exceedingly small number of hypersensitivity reactions that are discussed. This review highlights the diagnosis and clinical findings of contact allergic reactions to mercury and amalgam. This review should enable dentists to undertake appropriate measures when patients have a suspected or proven contact allergy on their oral mucosa to mercury or other metallic constituents of amalgam.

Key words: lichenoid reactions, amalgam, review