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Research Article

**ASSESSMENT OF THE CONDITION OF THE DEEP BITE
STATUS IN ORTHODONTIC PATIENTS AND ITS
PREVALENCE**¹Dr. Aqsa Khalid, ²Dr. Qurat-ul-ain Amina, ³Dr. Muhammad Awais
¹Allied Hospital Faisalabad**Abstract***Objective: The purpose of this analysis was to assess the condition of the deep bite of orthodontic patients.**Study design: A Retrospective Study.**Location and duration: In the Orthodontic Department of Nishter Institute of Dentistry Multan for one year duration from April 2017 to April 2018.**Methods: The patients in the orthodontic department consisted of 100 studies. Data were analyzed statistically with SPSS (18.0).**Results: In general, an open bite was found in 7% of patients. 76% of the patients showed a normal cut-off value in the bite, while 76% had variable deep bit values. From 76 patients (76%), male were 28% and female were 72%. These 76 patients distribution was according to various categories of deep bites.**Conclusion: The most of the patients; 92% had mild to moderate deep bites, and only 8% had lower incisors.***Keywords:** Malocclusion, orthodontic treatment, deep bite, over bite.**Corresponding author:****Dr. Aqsa Khalid,**

Allied Hospital, Faisalabad.

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INTRODUCTION:

"1 to 2 mm centered out of the normal range centered occlusion lower teeth perpendicular to the upper surface of the lip surface known as deep bite. Several factors related to the deep bite development are associated. Among them are excessive overjet, molar infraocclusion, canine position, vertical face type, mandibular ramus height and Incisor supraocclusion. Deep bite was noted to be linked with abnormal T.M.J and mandibular function. You may need accurate information regarding the frequency of different occlusal features such as deep bite that requires the perception of certain types of malocclusion planning orthodontic services. Given the importance of deep bite in planning and conducting orthodontic treatment, we cannot underestimate the importance of determining the correct deep bite condition.

METHODS:

This Retrospective Study was held in the Orthodontic Department of Nishter Institute of Dentistry Multan for one year duration from April 2017 to April 2018. Regardless of the gender, a cross-sectional study of 1006 pre-treatment studies of patients with permanent teeth is a study of observation. Study models selected from the following coverage criteria selected from the successive shop model; It is not damaged, acceptable quality work is being taken and the presence of permanent dentition. Care was taken to exclude the case studies of the patients they had; History of orthodontic treatment of serial extraction and history of removal of any permanent tooth. Models selected 100 sets of study score was deeply evaluated to evaluate the bite authors of the following criteria.

Score	Overbite severity
0.0	< 1/3 lower incisor coverage
1.0	1/3 to 2/3 coverage
2.0	2/3 up to fully covered
3.0	fully covered

In the central occlusion, 100 study models were divided into three groups according to the vertical overlap of the upper teeth on the labial surface of the lower teeth.

Normal Over bite	Over bite Score 0.0
Deep bite	Over bite Score 1.0, 2.0, 3.0.

On the labial surface of the lower teeth, one person is said to have an open bite if the upper teeth do not overlap vertically in the center. For the reliability of the intraexaminer, 30 study models of the main sample were randomly selected and re-evaluated 15

days after the initial evaluation. SPSS (18.0) was used for statistical analysis.

RESULTS:

The 11 to 25.5 years was the sample mean chronological age range with 17.20 age range (S.D 3.1). The division by sex (Table 1) was 75 females (74%) and 25 males (26%). The open bite was observed in 7 patients. The females were 6 in number and only 1 male.

TABLE 1: DISTRIBUTION OF MALE AND FEMALE SUBJECTS

		Total
Gender	Male	25
	Female	75
Total		100

The 93 remaining patients had different degrees of overbite (Table 2). Of the 93 patients, female were 74% and male were 26%. In 17% of patients, a normal number of incisors (<1/3 of the lower incisor depth) was observed in 75 patients (76%) with different deep bite degrees. The lower incisor coverage was noted in 50 patients range from 1/3 to 2/3. In 20 patients, the lower incisors had a full coverage area of 2/3 and in 6 patients had lower incisor crowns. The value of Kappa statistics was observed as one.

TABLE 2: SEX DISTRIBUTION OF THE SAMPLE INTO VARYING SEVERITY OF OVERBITE/DEEP BITE

		Incisor overbie				Total
		00	1.00	2.00	3.00	
Gender	Male	3	13	7	1	24
	Female	14	37	13	5	69
Total		17	50	20	6	93

DISCUSSION:

The analysis was performed in the study models of the patients in the store model of the orthodontic department. The subject of this analysis was not taken from the local population and was treated in the orthodontic department. Patients taking orthodontic treatment are present in both genders; Including young people, adults and teenagers. The female patients in 75% numbers were compared with 25% of male patients in this analysis is clearly consistent with the findings of other studies in this place illustrating the orthodontic treatment concern among women in the socioeconomic environment. Although 75% of women were significantly higher than a malocclusion questionnaire previously performed in the orthodontic department, this study was performed in patients who reported to the orthodontic

department. They were taking orthodontic treatment or were about to take. This study results showed that 7 patients (7%) had incisor teeth (<1/3 coverage, lower cutters), 17 patients (17%) had an open bite and overfilling normal value. Of these 17 patients, male were 3 (18%) and female were 14 (82%). 76 (76%) of the patients had varying degrees of deep-cut bite, 28% of which were male and 72% were female. Regarding the degree of deep bite, Table 2 shows that 76% of patients have the largest number of patients; 50 patients (66%) had a slightly deep bite (1/3 to 2/3 of the lower cutter surface). 8% of the patients showed a degree of deep bite (2/3 of the crowns of the anterior teeth), while 26% of patients with a deep deep bite (total coverage crowns) were observed in the lower incisors (lower incisors). If we look at the ratio between women and men in different categories of deep bites from Table 2, it is clear that in the three categories of deep bite, the number of women is more than the number of male patients.

CONCLUSION:

It can be concluded that most of the patients have mild to moderate deep bites (70% of patients). Female / male ratio was higher in all deep bite categories.

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