

Materials Used for Tooth Restorations (Fillings & Crowns)

This information will help you make decisions about selection of materials as tooth restorations in your mouth. Several types of metals are used in dentistry for the replacement of oral structures. Most of these metals are considered to be inert when placed in the body, while others have been controversial. Plastics and ceramics are used commonly as tooth restoratives, and although controversial, these have not been shown to have adverse biologic responses.

The Restoration of Missing Parts of Single Teeth:

Silver amalgam has been used since the 1800s for tooth restoration. This alloy contains silver, tin, copper, zinc, and about 50 percent mercury. It has been highly successful, but unsightly. Use of mercury in the body has been controversial since its inception, but amalgam use is still supported by the American Dental Association and other health groups worldwide. The World Health Organization is currently advising a slow phasing out of amalgam use. You have several other options for restorations.

Your Material Choices for Dental Restorations (Fillings):

- A. Resin or Composite.** Average longevity 6–15 years, tooth colored, moderate to high cost. Best used in small- to medium-sized restorations for front or back teeth.
- B. Silver amalgam.** Average longevity about 12 years, silver colored, low-moderate initial cost. Best used in small- to medium-sized restorations of posterior teeth (premolars and molars).
- C. Ceramic.** Average longevity 10–20 years, tooth colored, moderate to high initial cost. Best used in moderate- to large-size restorations for back teeth.
- D. Gold inlays and onlays.** Average longevity 20 years or longer, gold colored, moderate to high initial cost. May be used in most locations where metal is not displayed to an objectionable level.

Your Choices for Crowns (Caps) or Fixed Protheses (Bridges):

- A. All-Ceramic.** These restorations are fabricated from various ceramics. Average longevity is under study, moderate to high initial cost. All-ceramic fixed protheses may be used in some clinical situations. These materials are being improved constantly. Their use is growing rapidly and they are expected to eventually replace metal-containing restorations.
- B. Porcelain-fused-to-metal.** Average longevity 20 or more years, tooth colored, moderate to high initial cost. May be used in any area where extreme biting stress is not present, and patient does not have severe tooth grinding habit.
- C. Metal alone.** High-noble, noble, or base metal. Average longevity 20 years to life, gold or “silver” color, moderate to high initial cost. May be used in any area where metal display is not objectionable.
- D. Resin/Composite.** These restorations may be used for single crowns. Average longevity is several years. Research on its longevity is still underway.

We will inform you about the best type of tooth restoration for your mouth, and we welcome your questions.

I have read and understand the above information.

PATIENT'S NAME

SIGNATURE OF PATIENT, LEGAL GUARDIAN,
OR AUTHORIZED REPRESENTATIVE

DATE