

POLITEKNIK KESEHATAN TANJUNGPINANG
JURUSAN TEKNIK GIGI

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Pembuatan Gigi Tiruan Sebagian Lepas Termoplastik Akrilik *Unilateral Free End* Rahang Bawah dengan Kasus Ekstrusi Gigi 27

XVII + 53Halaman + 42 Gambar + 2 Tabel + 7 Lampiran

RINGKASAN

Gigi tiruan sebagian lepasan termoplastik akrilik adalah jenis gigi tiruan yang menggantikan beberapa gigi asli yang mengutamakan kenyamanan dan estetika. Berdasarkan laporan kasus yang penulis dapatkan, pasien mengalami kehilangan gigi 28, 37,38, dengan ekstrusi yang ekstrim pada gigi 27.

Tujuan penulisan laporan tugas akhir ini adalah untuk mengetahui desain, pemilihan dan penyusunan elemen gigi, kendala dan cara mengatasinya dalam pembuatan gigi tiruan sebagian lepasan termoplastik akrilik *unilateral free end* dengan kasus ekstrusi gigi 27 agar mendapatkan retensi dan stabilisasi yang baik.

Prosedur pembuatan dimulai dari persiapan model kerja, *survey* dan *block out*, transfer desain, pembuatan basis, dan pemasangan okludator. Selanjutnya dilakukan penyusunan elemen gigi, *flasking*, pemasangan *sprue*, *boiling out*, injeksi, *finishing* dan *polishing*.

Hasil, protesa halus dan tidak porus, insersi ke pasien retensi dan stabilisasi baik, cekat serta mudah dilepas pasang. Simpulan, desain basis menggunakan unilateral dengan perluasan sampai *retromolar pad*. Cengkeram *main clasp* ditempatkan pada gigi 35. Penyusunan elemen gigi 37 normal dengan melakukan pengurangan pada servikal dan oklusal cukup banyak untuk mendapatkan oklusi dengan gigi 27 yang mengalami ekstrusi ekstrim. Kendala, pembuatan retensi diatorik pada gigi 37 dibuat horizontal karena giginya cukup pendek, terjadi peninggian gigitan saat *fitting* pada model kerja, Saran, pembuatan retensi diatorik harus hati-hati untuk elemen gigi yang terlalu pendek, hati-hati dalam melakukan *selective grinding* dan dianjurkan menggunakan *articulating paper*.

Kata Kunci : Gigi Tiruan Sebagian Lepas, Termoplastik Akrilik, Ekstrusi

Daftar Bacaan : 28 (1991–2024)

POLYTECHNIC OF HEALTH TANJUNGKARANG
DEPARTMENT OF DENTAL TECHNICIAN

Final Project Report, 16 June 2025

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Fabrication Unilateral Free End Removable Partial Denture Using Thermoplastic Acrylic In A Cas Of Tooth 27

XVII + 53 Pages + 42 Figures + 2 Tables + 7 Appendices

ABSTRACT

Acrylic Thermoplastic Removable Partial Denture is a type of prosthesis that replaces several missing natural teeth, prioritizing comfort and aesthetics. Based on the case report obtained by the author, the patient experienced the loss of teeth 28, 37, and 38, with severe extrusion of tooth 27.

The purpose of this final project report is to describe the design, selection, and arrangement of artificial teeth, the challenges encountered, and how to overcome them in the fabrication of an acrylic thermoplastic unilateral free-end removable partial denture in a case involving extrusion of tooth 27, in order to achieve good retention and stabilization.

The fabrication procedure begins with working model preparation, surveying and block-out, design transfer, baseplate fabrication, and occludator placement. This is followed by tooth arrangement, flasking, sprue placement, boiling out, injection, finishing, and polishing.

Result, the prosthesis was smooth and non-porous; insertion in the patient showed good retention and stabilization, it was stable and easy to insert and remove. Conclusion, the base design used a unilateral type with extension to the retromolar pad. The main clasp was placed on tooth 35. Tooth 37 was arranged normally, but significant reduction on the cervical and occlusal areas was done to achieve occlusion with the extremely extruded tooth 27. Challenges, the diatoric retention on tooth 37 was made horizontally due to the short crown. There was an increase in vertical dimension during try-in on the working model. Suggestions, care must be taken when creating diatoric retention on short teeth, be cautious during selective grinding, and it is recommended to use articulating paper.

Keywords : Removable Partial Denture, Acrylic Thermoplastic, Tooth Extrusion

References : 28 (1991-2024)