

Two years periodontal evaluation of surveyed crown teeth

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أجريت هذه الدراسة لتقييم التغيرات حول النسبة لاربع ولثلاثين من النيجان المسنودة لتثبيت ودعم أنواع مختلفة من الصمات التي استعملت في تصميم تعويضات جريه متحركة تم قياس مؤشر التهابات اللثة وتجميع اللويحات الجرثومية وفقاً لطريقة لوي. وكان قياس نسبة حركة الأسنان كالتالي - 1 - لا توجد حركة 2 - يوجد حركة 1 مم في الاتجاه اللساني الدهليزي 3 - يوجد حركة 2 مم في الاتجاه اللساني الدهليزي. تم استنعاء المرضى خلال أربع فترات زمنية أو صحت الدراسة أنه لا يوجد فرق إحصائي هام في حركة الأسنان أو التهابات اللثة حول هذه النيجان سيما وحد فرقا إحصائيا هاما في اللويحات الجرثومية ما بين الفترة الأولى والفترة الرابعة.

This study was undertaken to evaluate the periodontal conditions of thirty-four (34) surveyed crowns which support and retain different designs of removable partial dentures with different clasping systems. The patients were called at four intervals. The gingival and plaque indices were measured according to Loë. The tooth mobility was measured according to the following criteria: 0 - no mobility; 1 - mobility 1 mm buccolingually; and 2 - mobility more than 1 mm buccolingually. The findings indicated no significant difference in tooth mobility or the gingival index. However, a significant difference was found in plaque index between the day of denture placement and the fourth visit.

Introduction and Literature Review

The advantages of the so-called surveyed crown were reported by many authors. Chandler *et al.*¹ indicated that the uses of surveyed crowns included the treatment of badly broken down teeth to achieve the desire path of insertion, to obtain a favorable occlusal relationship, the necessity to splint adjacent teeth and to provide additional stabilization. Miller,² on the other hand, stated twenty-one advantages for the surveyed crown. Surveyed crowns yield more ideal contours than natural teeth for receiving the various components of the removable partial denture (RPD).^{3,4} Other authors had described the alterations in tooth preparations for surveyed crowns.^{4,5} The design requirement for the RPD must also be determined before treatment is initiated to account for the position, the facial and labial contours, and the size of the existing restorations.⁷ Porcelain-to-metal crowns are routinely fabricated with retentive contours in veneering porcelain, but until recently, the contours of the other portions of the restoration were developed in metals.⁸

The aim of this study was to evaluate the periodontal status of a number of surveyed crowns which were used to stabilize and retain a removable partial denture.

Materials and Methods

Material

This study was conducted in the Department of Prosthetic Dental Sciences, College of Dentistry, King Saud University, Riyadh, Kingdom of Saudi Arabia. A total of thirty-four (34) teeth were randomly selected for this study. All the teeth were either malposed or badly broken ones and which required surveyed crowns to support and retain an RPD. Their distribution was as follows: eight (8) molars, twenty-two (22) premolars and four (4) canines. Out of the thirty-four used clasps, eight (8) were circler, ten (10) were RPA referred as rest proximal plate and half aker, twelve (12) were RPI illustrated as rest, proximal plate and a bar, and four (4) bar-type clasps composed of ledge and bar. The surveyed crowns were prepared to achieve the following criteria:

1. Have a rest that was ideally located
2. Have a guiding plane that was neither overcontoured nor had a large undercut gingival to the guiding plane.
3. Its reciprocal surface provided true reciprocation and a cervically placed height of contour.
4. An undercut which did not exceed 0.01 of an inch. In the study, all the finished lines were supragingival.

Method of Measurements

On the day of RPD placement which was referred to as level 1, the plaque and gingival indices were measured according to Loë.⁹ Tooth mobility was measured according to the following criteria:

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