

# Prevalence of tooth wear in patient with eating disorder

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## ABSTRACT

### Aim

This study aim is to prevalence the tooth wear in patient with eating disorder

### Background

Eating disorders are psychological illnesses defined by abnormal eating habits that may involve either insufficient or excessive food intake to the detriment of an individual's physical and mental health. Bulimia nervosa and anorexia nervosa are the most common specific forms of eating disorders (8). Which cause tooth wear

### Material and method

An epidemiological cross-sectional survey is conducted by trained, calibrated examiners, using the dental wear index. A questionnaire was used to assess the etiological factors of dental wear and the patient with eating disorder

### Reason for study

The reason for study is to prevent the tooth wear in patient with eating disorder like bulimia nervosa and anorexia nervosa

**Keywords:** Anorexia nervosa, Compulsive eating disorder, Tooth wear.

## INTRODUCTION:

The prevalence of tooth wear is increased nowadays among women and age between 20-40. This causes several dental problems such as dental caries, tooth attrition, tooth erosion and also other gastric problems. The three major eating disorders are anorexia nervosa, bulimia nervosa, compulsive eating disorder (1). The young people are more affected by the eating disorder. Majority of the people were affected by anorexia nervosa are increased among the young women because of their beauty conscious. Anorexia nervosa is a serious potentially life threatening eating disorder characterised by self-starvation, inadequate food intake, fear of weight gain (2,3,4).

Bulimia nervosa is a serious eating disorder characterised by a cycle of bingeing and compensatory Behaviour such as self-induced vomiting. Compulsive eating disorder is a serious life threatening disorder in which patient has consuming large amount of food followed by behaviour to prevent weight gain and a feeling of being out of control(5). Pathological tooth wear is not limited to the middle-aged and the elderly alone, but also occurs in the younger age groups. Also there is a perception within the dental profession that the problem of pathological tooth wear is increasing(6,7).

## MATERIAL AND METHOD

In this present study, about 50 patient with eating disorder are taken in to study. Patient were taken in Saveetha dental college. A questionnaire is taken among patient with eating disorder, it includes dental caries, tooth attrition, tooth erosion, gingivitis and type of eating disorder. The wide range of patient with eating disorder like anorexia nervosa, compulsive eating disorder were taken into study. Patients with age group below twenty and till age fifty into study. Most often people has eating disorder are anorexia nervosa and compulsive eating disorder. And also some of the gastric disorder were asked in the questionnaire. Because eating disorder such as compulsive eating disorder has effect on digestion system and also in the dental wear. Questionnaire is taken by the direct view of patient and asking about the eating disorder. And also by viewing for dental caries, tooth attrition, tooth erosion, gingivitis, and asked about the present medical history of gastric disorder. After collecting the datas, the percentage of the datas were taken under the division of three groups on the basis of age group includes below 20, 20-35, 35-50. Under these groups the percentage were taken.

## RESULT

After the collection of data,the percentage of the data were. Taken under the basis of age group below20,20-35,35-50.and in which the gastric disorder, eating disorder were also taken in percentage as in the table 1.

Table no 1: percentage of GERD and eating disorder under the age group.

Range	No of patient	% of GERD	Anorexia nervosa	Compulsive disorder
Below 20	12	58.34	83.34	16.64
20-35	27	66.67	55.56	48.14
35-50	10	80	30	70

From these table1, patient with eating disorder under the age group 35-50 has maximum GERD. And age group between 20-35 has larger GERD than age group below 20. And anorexia nervosa, a serious disorder is maximum in age group below 20. And age group between 35-50 has minimum range of anorexia nervosa than the age group between 20-35. from the table 1, patient with eating disorder has maximum compulsive eating disorder under age group between 35-50. And age group below 20 has minimum range of compulsive eating disorder.

Table no 2: Percentage of caries, attrition, erosion, gingivitis under age group.

Range	No of patient	% of dental caries	% of tooth attrition	% of tooth erosion	% of gingivitis
Below 20	12	83.34	58.34	0	8.33
20-35	27	55.56	62.96	11.11	40.74
35-50	10	50	30	0	0

From the table 2, the percentage of the dental caries, attrition, erosion and gingivitis are given. Percentage of the dental caries are maximum in age group below 20 and minimum in other two group. Whereas the attrition and gingivitis are maximum in group between 20-35. Erosion are maximum in age group between 20-35, whereas the age group between 35-50 and below 20 has 0% of tooth erosion. From the table, it is shown that age group between 35-50 has 0% of gingivitis.

## DISCUSSION

In this present study, easy method of getting data are taken between the age group between the 20- 50 and below 20 were taken into consideration. In the study of the author O.Oginni and A.O. Olusile taken vast range of age group. It is difficult and Time taking process. In the study, age group below 20 has mid-minimal range of GERD, maximum range of anorexia nervosa, minimal range of compulsive eating disorder from the table 1 and from table 2, maximum range of dental caries, mid-minimal range of attrition, 0% of erosion, mid-minimal range of gingivitis.

Age group between 20-35, has mid minimal range of GERD, anorexia nervosa, compulsive eating disorder from table 1. From table 2, mid minimal of dental caries, maximum range of attrition, erosion and gingivitis. These age group people has large range of eating disorder. Half of patient in this study belong to this group. Age group between 35-50, has maximum range of GERD, minimum range of anorexia nervosa, maximal range of compulsive eating disorder from table1. From table 2, minimum range of dental caries and attrition. 0% of erosion and gingivitis.

From these study, it is understood that most of the people between age group 20-35 are affected by the eating disorder and also to the dental wear. Age group below 20 also affected by anorexia nervosa very easily because of their consciousness about weight gaining.

## CONCLUSION

In the present study, easy method of measuring the prevalent of tooth wear in patient with eating disorder were studied. The result of this study has given tooth wear in patient with eating disorder under certain age group. It is known that age group between 20-35 has affected by eating disorder and also a large range of tooth wear. Dental caries and tooth attrition were major causes of eating disorder. and also age group below 20 has affected to anorexia nervosa also dental caries. Considering the aetiology of the tooth wear from these study help in prevention of factor causing the tooth wear and cause oral hygiene practises. This shows that eating disorder is treated sensitivity and understanding.

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