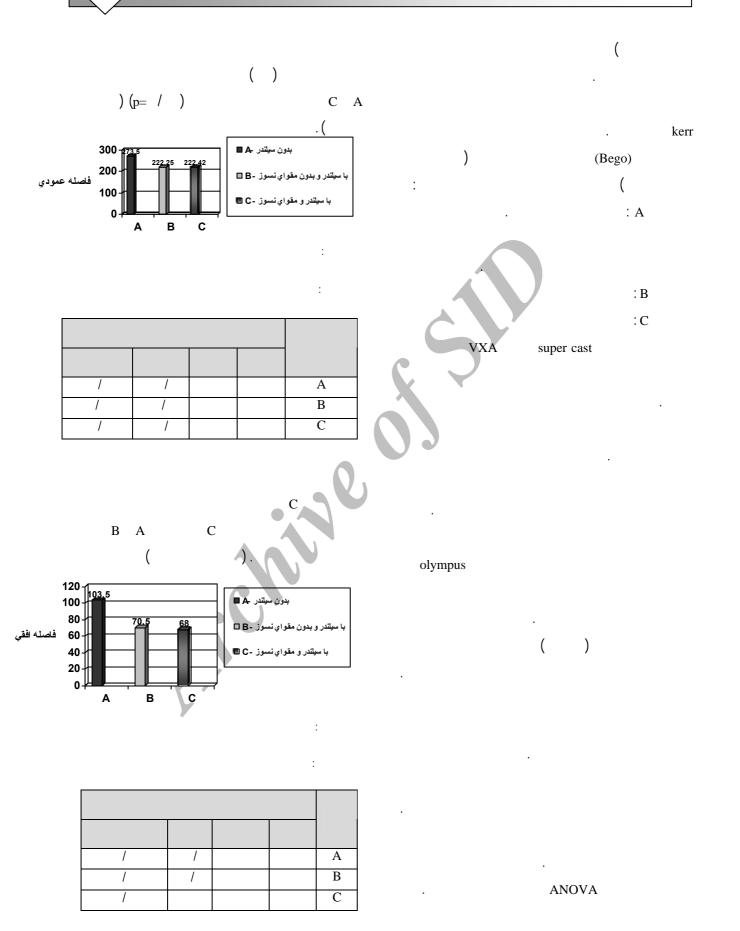
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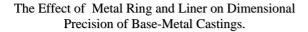


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Abstract:

Introduction: Several procedures are in use for compensating the solidification shrinkage of the casting through investment expansion, among which using the metal ring or liner inside the ring may be mentioned. The purpose of this study was to evaluate the effect of metal ring and liner on the marginal integrity of base metal crowns.

Materials & Methods:30 metal dies were made and divided into 3 groups of 10 .Metal copings were waxed up for all dies and invested using 3 methods. Group 1: with metal ring and liner; Group 2: with metal ring and without liner; Group 3: without metal ring and liner. Castings were cemented on their dies and horizontal and vertical marginal discrepancy was measured microscopically. The results were analysed using ANOVA test.

Results: Group1 (using metal ring and liner) showed the least horizontal and vertical marginal discrepancy (p=0.001) and group 3 showed the highest discrepancy. Conclusion: Considering the results, it is suggested that a metal ring and liner be used for casting base metal restorations.

Key words: Metal ring, liner, base metal.

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