

## COMMON COMPLAINTS BY PATIENTS USING REMOVABLE PARTIAL DENTURE

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## ABSTRACT

**Objective:** The objective of this clinical research was to determine the occurrence of complaints by those patients who were using partial removable dentures. **Patients & Methods:** We conducted this research at Nishtar Institute of Dentistry, Multan (September 2019 to August 2020) on one hundred patients including 40 females and 60 males who were using dentures from last six months. We also took details about the denture history, medical history, gender and age. The patients were also asked about the pain before the insertion of dentures. Outcome analysis was made on SPSS software. **Results:** The outcomes were statistically significant (P-Value < 0.05). Patients normally complained about loose dentures, ulceration under and around the appliances, discomfort & pain, low masticatory efficacy and speech issues respectively among 55%, 40%, 35%, 25% and 28%. Ten percent of patients also complained about debonding artificial teeth. **Conclusion:** Major post insertion complications among RPD patients were soreness and pain, speech difficulty, mastication difficulty, retention loss, debonding, ulceration and artificial teeth fracture. These limitations can be overcome through proper compliance of the patients and designing of the dentures.

**KEYWORDS:** Removable Partial Denture (RPD), Edentulism, Retention, Mastication, Ulceration and Soreness.

## INTRODUCTION

The composition of the functional unit (Masticatory System) is teeth, jaws, supporting structure, muscles and temporomandibular joints.<sup>[1]</sup> Periodontitis and dental caries are counted as the primary etiological factors of teeth loss globally.<sup>[4]</sup> The loss of tooth affects the aesthetics, functionality and speech functions.<sup>[2]</sup> Overall life quality is also adversely affected through teeth loss and its associated factors.<sup>[3]</sup>

It is recommended to preserve natural teeth and the same is the teachings of modern dentistry. Teeth loss leads to the increased use of dentures with an increase in the patients of partial dentate and complete edentulism decline in a gradual way.<sup>[7]</sup> Missing teeth are replaced through various modalities such as fixed partial, removable partial dentures or it may be implants of the teeth. Every modality comes with its associated merits and demerits.<sup>[5]</sup> Largely the implant-retained/supported prosthesis and bridgework through adhesive for the restoration of limited bounded saddles in the aesthetic zone are opted as a treatment choice. However, we cannot neglect the cost-effectiveness of removable partial dentures as it is capable to manage edentulous saddle particularly in the larger saddle areas.<sup>[6]</sup> RPDs are a reversible, cost effective and versatile treatment option that can be employed on a larger age bracket and in a

variety.<sup>[8]</sup> However, there are also different complications such as loose dentures, ulceration under and around the appliances, discomfort & pain, low masticatory efficacy and speech issues.<sup>[9]</sup>

The objective of this clinical research was to determine the occurrence of complaints by those patients who were using partial removable dentures.

## METHODOLOGY

We conducted this research at Nishtar Institute of Dentistry, Multan (September 2019 to August 2020) on one hundred patients including 40 females and 60 males who were using dentures from last six months. We also took details about the denture history, medical history, gender and age. The patients were also asked about the pain before the insertion of dentures. Research commenced after the written agreement of the patients. The patients were in the age bracket of 40 – 50 years with a mean age of 45.5 years. We also documented the preference of patient about the selection of dentures. The prosthodontic complaints observed during this research were soreness and pain, speech difficulty, mastication difficulty, retention loss, debonding, ulceration and artificial teeth fracture.

We tabulated the post-insertion complaints of the patients and evaluated the difference between cast and acrylic partial dentures through the Chi-Square Test. Significant P-Value was 0.05. Outcome analysis was made on SPSS software.

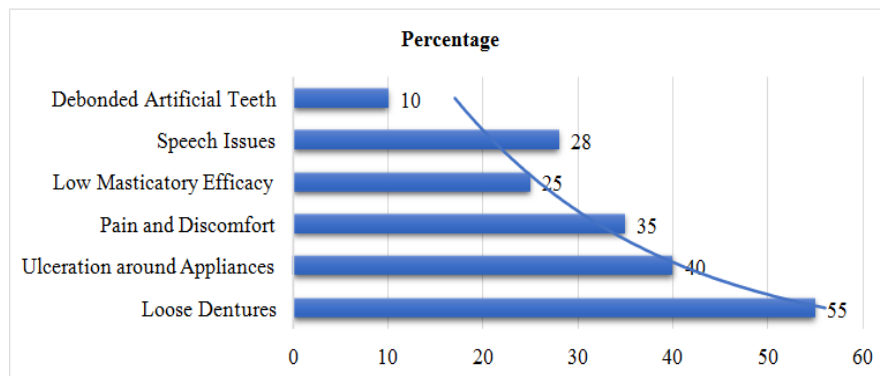
## RESULTS

Majority of the patients reported multiple complaints; whereas, few reported only one complaint. The outcomes were statistically significant (P-Value < 0.05). Patients normally complained about loose dentures, ulceration under and around the appliances, discomfort & pain, low masticatory efficacy and speech issues respectively among 55%, 40%, 35%, 25% and 28%. Ten percent

patients also complained about debonding artificial teeth. Fewer issues were found in the patients who used cast partial dentures than acrylic RPDs.

**Table: Complaints of Patients (Percentage).**

Issue(s)	Percentage
Loose Dentures	55
Ulceration around Appliances	40
Pain and Discomfort	35
Low Masticatory Efficacy	25
Speech Issues	28
Debonded Artificial Teeth	10



## DISCUSSION

Though the use of RPDs is a common nut at the same time it is not an ideal and recommended management for dentate patients. The data about the complication rate and success related to removable prostheses is very much limited. However, literature is available about the abutment teeth prognosis, remaining teeth periodontal status or various denture complaints about the life quality and patient's satisfaction.<sup>[10-13]</sup> An increased patient's dissatisfaction with removal of the dentures is because of the stability and retention issues, especially in the case of mandibular dentures because of the continuous resorption of the residual bone which causes mediocre level masticatory efficacy.<sup>[14]</sup> Dissatisfaction is also the combination of loss of speech or restricted speech and factor of pain.<sup>[15-17]</sup>

Most of the patients complained about the loss dentures which required the dentures to be replaced. In addition to that, patients were also dissatisfied about various functions such as reduced masticatory ability which is also because of the loose dentures. Second major issues were the forming up of ulceration under and around the appliances. It was also associated with extended flanges and denture retention. Subsequently, patients also complained about the speech disability and inferior masticatory. Sore spots on the maxillary tuberosities buccal surfaces may reduce chewing ability. Lingual and buccal mandibular crest surfaces are due to frenulum or instability of the impingements. Extension of the upper denture to the soft palate results in the shape of speech

difficulty. We also reported that the RPD users may also suffer from the debonding of the teeth and fracturing of the artificial teeth because of occlusal disharmony due to the wrong centric occlusion association. An unequal force causes the breakage among artificial teeth. Our outcomes will definitely help in the improvement of clinical practices.

## CONCLUSION

There is no association of age, gender and clinical history with the complaints of RPD users. Major post insertion complications among RPD patients were soreness and pain, speech difficulty, mastication difficulty, retention loss, debonding, ulceration and artificial teeth fracture. These limitations can be overcome through proper compliance of the patients and designing of the dentures.

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