Assessment of All-Ceramic Cantilever Bridges with Different Connector Dimensions

Thesis

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بسم اللہ الرحمن الرحیم

”قال رب اشرح لی صدری، و یسر لی امری، و احلل عقدة من لسانی، یفقهوا قولی“

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Cantilever fixed partial dentures can be used to replace molars when there is no distal abutment present. When used judiciously, it is possible to avoid the insertion of a unilateral removable partial denture. Most commonly, this type of fixed partial denture is used to replace a first molar, although occasionally it is used to replace a second molar to prevent super-eruption of opposing teeth.

When the pontic is loaded occlusally, the adjacent abutment tends to act as a fulcrum, with a lifting tendency on the farthest retainer. To minimize the leverage effect, the pontic should be kept as small as possible, more nearly representing a premolar than a molar. There should be light occlusal contact with absolutely no contact in any excursion. The pontic should possess maximum occluso-gingival height to ensure a rigid prosthesis.

A posterior cantilever pontic places maximum demands on the retentive capacity of the retainer. Its use, therefore, should be reserved for those situations in which there is adequate clinical crown length on the abutment teeth to permit preparations of maximum length and retention.

The use of all-ceramic materials for fixed restorations in dentistry has become more and more important for patients and clinicians in the last decades.

Since the first feldspathic crown was inserted in 1886 [1], recent progress in material technology and manufacturing procedures has extended the indications for these materials.

In 1990 the IPS Empress system (Ivoclar Vivadent) was introduced to the dental community and became a popular all-ceramic system for pressed glass-ceramic inlay, onlay, and veneer restorations. To increase the