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Prosthetic Rehabilitation by Casted Denture with Modified Reduced Base Fabricated after Chemotherapy

Case Report

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Introduction

Introduction. After completion of chemotherapy, the invent of prerequisites allow fabrication of denture and rehabilitation of occlusion and oro-facial system's function.

Objectives

Case report. The patient N.L. aged 64 yrs., was inspected at the University Clinic of dental prosthetic in Belgrade. She submitted the confirmation on completion of chemotherapy, after removing of tumour.

The fabrication of partial casted denture was indicated in prosthetic therapy of the upper jaw. The denture was initially designed respecting remaining teeth in the upper jaw, with particularly designed base of the denture respecting shapes and form of palatal tissues (figures 1-6). Mastication, speech and swallowing were rehabilitated in this patient (figure 7). There were not pathologic changes in her mouth, at recall (figure 8).



Fig. 1: After polishing casted framework was positioned in the mouth

Fig. 2: Wax rims



Fig. 3: Determination and verification of vertical dimension, established maxillo-mandibular jaw relation record and interocclusal relationship with wax-rim record

Fig. 4: The try-in appointment and patient's acceptance of the arrangement of artificial teeth



Fig. 5: The casted maxillary partial denture positioned in the mouth of a patient in opening position



Fig. 6: The casted maxillary partial denture in the mouth of a patient in occlusion



Fig. 7: The casted maxillary partial denture in function of oro-facial system



Fig. 8: Situation in a mouth in recall

Discussion

In the significant number of cases breast cancers could expose metastasis to distanced bone hard tissues (1). A one of the bones in which metastases could develop are maxilla as well as mandible. Breast cancer's metastases in jaws stay on the consequences. Because of the presence of metastases, structure of a bone should be disordered, malignant osteoporosis is developing, and loosening of teeth could be accelerated.

Up-to now, significant number of breast cancers' metastases to bone could be medically treated (2-12). Before initiation of prosthetic-oral rehabilitation of patients of this kind it should have been important to focus two parameters: weather each hazard of tumours' recidivism could be pronounced, and what kind of medical therapy was conducted, or was conducting at the moment of initiation of oral cleanliness with prosthetic rehabilitation.

In this woman patient bisphosphonates were implicated within chemotherapy, in spite of the fact that in dental and medical literature some of the experts advocated different and certain unfavourable comments on bisphosphonate therapy of jaws (13-17). In the case of this woman patient, bisphosphonates showed very successful medication which influenced regularity of secondary mineralization of cancellous bone of her upper jaw. As the clinical result, fortifying of the remaining teeth in the jaw has happened.

Casted denture should have been considered in prosthetic therapy of this patient because of the reason that casted denture could have prevented loosening of teeth in the bone, and it could have reinforced the positions of the teeth after fortifying (figure 1 and figure 5).

Casted denture for the upper jaws should have been usually designed with massive and moderately extended palatal bar, or with anterior and posterior palatal bars (18-21). In the case of this woman patient palatal bar was significantly reduced and designed as much as anterior in position. This prevented redundant forces to previously changed structure of osseal palatal supporting tissue of her maxilla. Moreover it should have been free of Ni (nicle) to avoid inflammatory and allergic reactions o f supporting tissue and denture. For this patient Co-Cr-Mo alloy has been provided in the fabrication of the denture.

Fabrication of attachments and designing attachments in the casted denture for this woman patient seemed to be redundant and ineffectual.

Conclusion

Partial casted denture for upper jaw, when designed in accordance with shape of supporting tissues after chemotherapy, is successful mode of treatment of partially edentulous patients after surgery and removal of tumour.

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**PROTETSKO ZBRINJAVANJE SKELETIRANOM PROTEZOM SA
MODIFIKOVANOM REDUKOVANOM BAZOM POSLE
HEMOTERAPIJE- POKAZ S LUČAJA
PROSTHETIC REHABILITATION BY CASTED DENTURE WITH
MODIFIED REDUCED BASE FABRICATED AFTER
CHEMOTHERAPY -CASE REPORT**

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Uved. Posle završene hemoterapije jestvaran povoljan medjun za rehabilitovaje
okluzije funkcije ore-facijalnog sistema, postavljanje proteze.
Introduction. After completion of chemotherapy, the invert of prerequisites
allow fabrication of denture and rehabilitation of occlusor and ore-facial
system's function.

Pacijentkinja NL, stara 64 god, je pregledana u Klinici za
stomatološku protetiku. Pacijentkinja je pitala o radie o završenoj hemoterapiji
posle operacije tumora. Indikovana je izrada parcijalne skeletirane proteze u
gornjoj klesavici vilice. Proteza je izrađena prema preostalim prirodnim zahtevima
ostalih proteza, sa posebno oblikovanom bazom koja je bila prilagođena
obliku nepca. Protezom su lokalno jeftinije rehabilitovane funkcije žvakanja,
govora i gutanja. Za vreme kontinuiranog pregledanja nije bilo patoloških promena u
ustima.

Case report. The patient NL., aged 64 yrs. was inspected at the University clinic
of dental prosthetic in Belgrade. She submitted the confirmation on completion
of chemotherapy, after tumorous tissue removal. The fabrication of partial casted
denture was indicated in her upper jaw. The denture was initially designed
respecting remaining teeth in the upper jaw, with particularly designed base of
the denture respecting shapes and form of palatal tissues. Mastication, speech
and swallowing were rehabilitated in this patient. There were not pathologic
changes in her mouth at recall.

Zaključak. Skeletirana proteza u gornjoj vilici, oblikovana tako da bude
prilagođena položaju i obliku nepca, je uspešan vid rehabilitacije klesavice
posle operacije tumora.

Conclusion. Partial casted denture for upper jaw, when designed in accordance
with shape of supporting tissues after chemotherapy, is successful mode of
treatment of partially edentulous patients after surgery and removal of tumor.



THEIR OPTICAL BASE L.P. WITH PROVISION



WORKING MODEL OF THE M.F.S.

CORDINA VETERANNA DENTURE WITH O.C. DENTURE MONITORING IN OCCLUSION



TRY IN



PROVISIONAL DENTURE MONITORING IN OCCLUSION