

Keywords: Zirconia; Orthopaedic; Dentistry

Introduction

score of 1.0. This was in contrast to the 2.6 average for those without teeth. It is reasonable to assume that these negative perceptions have only become more pronounced as a result of the increased levels of employment competitiveness and the media's increased focus on personal appearance. The most common treatment for patients whose lack of a complete dentition makes them feel unattractive is the use of dental prosthetics that are the right color, shape and size [8].

Conclusion

Evidently the use of zirconia in dental ceramics is becoming quite established, with significant advancements made in the last decade particularly with regard to 3Y-TZP. This is because it can satisfy all important factors that make a patient happy, including comfort, functionality, social aspects and appearance. Due to their increased dependability and lower machining demands, 3Y-TZP prosthetics are frequently formed and machined from partially sintered blanks, such as those produced by CeramTec. Although pressing and sintering optimization has been the subject of extensive research and experimentation, there will always be knowledge gaps for this newly developed technology. If Ceram Tec and the prosthodontics industry investigate novel and alternative sintering methods for their blanks such as two-step sintering, it will be to their advantage. Trial and error with two-step sintering has shown positive outcomes in working on mechanical properties. Because similar equipment is used for both, this method and conventional sintering do not incur significant cost increases. Further research would aim to improve key parameters like hardness, flexural strength, grain growth and size, and their superior aesthetic properties at the same time. These can be contrasted with

products fully processed from green zirconia powder and the outcomes of the prescribed sintering conditions.

Acknowledgement

None

Conflict of Interest

None

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