Evaluation of optical Properties of Monolithic Zirconia Restoration

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Monolithic zirconia restorations have been developed to overcome the adhesion problem between the veneering ceramic and zirconia core and gain popularity in the last few years. The aim of this study is to review and discuss the literature regarding the optical properties of monolithic zirconia. Materials and Methods: A Medline (PubMed), Google scholar electronic database search, and science direct from 1985 to December 2016 was reviewed 95 were first reviewed by abstract and subsequently by full-text reading. Result: Monolithic zirconia is indicated in the posterior regions due to its high fracture strength, requires conservative tooth preparation, does not wear the antagonist enamel and can be successfully used for implant supported restorations. The light transmission through monolithic zirconia is improved in comparison to conventional zirconia core material. Conclusions: With its high fracture resistance, monolithic zirconia is becoming a preferred material because it can be used in the posterior region, can be used for conservative tooth preparation, does not cause contrary dental wear. The degree of translucency of monolithic zirconia is not comparable to that of glass ceramics, although it has been improved relative to conventional zirconia. For these reasons, more clinical investigations and long-term follow-up studies are required for the routine clinical use of monolithic zirconia, and optical properties must be improved in order to be used in the anterior region.

Biography:
M.Wafa RICHI has graduated at the age of 23 years from Aleppo University Faculty of Dentistry and has started the PhD program in the Department of Prosthetic Dentistry in Near East university in September of 2015.

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