Coltène Affinis Precious

FJT Burke, University of Birmingham School of Dentistry, and RJ Crisp, the PREP Panel, reveal the results of their latest product evaluation

DIMENSIONALLY accurate impression materials are central to success in indirect dentistry. Their ideal properties include adequate working time, fast or controlled set in the mouth, high level of dimensional accuracy, easily read by the clinician and manageable cost.

Explanatory letters, questionnaires and packs of Coltène Affinis impression material were distributed in September 2007 to 16 randomly selected members of the PREP (Product Research and Evaluation by Practitioners) Panel, a group of dentists who carry out practice-based research. The practitioners were asked to use the material and return the questionnaire requesting details of the handling of the material.

Seven (44%) of the evaluators normally used an automatic mixing machine. The most common reasons for repeating a crown impression were air blows (10 evaluators) and deficient recording of preparation margins (11).

The evaluators were asked to rate the ease of use (where 5 = excellent and 1 = poor) and ease of removal (where 5 = easy and 1 = difficult) of the materials presently used for crown and bridge impressions with the following results:

The overall mean ratings of the presently used crown impression material were for:

- Ease of use: 4.5
- Ease of removal: 4.3

**Evaluation of Coltène Affinis Precious Impression material**

When the evaluators were asked to rate their view of Affinis after familiarisation, the result was as follows:

- (a) Excellent: 7 (44%)
- (b) Good: 4 (25%)
- (c) Unremarkable: 4 (25%)
- (d) Poor: 1 (6%)

A total of 259 impressions were taken, principally in putty/heavy/light body. Seven (44%) of the evaluators normally used an automatic mixing machine. None of the evaluators reported any problems associated with the cleaning and disinfection of the Affinis Precious impressions.

The evaluators rated the application of Affinis around preparation margins in the following conditions as indicated below:

- Dry fields above and below the gingival margin:
  - 1 Poor
  - Excellent 5

  Fields above and below the gingival margin in which there were limited moisture problems:
  - 1 Poor
  - Excellent 5

  Moist fields above and below the gingival margin:
  - 1 Poor
  - Excellent 5

  4.1

  3.6

The evaluators rated the Affinis Precious working time and setting time as follows:

- Acceptable
- Too long
- Too short

When the evaluators were asked to rate how the Affinis impression material compared with the current impression/mixing technique, the results were as follows:

<table>
<thead>
<tr>
<th>Material Comparison</th>
<th>Monophasic</th>
<th>Putty/Heavy Body/Light Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worse</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Same</td>
<td>2.6</td>
<td>2.9</td>
</tr>
<tr>
<td>Better</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Final comments included: “In ideal circumstances the best material I have used”; “Include a colour card to recommend ideal mixing times”; “I will change to the silver light body”; “Great impression material” (two similar).