



SCRUTINIZING PARADIGM BETWEEN TOOTH WEAR FACETS AND COMMUNITY'S ORAL HEALTH: A REVIEW

**Dr.Rangoli Srivastava¹, Dr.Pradeep Tangade², Dr.Najmus Sahar³, Dr.Surbhi Priyadarshi⁴,
Dr.Ayushi Pragya⁵, Dr.Shafali Prerna Ram⁶**

¹Post graduate student, Department of Public Health Dentistry, Teerthanker Mahaveer Dental College & Research Centre, Moradabad.

²Professor & Head, Department of Public Health Dentistry, Teerthanker Mahaveer Dental College & Research Centre, Moradabad.

³Senior Lecturer, Department of Public Health Dentistry, Rungta Dental College, India.

⁴Senior Lecturer, Department of Public Health Dentistry, Faculty of Dental Sciences, SGT University, Gurugram, India

⁵Medical officer, Tata Memorial cancer Hospital, India.

⁶Private dental practitioner, India.

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ABSTRACT

Since we already know that people are living longer and retaining increasingly their natural teeth .Over the years there has been a progressive increase in the amount of teeth wear seen in a population. Somehow the extent of teeth wear is related to the group practices of a community and hence to find an association between the former and the latter might lead to a better prevention of teeth wear especially for the future generations as this particular destructive and cumulative process impairs functional level at a severe extent hence it is crucial for dentists to have a look at the various practices that might lead to rise in prevalence of teeth wear.

Keywords – Tooth wear, Abrasion, erosion, Regurgitation, Community

INTRODUCTION

If we talk about health care, it has completely changed in current scenario to enhance good oral health of individuals and also to prevent common oral diseases from spreading. By this scenario we can see a very huge change in the system which hasn't been looked upon and somewhere there is a role of many health policies in this. This also demonstrates different paradigm in society where a good health's objective is not just to treat the present disease but also to prevent any future disease and with the help of many dentists and clinicians many diseases are preventable. If we talk about developed countries, in those countries the oral health has tremendously improved and especially in the last decades. As the life of people is getting prolonged and because of other specific measures many individuals seem to retain their teeth in their older age as well. Therefore much amount of improvement is required and is necessary to

prevent increasing load of oral health diseases. Making this point clear beforehand that when an individual practitioner will see tooth wear, he'll deal with it differently. Both of their interventions will be quite different towards the treatment. Reason being many applications will be involved when it will involve not an individual but the whole group. All healthcare facilities that are provided should be provided equally to all the members of the area. These are some important points that should be kept in mind. All the matters related to finance should be counted on and thus all those people who are at utmost need should be provided all the services. Such protocols are applicable to prevention practices and promoting good health along with all the interventions. For example if we talk about eating a fruit, it is ultimately a very healthy advice and if we advice people to eat up to 5-6 portions of fruits and vegetables in one day. For most of the individuals who are conscious of their health, eating so many fruits and vegetables can become an etiological risk factor for causing tooth wear. Though it is also a probability that all those individuals who are so much health conscious will also definitely visit a dental clinic to get themselves treated. While those individuals who have significantly high amount of teeth wear and when they visit any practitioner for the same issue, they'll somewhere get the advice that in particular they need to reduce the intake of several types of fruits and they need to ensure that their acidic meal consumption is also very low. Also the fruit consumption should have broader aspects included for their purpose that they serve in a human body. Right from being an excellent source of nutrients to providing body with fibers that are good in intake. Further leading to decrease in the amount of disease a person can have. If we compare this with the consumption of various tobacco products where the consumption is neither advantageous for the individuals or the society. In this particular situation, the best advice that can come up is restricting the usage of both these products. This is a bit delayed and a bit complex process and it becomes and it becomes an issue only when there are aesthetic problems that arise because of it and if they don't treat it at initial stage, it'll lead to future problems that are problematic for the patient in future too. In this article we'll address various stages of teeth wear along with potential risk factors and its prevention and management at various stages.

TYPES OF TEETH WEAR

If we talk about only tooth wear irrespective of its type it can be referred to as a collective loss of substance of tooth basically the mineral components. Erosion refers to loss of chemicals or where there is dissolution of minerals of tooth when there is no black or calculus basically due to exposure by acids. Atrium refers to laws that is physical in nature and that occurs when there is contact of one tooth with another tooth. Abrasion also refers to loss that is physical in nature and its etiological factor is any factor apart from a tooth. To measure the amount of teeth wear along with type of teeth wear we have many indices already available.^{1,2}

EPIDEMIOLOGY OF TEETH WEAR

Tooth wear was seen rising in population in India too and as per a survey it was more in urban people (44.83%) in comparison to rural people (29.56%). In many studies males have shown

more amount of teeth wear as compared to females. Erosion was more prevalent and its main etiological reason being the acids produced and this erosion mainly occurs due to regurgitation of acids. Exposure of pulp and exposure of dentin can also be seen in some major cases of adults having proper dentition (4% and 20%). Nearly half of all individuals having tooth wear demonstrated periodontal issues as well. Tooth wear comparatively shows much correlation with other systemic problems. Teeth wear is also positively associated with obesity as well/ teeth wear is basically a complex procedure involving many cumulative actions of the past thus many risk factors of the past are also associated therefore proper longitudinal studies should be done over longer duration so as to have proper understanding of pattern of teeth wear.³

RISK FACTORS ASSOCIATED WITH TEETH WEAR

There are various risk factors associated with teeth wear because causation of teeth wear is due to various factors. These findings come up from various studies that were conducted in vivo and also from some studies which are cross sectional in nature. As per many studies a major risk factor associated with it are those beverages which are having sugar content in them and also some acidic drinks.⁴

We need to show more activeness in diagnosing those patients who demonstrate teeth wear. Without taking proper precautions and following an unhealthy practice, it can lead to various damaging process of caries and periodontal disease. Teeth wear is another such destructive disease which has very prominent effects on the appearance of patient as well as on the self esteem of patient and there are cases in which function is altered along with alteration in many things. The management involves cumulative steps which might also increase load on patient's finances. No matter what funding acquisitions are present, identifying risk factors must be a part of regular oral health check-ups.⁵

MARKERS OF WEAR OF TEETH

They can be physical, medical or social as they predict teeth wear in a population which lead to multifactorial causation of teeth wear. This can lead to problems which are aesthetic as well as functional in nature. To assess the amount of risk and to prevent unnecessary amount of teeth wear patient needs to be identified for their markers. With the help of tool of cariogram we can pictorially represent and assess risk caused by caries and also by calculating previous year experience along with noting diseases, diet of a person and the quantity of plaque and bacteria present, fluoride quantity and the quality of saliva. This particular tool is freely available on the internet and can be used for the purpose of information and imparting education. Similarly we can have wearogram which can help in estimating amount of risk regarding tooth wear.

Physical markers can be intraoral or extra oral, extra oral includes activity of masseter muscle, intraoral includes cheek biting, tongue scalloping, xerostomia, small dental arch, wear facets.⁶

Medical markers are the one related to genetics, pain, psychology, saliva, disorders related to sleep and acidic problems. Genetic cause could be by absence of a gene related to enamel production like amelogenin. Thus it can be proven that this tooth wear is thus associated genetically with genes. Because of facial pain, bruxism might be seen hence pain is a medical marker of this disease. Psychology also showed a correlation of these diseases with wear of teeth. And hence anxiety and mood are also dependent.

Social markers include misusing alcohol, having high intake of caffeine, having a diet erosive in nature and also by smoking frequently.

COMMON ADVICES FOR GENERAL POPULATION

After beginning of discussion on how to prevent teeth wear it is generally not practical to suggest some people to avoid such dietary practices or such advices to avoid some habits that lead to teeth wear. However keeping in mind general health of those individuals it is also not moral to advice them to prevent such dietary habits which are beneficial for their nutritional status. In real many individuals accelerated teeth wear is not seen and other individuals don't seem to follow a proper healthy dietary pattern. Also most people witness teeth wear at an age that is necessary for them to remove those important nutrient giving foods which might be systematically a good source of nutrient for them.^{7,8}

Some generic advices that can be given to the population are to make sure that every individual on his/her own are taking a healthy and nutritious diet and they are eating nearly five portions of fruits and vegetables every day along with reducing frequency of sugar intake and avoiding those drinks which have higher sugar content for example some shakes or smoothies.

Regarding oral hygiene they need to brush their teeth twice in the whole day and especially before bedtime to avoid sticking of sugar on the surface along with giving a major emphasis on interdental cleaning. With the addition of fluoride in their toothpaste and avoidance of nearly every form of tobacco. Reducing alcohol intake as it can be regarded as a potential risk factor for etiology of teeth wear. There should be a regular dental checkup for all population from children to oldest adults. A necessary amount of sleep would be beneficial both for the young as well as older age adults. A proper exercise is also advised be it in any form either walking or bicycling.

PREVENTION OF TEETH WEAR

A very important aspect of the whole protocol is to avoid or prevent further teeth wear in individuals already having teeth wear. This process is a very complex procedure involving many processes and there is a very necessary importance of recording teeth wear in generic population. To take care once it has been established in an individual. To identify what all factors lead to teeth wear. The risk factor can be anything from physical to chemical or mechanical. Some advices in rendering a better oral health care could be by doing a necessary screening once in a while as per advices followed by identification of etiological risk factors and also to support

patient so as to manage everything and decrease the amount of risk factors associated with the teeth wear. Then noticing what all precautions can be taken and further monitor and review as per the amount of risk.

If you are supporting any individual in eliminating their risk factors then it is very necessary to involve the medical practitioners in this case. With such practices inter department engagement in providing over all care can be established, especially in cases with GERD & bulleimia. If there need to be any advice that needs to be given so as to reduce sugar intake, should be given in consent with medical practitioners. This particular practice is so harmful for health of both oral and general origin that modifying this particular habit will lead to be advantageous for the human overall. There should be an encouragement to switch over to those drinks which are to be taken especially in between meals. If at all with a person his/her health actually is leading to teeth wear than in particular that healthy habit's discontinuation isn't a good option. Therefore that healthy activity should be monitored and shouldn't be discontinued but should be done at regular short intervals. And this is how the balancing of various risk factors can be done along with achieving the goal of preventing teeth wear in future.⁹

PROSPECTIVE EVALUATION AND ACTIVITY

Further new research is necessary to provide backbone to various steps especially by studies done over longer duration with relation to other prevention levels applied. A much thorough understanding is necessary to study teeth wear and its early diagnosis and prevention and further treating teeth wear. This will be beneficial both for the youngsters and adults who might face the problem.

CONCLUSION

As people are advancing towards an age in which life is prolonging and they are retaining their teeth for a longer duration. Early diagnosis and possible prevention is the key to a healthy oral cavity. The risk factors should be addressed properly and they should be eliminated. Regular advices should be given for monitoring. Teeth wear can be a very serious issue as it has got major deleterious effects on a person's health. Teeth wear can be regarded as a serious threat not only to a person as an individual but to the whole environment as its effects are such that they hamper the functional as well as systemic activity of an individual's daily routine. Keeping in mind the practices that can lead to teeth wear, proper regulatory advices should be given which will prevent causation of a serious stage of teeth wear. Various health education methods and various interventions can be beneficial for preventing serious consequences. Avoidance of over consumption of various sweetened beverages should be done as they promote teeth wear; not only for oral health but for general health too this practice is harmful.

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