

Aesthetics in Complete Denture – A REVIEW

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Abstract:- Aesthetics is derived from a greek word. aesthetics plays a major role in modern dentistry. Complete denture should have great esthetics and patient must be satisfied with the overall esthetics. The present article reveals about impact of aesthetics in complete denture.

Keywords:- Aesthetics, Complete Denture, Occlusal Rim, Vertical Dimension.

I. INTRODUCTION

Aesthetics is derived from the esthetics a Greek word (1).Aesthetic starts at the time of diagnosis of patients and completes with acceptance of patient(2).Websters defined aesthetics in third new international dictionary, and he also said that beauty lies in the eyes off the holder. Hierarchy of dental needs was given by doctor priest, and he said that if the patient doesn't have fit prosthesis. He may not have satisfied desire with the function of prosthesis(3). Aesthetic dental treatment is considered as an artistic and subjective design of components which is used to create beauty(4). Aesthetic of denture consist of two components supporting denture and teeth (5).Aesthetics plays an important role in prosthodontics. Prosthodontics and surgery treatment are done to improve both aesthetics, and oral health (6). The present article empathizes on Aesthetics in complete denture.

➤ Patient evaluation:

Cosmetic index play an important role to achieve aesthetics in patients. Old denture immediate denture and all records on the preextraction radiograph photograph Plays a major role in bringing aesthetics in complete denture(2). In 1939 Baker and Smith classified personality into three groups Group1: are people who are adjustable these type of people are ideal patients, and they are successful in both life and career. Group2: people who have inadequate personality. Group3: Psychotic come under group 3.

➤ Aesthetic in denture:

Smokers can given special consideration as they have stains in their oral cavity for these cases yellow gray brown shades are given. There are different type of shades available for Complete denture, removable partial denture which gives appearance of natural teeth(3). Aesthetic of denture can be defined as cosmetic produced by denture that

produces attractiveness beauty of an individual (7). Color places an important role in aesthetics. Hue intensity values are three components of color. (4).

➤ Orientation of occlusal plane:

During vertical dimension the degree of jaw opening must be remembered by the patient while attain the tactile sense. Mandible is at rest during vertical dimension the maximum closing force is obtained. The pressure of vertical dimension may vary. These serves in between the speech of interocclusal distance and position of the occlusal plane⁸. Orientation of the occlusal plane is done in saggital view. The occlusal plane should lie parallel to champers line.and in frontal view it should be parallel to inter pupillary line. Fox plane which is designed by Dr.frank fox is used to measure this relation.(2). If the plane is very high correction of position of Lower lip is difficult and when the plane is very low the lip will enhance labial side of the maxillary teeth, and this might affect the speech.(1).

➤ Occlusal rim:

The occlusal rim is fabricated in such a manner resemble the natural occlusion. The occlusal rim should be fabricated fulfilling space occupied by the natural teeth Artwell and Rahm suggested mandibular teeth is more visible with age, and Vig says that about 1.23 mm mandibular teeth is visible in men while 0.49 mm is visible for women.(2).orientation of occlusal plane plays a major role in providing aesthetics the plane forms an important part in a concept of balanced articulation. In mandibular region the occlusal plane is related to mastication functionally some landmarks used in orientation of occlusal plane in mandibular region are buccinator groove lip commissures lateral borders of the tongue, retromolar pad region. (9)

➤ Selection of anterior teeth:

There are many concepts for teeth selection such as whites concepts, H Pounds concepts, dentogenic concepts, Winkler's concepts, leon william's concept. The factors for selecting the size of the tooth include, size of the face, size of the maxillary arch, incisive papilla and the canine eminence or the buccal frenum maxillomandibular relation, contour of the residual ridge, vertical distance between the ridges, lips, nasal width as a guide, inner canthal distance as a guide. (2). There are some anthropometric measurements reported like philtrum width, nasal width, and inter

commissural width Size, form, brilliance, hue, translucency, distribution of enamel and dentin, asymmetry are the main reasons for selecting the tooth. (9). Methods for selecting anterior teeth are pre-extraction records usage of golden proportion, usage of red proportion. Chu's esthetics scale plays an important role in selection of anterior teeth. (aesthetic n cd)

➤ *Arrangement of teeth:*

There is a technological flowchart for automatic arrangement of teeth for complete denture. For obtaining 3D data of occlusal rim and wax denture bases constraints set of individual characteristics are analyst. 3D data of artificial tooth is obtained from construction of artificial tooth database. (complete denture tooth arrangement ningdai) Arranged teeth should be assessed in three, different planes include frontal, sagittal, and occlusal planes In arranging the maxillary teeth the incisal edge of central incisors and canine should rest on occlusal plane whereas lateral incisor is 1 mm short of the occlusal plane. The long axis of the central incisors is perpendicular, and for lateral incisor is slightly angulated whereas the long axis of the canine is angulated slightly more than lateral incisor in respective of occlusal Plane. (2). The arrangement of mandibular teeth includes placement of central incisors upright and mesially titled canine known as sleeping canine respective to the occlusal plane. For enhancing the aesthetics overjet of 2-3 mm and overbite of 1-2 mm is given to the denture.(1).

➤ *Guidelines for selecting teeth:*

Teeth are selected based on shade, size, and shape. The maxillary central incisors are naturally the lightest tooth whereas maxillary lateral and mandibular incisors are little darker. Canines are darker when compared to these tooth. For better aesthetics these should be taken into consideration while selecting the artificial teeth. Selection of teeth is guided by the skin color, age and patient desire. Men are vigorous personality preferred darker shades while women are delicate personality prefer lighter shades respective to dentirogenic concept. (2). The size of the tooth is based on size of a face and maxillary arch Width of the anterior teeth= 1/16 of bizygomatic width. Width of maxillary anteriors = 1/3rd of bizygomatic width. (1).

➤ *Characteristic of denture:*

Hardy suggested that "to meet the esthetic needs of the denture patient, we should make the denture teeth look like natural teeth. When the patient upper lip is short and a single arch complete denture given with dentulous or partially dentulous opposing arch the characteristic of denture is more difficult. (4) The characterization of complete denture can be achieved by the following ways

1. Changing the long axis of the teeth
2. Rotation of teeth
3. Using an eccentric midline
4. Diastema
5. Long clinical crowns
6. Silver filling can be given on posterior teeth
7. A hairline crack can be the given in the teeth.(1)

➤ *Acceptance by the patients:*

The aesthetics can be well tested with the patient since the patient is the one who will take care of the denture. Education should be given to the patient at every step of prosthesis. Micheal proposed that patient involvement, and their preference is the modern concept of denture aesthetics (2).

II. CONCLUSION

Thus Denture must be incorporated carefully by the dentist for the treatment plan. For the selection of posterior teeth there are no guidelines but depends on supporting tissues of the patients. Dentist is goal is to attain the smile by including various aesthetics elements. Prosthodontist should have the power to restore the smile of the patient. Skills, scientific information regarding the setup of the tooth are important one to achieve natural look in complete denture. For various prosthetic treatment immediate dentures are still indispensable one and very useful for functional, aesthetics, and psychological maintenance of patients oral health care.

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