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[\[PDF \(1016K\)\]](#) [\[References\]](#)**Investigation of distortions around the cervical area of teeth restored with two kinds of crown materials**[Chikako SUZUKI](#)¹⁾, [Hiroyuki MIURA](#)¹⁾, [Daizo OKADA](#)¹⁾, [Wataru KOMADA](#)¹⁾, [Munenaga MIYASAKA](#)¹⁾, [Masahiro YAMAMOTO](#)¹⁾ and [David MASUOKA](#)¹⁾

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Abstract:

The purpose of this study was to identify crown materials to decrease the stress concentrated at the cervical area of endodontically treated teeth. To this end, 14 extracted human mandibular premolars were divided into two groups for this study: complete cast crowns *versus* polymer-based crown and bridge material crowns. Both complete cast crowns (MC) and polymer-based crown and bridge material crowns (HC) were cemented with a glycidyl methacrylate-based resin cement (RC) to composite resin cores with glass fiber posts. Static loading was applied and distortion was measured with four pieces of strain gages attached to the marginal area. Findings showed that there was a large difference in distortion between crown and root in MC. On the other hand, distortions at the cervical area of crown and root were similar in HC.

Key words:[Strain gage](#), [Distortion](#), [Crown materials](#)[\[PDF \(1016K\)\]](#) [\[References\]](#)Download Meta of Article [\[Help\]](#)[RIS](#)[BibTeX](#)

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