ACE Panel Report

Posterior Composite Restorations

Survey Results

Data reflect the opinion of 311 ACE Panel member dentists in the United States.

92% of ACE panelists place posterior composite restorations at least once a day

Top 5 Preferred Products

1. Filtek Supreme Ultra Universal (3M Oral Care)
2. Sonic Fill 2 Single-Fill Composite (Danaher/KaVo-Kerr)
3. TPH Spectra Universal Composite (Dentsply-Sirona)
4. Filtek Bulk Fill Posterior Restorative (3M Oral Care)
5. Herculite XRV Microhybrid Composite (Danaher/KaVo-Kerr)

Preferred Posterior Composite Resin Type

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<th>Incremental</th>
<th>Bulk Fill</th>
<th>Other</th>
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<td>70%</td>
<td>26%</td>
<td>3%</td>
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Concerns Regarding Bulk Fill Products

- 45% prefer an incremental technique
- 43% are concerned of an inadequate depth of cure
- 40% are concerned of the polymerization shrinkage stress

This question allowed for multiple answers.

Most Frequent Reason for Placement / Replacement of Composite Resin Restorations

- Placement
  - Primary caries: 64%
  - Secondary caries: 76%
  - Fractured tooth: 11%
  - Patient aesthetic concerns: 9%
  - Core build up: 6%
  - Repair old restorations: 26%
  - Other: 4%

- Replacement
  - Primary caries: 64%
  - Secondary caries: 76%
  - Fractured tooth: 11%
  - Patient aesthetic concerns: 9%
  - Repair old restorations: 26%
  - Other: 4%

Clinical Insight: Replace or Repair Resin Composite Restorations?

Repair helps increase the longevity of restorations and has high patient acceptance. Replacement of restorations sacrifices sound tooth structure, reduces the likelihood of continuing pulp vitality and increases the complexity and the risk of failure of dental restorations. Repair is indicated for localized shortcomings of secondary caries and fracture; while replacement is more appropriate when generalized or severe defects are present.

Repair of marginal defects involves careful opening and cleaning to assess undermining caries and to smooth surfaces. The restorative protocol includes surface etching, a bonding system and filling with flowable (small marginal repair) or bulk resin composite (major repair). For placement, replacement and repair, incremental techniques are more appropriate in preparations deeper than 2 mm, regardless of resin composite type.