Abstract: Aim:
The aim of this review is to verify the ability of different adhesive materials to prevent postoperative sensitivity in amalgam restoration.

Currently, clinicians face choices of restoration including amalgams (mercury-based, gallium-based alloys, or mercury-free silver-based substitutes), composite resins, ceramics, and gold alloy. In order to choose an appropriate restorative material, many parameters are involved; they include preparation time requirements, finishing and polishing, marginal integrity, anatomy and contours, chipping and fracture, sensitivity, microleakage, wear resistance, and corrosion resistance. It is generally believed that amalgams are still evaluated as the best of all restorative materials as far as the aforementioned parameters are concerned. It is claimed that the amalgams exhibit in the range of 10 to 25 service years. Amalgam remains unchallenged as a posterior restorative material. But its inability to bond to the teeth leads to some amount of microleakage at the restoration-tooth interface with associated problems such as postoperative sensitivity, pulpal complications etc.

Conclusion:
Researchs show that use of some material such as Copalite, resin-modified glass-ionomer liner, VivaSens and adhesive resins as a liner under high copper amalgam successfully reduced postoperative sensitivity.
Bonding amalgam restorations to tooth structure in butt-joint cavities also will reduce microleakage of both admixed and spherical amalgam restorations.

Presentation: Oral