Letters to the editor

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There is a need for clinical studies comparing pressable and machinable lithium disilicate restorations

Lithium disilicate has been claimed to have favourable clinical performance when used for restoring anterior and even posterior teeth or implants.[1, 2] However, there are two processing options that may influence the material's intraoral behaviour. The traditional method, ie heat-pressing, is based on the lost-wax principle, whereas computer-aided design/computer-aided manufacturing (CAD/CAM) arose as an alternative procedure. The latter method is alleged to decrease manufacturing costs by reducing laboratory work time and material costs while increasing productivity.[3,4] Nevertheless, dental professionals have arbitrarily selected the processing method for the selected restoration, leading us to question whether this decision could be based on solid evidence from clinical studies. Therefore, our group developed a systematic review whose objective is to compare success and survival outcomes of pressable versus machinable lithium disilicate restorations, as well as to identify the complications and reasons for failure associated with each method.

As recommended for systematic reviews,[5] we registered a protocol version in the PROSPERO database that can be referred to for further details.[6] In brief, we would include all clinical studies (except case series, case reports and clinical guidelines) reporting on clinical outcomes of lithium disilicate restorations comparing pressed and machined restorations. After searching four major databases, it was disappointing to find no study after the full-text assessment, in stark contrast with the large number of laboratory studies published since 2008.[7, 8] This paucity of clinical studies supports no recommendation for practice. However, it serves as an encouragement for the dental scientific community to undertake clinical studies including pressable and machinable lithium disilicate restorations.

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Conflict of interest

The authors declare no conflict of interest.

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