

Journal of Dental Technology
May 2025
Radiopacity of Modern 3D Printable Restorative Materials
NBC Approval # 51619

- 1. Radiopacity refers to a material's ability to reflect light during intraoral scanning procedures.
  - a. True
  - b. False
- According to ISO 13116, a 1 mm thick resotrative material must have at least the same radiopacity as 1mm of aluminum to be considered clinically acceptable.
  - a. True
  - b. False
- 3. The material with the highest measured radiopacity in this study was Flexcera Smile Ultra Plus.
  - a. True
  - b. False
- 4. Additive manufacturing allows for the creation of more complex dental restorations compared to subtractive methods.
  - a. True
  - b. False
- All tested 3D printable materials in the study exceeded hte ISO standard for radiopacity.
  - a. True
  - b. False

- a. True
- b. False
- 7. ImageJ software was used to analyze digital x-ray images and measure grayscale values of the samples.
  - a. True
  - b. False
- The x-ray setup used a 65 kVp, a 10 mA setting with a 0.3 second exposure at 35 cm distance, following ISO guidelines.
  - a. True
  - b. False
- The use of a tooth section alongside the aluminum step wedge served as a control for assessing clinical comparability.
  - a. True
  - b. False
- 10. Radiopacity higher than enamel is recommended for all restorative materials to improve caries detection.
  - a. True
  - b. False

The presence of elements such as barium, zirconium, and strontium in restorative materials increases their radiopacity.

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