

Management of flabby ridges – Cognizance among dental interns

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Abstract

Background: Management of flabby ridge differs from patients to patient. It depends on patient's health and prognosis. Intern's knowledge about treating flabby ridge patients is analysed in this study. The main aim of this study is to establish intern's view regarding the management of flabby ridges.

Aim: To determine the knowledge of dental interns regarding the management of flabby ridge.

Materials and methods: A set of 10 questions is prepared and data is collected among 100 dental interns. The data collected is analysed and the report is made statistically.

Result: In this study 100 dental interns have participated around the age of 22 to 25. The results conclude that 50 % to 60% of interns are aware in diagnosing and treating flabby ridge patients whereas rest of them are not aware of it.

Conclusion: Thus majority of dental interns agree that surgical or implant retained prosthesis gives more stability and retention in comparison to conventional prosthesis.

Keywords: Flabby ridges, Impression techniques, stability, complete denture, management.

1. Introduction

Complete denture plays a major role in completely edentulous patients as they fulfill all major oral necessities like mastication, aesthetics and phonetics by replacing the missing dental and alveolar structures using a stable prosthesis. They are also helpful in movement of muscles of lips and tongue [1]. Flabby ridge is also known as displaceable ridge or fibrous ridge. It can be defined as a mobile soft tissue covering the superficial aspect of the alveolar ridge [17]. Using ill-fitting denture for a longer period leads to resorption of alveolar bone, mostly in anterior region. [2,3] Flabby ridge results in poor stability and retention for the complete denture. Management of flabby ridges is seen under three categories- 1.Surgical removal of soft tissues, 2. Implant retained prosthesis, 3.Conventional prosthodontics without surgical intervention [4,5]. In case of implant prosthesis the support is obtained from the alveolar bone in which minimal support is needed from the soft tissue. It also has fewer disadvantages like higher cost and time taken for the completion of treatment,

general health of the patient and surgical complications [6]. Flabby ridges usually have thickness of 2-4mm [7]. Surgical removal of soft tissue gives firm ridge but may lead to decrease in stability of the denture [8] this can be managed by specific impression technique. In case of conventional impression technique, if the tissue is compressed during impression making it will lead to dislodgement of the denture or an ill-fitting denture [9].

2. Materials and methods used

The study was conducted as a descriptive survey in a private dental college in the Chennai city, Tamil Nadu, India. A set of 10 questions with 'yes' and 'no' pattern was prepared to obtain information about impression techniques for flabby ridges among edentulous patients. A total of 100 intern students, especially BDS, ageing ranged from 23-25 years were chosen. The responses from all students are collected within 20 days. The questionnaires were distributed manually. After collecting the questionnaires and data, statistical analysis was done.

3. Results

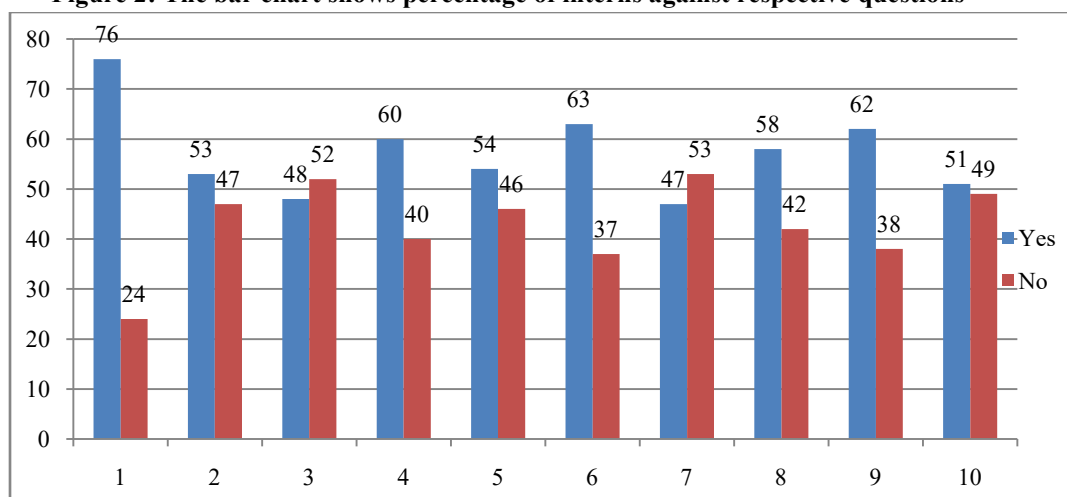
This study shows the awareness of dental interns regarding management of flabby ridge. A survey is conducted among 100 dental interns around the age of 22 to 24 years. In diagnosing flabby ridge patients 70% of the interns were confident in diagnosing the flabby ridge were as 30% of students were not confident about it. Regarding the management of flabby ridges 53% of students has the knowledge in management of flabby ridge whereas 47% of dental interns have no knowledge about it. This may be due to lack of exposure of dental interns in flabby ridge patients. Fixed or removable Implant retained prosthesis: - 48% of the dental interns agree that they were aware of implant retained prosthesis and 52% of the dental interns disagree to it. When it comes to the stability and retention of the prosthesis 60% of the dental interns say fixed or removable prosthesis gives more retention when compared to conventional prosthesis and 40% of the dental interns

strongly disagree. Surgical procedures used in conventional retained prosthesis: - only 54% of the dental interns are aware of surgical procedures and 46% students are not known about it. 63% of dental interns know that flabby ridge occurs when a natural tooth oppose an edentulous space whereas 37% of interns has no idea of it. Window impression technique is most commonly used impression technique for flabby ridges and therefore 47% of dental interns agree that they use this impression technique rest of 53% interns disagrees to it. 58% of dental interns assume that flabby ridge compromises the stability of the denture and 42% of students are not aware of it this may be due to lack of patients. Therefore 62% of interns state that maxillary anterior region is the most common site for flabby ridge and 58% of students are not known of it. Flabby ridge shows indirect sequelae of wearing complete denture: 51% of interns agree to this whereas 49% of interns are not aware of it.

Questions

- Are you confident in diagnosing flabby ridges patients?
a) Yes -76 b) No-24
- Are you aware of management options for flabby ridge?
a) Yes -53 b) No-27
- Do you acknowledge that fixed & removable implant retained prosthesis in one of the way to manage flabby ridge?
a) Yes -48 b) No-52
- Are you aware of fixed or removable prosthesis will provide more stability and retention in comparison to conventional prosthesis?
a) Yes -60 b) No-40
- Do you agree that surgical procedures are rarely used in comparison to conventional prosthesis?
a) Yes -54 b) No-46
- Are you aware that flabby ridge occurred when natural teeth oppose an edentulous ridge?
a) Yes -63 b) No-37
- Are you window impression technique can be applied during impression making for flabby ridge?
a) Yes -47 b) No-53
- Do you think flabby ridge compromises stability of a denture?
a) Yes -58 b) No-42
- Do you agree maxillary anterior region is the most common site for flabby ridge?
a) Yes -62 b) No-38
- Do you agree that flabby ridge is the indirect sequelae of wearing complete denture?
a) Yes -51 b) No-49

Figure 2: The bar chart shows percentage of interns against respective questions



4. Discussion

Flabby ridge is an excessive movable tissue which is formed by fibrous tissue deposition. It is often seen in upper anterior region. Flabby ridge occurs when natural teeth oppose an edentulous space. Kelly in 1972 used the term “combination syndrome” to describe changes in patients wearing maxillary complete denture opposing a mandibular anterior teeth [18].

Flabby ridge disturbs denture’s stability. Fabricating an ideal complete denture is quite challenging in case of flabby ridge patients. Bringing back their function, appearance, smile and maintaining their physical health is the main purpose of complete denture [10].

There are different impression techniques to compromise the instability of the denture. Impression types include selective impression technique, general selective impression technique and surgical technique, surgical removal of flabby tissues prior to conventional prosthodontics. Selective impression technique is most commonly used technique and has good retention when compared to other impression technique. Surgical removal of flabby tissues is an old concept in this era; its use was the removal of flabby tissues and resulting in normal compressible denture bearing area of which common impression techniques (mucocompressive technique) can be used.

The difficulties that have been faced during the surgical technique is many complete denture patients are elders above the age of 50 years and they may have medical histories that may hinder any kind of surgery. Removal of flabby tissues may show shallow ridge which may result in little retention or resistance to lateral forces on the denture. Concept of prosthodontics therapy should be concerned with conservation of what remains, rather than the replacement of what has been lost [19].

Implant retained prosthesis can be done in this scenario which is also not easy. If there is excessive bone resorption and replacement of flabby tissues, the only minimal amount of bone will be available onto which implant can be placed and it can be covered with bone grafts. There are some other impression techniques to overcome the problems faced in flabby ridge patients.

McCord and Ahmad F explained window impression technique. In this peripheral moulding is done with peripheral seal because window, holes or vents are prepared after final impression is made. The displaceable tissue is then recorded in the minimally displaced position and plaster of paris setting is made which re-establishes the peripheral seal.

Figure 3: Maxillary impression made with green stick compound



Figure 4: Maxillary impression made with zinc oxide eugenol impression paste



Allen F and Polychronakis claimed to increase the stability of complete denture by customizing the special trays presenting a window opening over the displaceable tissues. This provides more stability and retention. This study is regarding management of flabby ridge. According to this study it is known that majority of the dental interns are well-known in treatment plan for flabby ridge patients. From this study we can come to a conclusion that implant prosthesis provide more stability than conventional prosthesis. Also many of the interns prefer surgical procedure than conventional prosthesis. But surgical procedure is not applicable for all patients; it depends on individual [11].

The injecting sclerosing solution was used to make flabby tissues firm was introduced by Desjardins RP, Tolman[12].

The drawbacks of this technique include anaphylactic reactions, discomfort of patient, loss of firmness, technique sensitivity. Window impression technique reduces hydraulic pressure and minimizes the displacement of tissues during impression making. Window impression technique and surgical techniques will reduce displacement of soft tissues, during secondary impression therefore physiologic and anatomic recordings of attached and unattached tissues bearing areas are achieved [13,14]. Treatment choice is made by analysing the requirement of stability and denture's retention and to preserve the health of the oral tissues of every patients [15,16].

5. Conclusion

It is quiet challenging in fabricating a denture base with good retention and stability for flabby ridge patients. Implant retained prosthesis gives better retention and stability but it cannot be applicable for all patients yet conventional prosthesis can be used for such cases. Hence complete case history and diagnosis should be done for treatment plan. Thus I conclude that proper diagnosis plays a vital role in management of flabby ridge patients.

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