

# POST INSERTION COMPLAINTS ASSOCIATED WITH NEW COMPLETE DENTURE

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## ABSTRACT

*The aim of this study was to determine the frequent post insertion complaints associated with complete denture. This cross sectional study was done on 117 patients wearing complete dentures who came to the Department of Prosthodontics of Dow International Dental College with post insertion complaints from January to December 2017. These patients came for the first visit within the first month after the insertion of complete denture. The assessment of all post-insertion complaints was done by one prosthodontist. The questionnaire included information on age, gender, type of denture, chief complaint and place where the denture was fabricated. This was followed by a clinical examination. Patients were informed about the study. After obtaining consent the data were collected.*

*Regarding the post insertion complaint, 75% of patients faced pain and discomfort. 65% reported difficulty in eating. Looseness of denture was reported by 58%. 35% experienced difficulty in speech complaints regarding food accumulation under and around the prosthesis were reported by 17%.*

*The most common post-insertion complaint of complete denture was pain and discomfort followed by difficulty in eating. Identification of post insertion complaints in different types of prosthesis would be very supportive to developing strategies to prevent and manage these more effectively by reducing all negative factors associated with these complains.*

**Key Words:** Complete denture, Post insertion Complaints.

## INTRODUCTION

Rehabilitation of the edentulous patient is a tremendous challenge for the Prosthodontist. Providing complete denture service can be rewarding as well as, not infrequently, a frustrating experience.<sup>1</sup> Oral tissues may not accept the new complete denture immediately and may require some time to accommodate it. The

denture must be compatible with the surrounding environment, and must restore the musculature efficacy.<sup>2</sup> The dental literature is replete with issues and problems faced by patients, consequent to denture insertion. Placement of a complete denture in the oral cavity produces profound changes that may adversely affect the oral tissues.<sup>3</sup> Wearing complete dentures that function poorly could be a negative factor with regards to the maintenance of muscle function and nutritional status.<sup>4</sup> Complaints with the removable dental prostheses may also arise due to factors such as thick or over extended denture flange, loose or tight fitting denture, occlusal interference or frenal impingement.<sup>6</sup> After insertion of complete denture discomfort and pain may occur due to overextended borders. Pain can be relieved by trimming the overextended areas and by grinding the acrylic spicules, if present on the denture. Disharmony in occlusion can be corrected by spot grinding.<sup>7</sup> Denture soreness may be due to undercuts mostly in the mylohyoid ridge and tori. Sometime bony spicules and spiny ridges may be responsible for soreness.<sup>8</sup> Minor irregularities can be treated by relieving the denture but gross undercuts may have to be surgically corrected

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followed by rebasing of the denture.<sup>9</sup> Rarely a patient may complain of pain in the throat followed by fever two days after the insertion of complete denture which is due to over extension of denture in retroramyloid space.<sup>10</sup> When the denture is loose, the cause is either over-extension or under extension. The denture should be checked for these. If it is over extended, it should be appropriately trimmed. However, if it is found that denture is under extended, it should be rebased. If the patient complains about the difficulty in speech that may be due to incorrect positioning of anterior teeth. They ought to be replaced by new set up and denture must be properly contoured and polished. Some patients may express dissatisfaction in esthetic. The emotional responses vary from person to person. Such problems could be due to incorrect selection of teeth regarding color and size of the teeth or may be due to incorrect set up. The situation should be properly assessed and corrected accordingly.<sup>11</sup> The dentist must have thorough knowledge of anatomy, physiology, pathology and to some extent of the psychology.<sup>7</sup> If these complaints are not addressed properly it will lead to patient disappointment and ultimately removable dental prostheses failure.<sup>11</sup> The follow-up care of complete denture is an important and critical phase in the treatment of the edentulous patient and can uncover minor problems and complaints.<sup>12</sup> Determining the common complaints by the patients will be helpful in ensuring a good clinical outcome. Very few studies to assess the complaints associated with acrylic dentures have been conducted in Pakistan. The current study was carried out to find out common complaints of patients wearing removable dental prostheses visiting the Prosthodontics department of a teaching hospital. This study will add to the existing literature and will aid in dental education and training. It will also improve awareness of a dental clinician about common post insertion complaints and help them in their management.

**METHODOLOGY**

This cross sectional study was done on 117 patients wearing complete denture who came to the Department of Prosthodontics of Dow International Dental College with post insertion complaints from January to December 2017. These patients were presenting for the first visit within the first month after the insertion of complete denture. The assessment of all post-insertion complaints was done by one clinician. Inclusion criteria; Patients with complete denture in upper, lower or both arches, which were inserted within the past one month (30 days), Polymethyl methacrylate (PMMA) complete dentures. Exclusion criteria; Patients who could not accurately describe their complaints (language, or speech limitation) and patients with disability (mental or physical). The questionnaire included information on age, gender, type of denture, chief complaint and

place from where the denture was fabricated. This was followed by a clinical examination. Patients were informed about the study. After obtaining consent the data was collected. The data were entered and processed in SSPS program version 17 and descriptive statistics (number and percentages) were calculated.

**RESULTS**

They are summarized in Table 1 and 2. According to patient’s gender and the most common complaints of patients associated with complete denture of upper and lower arch, and both arches, it was found that, 75% of patient faced pain and discomfort. 65% reported difficulty in eating. Looseness of denture was reported by 58%. 35% experienced difficulty in speech. Complaint regarding food accumulation under and around the prosthesis was reported by 17%.

TABLE 1: DEMOGRAPHIC DATA OF PATIENTS IN COMPLETE DENTURES

Factor	Frequency	%age
Gender Male	77	66
Female	40	34
Total	117	117

TABLE 2: POST INSERTION COMPLAINTS IN COMPLETE DENTURES

Patient complaint	Frequency	%age
Pain and discomfort	88	75
Difficulty in eating	77	65
Denture looseness	68	58
Difficulty in speech	49	35
Food accumulation under and around the prosthesis	21	17

**DISCUSSION**

Rehabilitation of the edentulous patient is a tremendous challenge for the Prosthodontist. Providing complete denture service can be rewarding as well as, not infrequently, a frustrating experience. Oral tissues may not accept the new complete denture immediately and may require some time to accommodate it. The dental literature is replete with issues and problems faced by patients, consequent to denture insertion. After insertion of complete denture patients often present different complaints such as pain and discomfort, difficulty in eating, looseness, difficulty in speech, food accumulation under and around the denture.

In this study pain and discomfort was experienced by 75% of the patients. This was most common problem noted. Disturbed occlusion, impingement of soft tissues and over extended denture flanges were also the most

common causes of pain and discomfort. This result supports the findings of previous studies conducted in USA and Pakistan.

In the present study the second most common complaint of the complete denture patients was difficulty in eating. It was reported by 65%. Results shown in this study are in agreement with previous studies conducted in USA and Pakistan.

In this study 58% reported looseness of denture. This was the third most common problem faced by the patients. The results of current study were consistent with the results of previous studies conducted in America and Pakistan.<sup>6-13</sup> The tongue also plays an important role in the success of lower dentures. At times new removable dental prostheses get dislodged due to tongue size and activity. Especially in edentulous areas the tongue can get enlarged and contraction of mylohyoid muscles raises the floor of mouth; resulting in dislodgement of a denture. This may explain greater number of complaints in the lower removable dental prostheses.

The fourth most common complaint observed by 35% was difficulty in speech. There is contrast of this result with a previous study conducted in Pakistan.<sup>13</sup> This might be due to incorrect positioning of anterior teeth, tongue space is encroached or polished surface is not contoured properly.

It was observed that 17% of patients complained regarding food accumulation under or around the prosthesis. This result supports another study conducted in Pakistan.<sup>13</sup> Study conducted regarding post insertion complains in removable partial denture also revealed that most common complaint was uncomfotability and pain during eating. Similarly in this study most of the patients complained about pain and discomfort and difficulty in eating. It was in terms of partially dentate patients which leads to looseness of denture.

## CONCLUSION

The most common post-insertion complaint of complete denture was pain and discomfort followed by difficulty in eating. Identification of post insertion

complaints in different types of prosthesis would be very supportive to developing strategies to prevent and manage these more effectively by reducing all negative factors associated with these complaints.

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## CONTRIBUTIONS BY AUTHORS

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| <b>1 Bushra Jabeen:</b>   | Principal Investigator, Concept of paper, data collection and write up.          |
| <b>2 Imran Samejo:</b>    | Critical Review of whole manuscript, data entry and helped in literature search. |
| <b>3 Syed Umer Hasan:</b> | Manuscript, data entry and helped in literature search.                          |
| <b>4 Asifullah Khan:</b>  | Helped in discussion writing, and reference citation.                            |
| <b>5 Yasir Ilyas:</b>     | Reference citation.  |