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IMPACT OF COVID 19 VIRUS IN DIFFERENT LEVELS OF ORTHODONTIC PRACTICE AND TIPS TO OVERCOME

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ABSTRACT

Covid 19 is a viral disease caused by the novel coronavirus, where it's been first identified in Wuhan, China. The coronavirus is a novel virus allied to the family of SARS (severe acute respiratory syndrome) virus. The effect of novel coronavirus on the dental practice in terms of safety and economy turns out to be very badly affected. In regard to orthodontic practice, the problems can be broadly discussed under 3 different categories. The categories include new cases, review cases, and retention phase cases. We need to live with the pandemic but by taking all precautionary and safety measures to avoid getting infected and meanwhile continue leading a normal life.

Keywords: Covid 19, Corona Virus, Orthodontic Practice

INTRODUCTION

Covid 19 is a viral disease caused by the novel coronavirus, where it's been first identified in Wuhan, China. The coronavirus is a novel virus allied to the family of SARS (severe acute respiratory syndrome) virus. The main transmission of the virus is through the droplets produced through coughing and sneezing by an infected person. As the virus can survive quite a few hours on the surface, the virus can also be transmitted through surface contact.

The symptoms and mortality vary from person to person. In more often cases, the symptoms are similar with influenza or common cold. The most common symptoms include fever, dry cough, tiredness, body aches, sore throat, difficulty in breathing, headache, loss of taste or smell, rash on the skin, and so on. In spite of many precautionary measures, it is spreading rapidly, which is causing the downtrend of individuals across the country and there in the country economy to [1].

The practice in dentistry mainly includes check-up through the oral cavity, thus the dental practice increases the risk for cross infection. As a result, many dental associations across the world including India, have recommended to close down dental clinics during this period or significantly

scale down the level of dental care provided to strictly emergency dental care, while all elective dental procedures are suspended. Among dentistry, orthodontics is a specialty which deals with the correction of malocclusion, where the average treatment ranges between 18-24 months.

As a result of multiple lockdowns in countries and regional areas, most of the dental units are closed, which directly and indirectly affect the practice of orthodontists. During this period, most of the orthodontic treatment offered was only emergency treatment. In addition, lockdown has also had significant economic and social impacts on the lives of orthodontists, as well as their practices [2]. This review article includes mainly the hiccups of the orthodontist during the reopening of orthodontic practice.

COVID 19 AND ORTHODONTIC PRACTICE

The effect of novel coronavirus on the dental practice in terms of safety and economy turns out to be very badly affected. In regard to orthodontic practice, the problems can be broadly discussed under 3 different categories. The categories include new cases, review cases, and retention phase cases.

NEW CASES/ OUTPATIENT DEPARTMENT IN ORTHODONTICS

Among dental practice, orthodontic practice deals with an elective and esthetic procedure. As such, these pandemic circumstances and frequent lockdowns had a significant impact on the economy of all classes of individuals. The next biggest problem is dental and orthodontic practice in particular, including treatment in the oral cavity, where it has high chances of transmission to the patient as well as to doctors. These reasons made a drastic decrease in patients opting for treatment. This led to the decreased practice for the orthodontist and to the general dental practice.

Tips to overcome: The decrease in new patients can be addressed through reassuring the patients about the precautionary measures taken in the working areas. It becomes essential for all orthodontists to follow all safety measures very thoroughly. The supporting staff need to educate the patients about how to avoid transmission, report all health issues in detail, to take a detailed travel history, reinforcing about personal protection measures like wearing a mask, maintaining social distancing, not to touch the surfaces unnecessarily and about maintaining good hand hygiene. It can also

be achieved through placing placards related to educating the patient and their accompanies about the pandemic condition and compulsory precautionary measures.

REVIEW/ FOLLOW CASES

As documented, the orthodontic treatment lasts for 18-24 months duration, which requires recall of patients in every month interval. Due to the Covid pandemic, it becomes very difficult for the patient as well as for the orthodontist that have regular scheduled recall of the patient mainly by frequent lockdowns. This will have a serious drawback in orthodontic practice, which includes delay in the treatment, breakages in appliance, undesired tooth movement, discontinuation of treatment, these all finally have an impact on the economy status of the orthodontics.

Tips to overcome: Few measures can be included to maintain the regular visit of the patient by incorporating all safety measures. The measures include proper use of Personal Protecting Equipment's, use of masks, minimizing the use of aerator generating procedures, maintaining social distancing by recalling the patient in a particular time slots, avoiding attendants of the patient inside the clinical area [3]. The biomechanical consideration to maintain is to use self-ligating bracket system which will make the

appointment schedule for 6 weeks once use of NiTi coil spring for retraction instead of E chain which will have continuous force for retraction, reducing the complicated and fragile appliances during this time which may reduce the emergence appointments, educating and reinforcing the patients about maintaining the oral hygiene measures so that it avoids frequent breakages and regularly in touch with the patient telephonically can reduce the problems.

RETENTION PHASE

The final and most important stage in orthodontic treatment is the retention phase. The aim of this phase is to maintain the corrected tooth position during the treatment. As the corrected malocclusion has the tendency to relapse due to tension in the inter-dental and dento-gingival fibers around the teeth [4]. The time duration of the retention phase varies when we search literature reviews. From the review, number of factors can be listed, which includes the variability of occlusal, skeletal, and soft tissue relationships, as well as the paucity of well-controlled scientific studies [5]. During this covid pandemic, it has become very difficult for the orthodontist to manage the retention phase mainly due to patients' unavailability.

Tips to overcome: This can be overcome to a certain extent by reinforcing the patient to wear the retentive appliance, explaining the consequences of nonuse of retentive appliances, and timely monitoring the patients use of an appliance through telephoning conversations. In addition, fixed retainers can also be an alternative to overcome non-compliance patients and it reduces the frequent visit especially in these pandemic situations.

CONCLUSION

This overview is intended to give insight knowledge on Covid 19 pandemic impact on different levels of orthodontic practice and few tips to overcome the problems. It's been almost 2 years; we are facing the same situation and became impractical to stop or postpone the orthodontic practice. Therefore, we need to live with the pandemic but by taking all precautionary and safety measures to avoid getting infected and meanwhile continue leading a normal life.

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