



# 196 - Impact of simulated toothbrushing and dentifrice abrasiveness on the surface roughness, gloss, and microhardness of CAD/CAM hybrid restorative materials



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## AIM

This study aims to evaluate toothpaste abrasiveness effects on hybrid restorative materials versus tooth enamel commonly used in ceramic laminate production.

## MATERIAL AND METHODS



Rugosity



Gloss meter



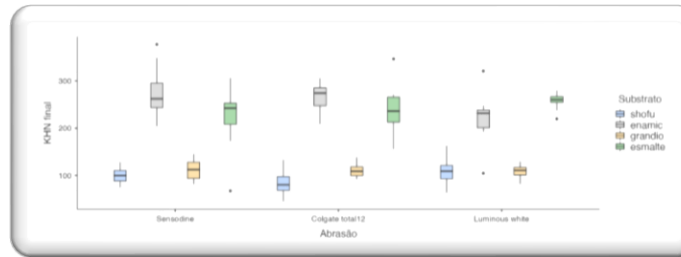
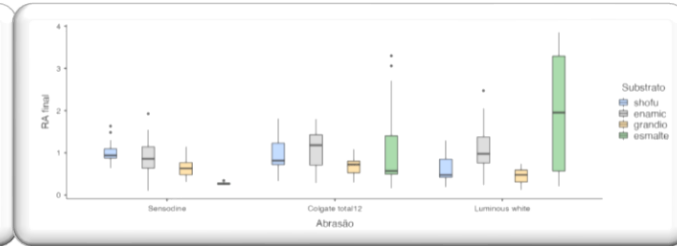
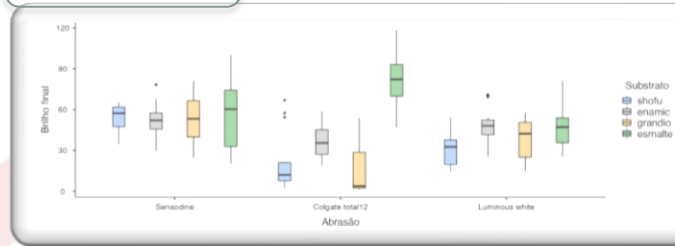
Microhardness

Groups of abrasiveness

L (RDA=36)  
M (RDA=78)  
EA (RDA=175)



## RESULTS



- The surface gloss was influenced by the tested brushing protocols.
- Roughness was similar across groups, except for dental enamel.
- The toothpaste with the highest abrasiveness was the only one that did not show changes in groups regarding microhardness.

## CONCLUSION

Despite the statistically significant differences observed in roughness, gloss, and microhardness among the tested materials following the brushing protocols, they still exhibit superior results compared to the control group.