

Editorial Article

Clinical Implications of COVID 19 on Implant Dentistry

Dr. Swati Jain

***Corresponding Author: Dr. Swati Jain**, MDS Prosthodontics and Implantology,
Rajiv Gandhi University of Health Science, India.

Received Date: November 22, 2020

Publication Date: December 01, 2020

Dental professionals are at high risk for transmission of COVID-19 due to the high concentration of viral load present in oropharyngeal secretion and its primary source of spread via droplet infection. Various dental interventions involve aerosol generation (via the use of high-speed handpiece or ultrasonic devices) which could also contribute to increased risk of cross-infection especially in asymptomatic patients who are carriers for the virus. Therefore the universal protective protocols followed routinely in dental practice may not suffice to prevent nosocomial spread.

Recommended Measures

First of all, it will be essential to get the COVID19 test done along with routine tests before implant surgery, depending upon active infection or recovered infection, following which a decision is to be made.

A preprocedural mouth rinse with 0.2% povidone-iodine is recommended for reducing the viral load in saliva since SARS-CoV and MERS-CoV appears to be highly susceptible to povidone mouth rinse.

Another alternative is rinsing with 0.5-1% hydrogen peroxide mouth rinse preoperatively as it demonstrates non-specific virucidal activity.

Imaging procedures should use extraoral techniques including panoramic radiography or computed tomography to avoid contact with oral secretions and minimize gag/cough reflex. However, if intraoral sensors are to be used, they should have double barriers to avoid cross-contamination.

Ather et al suggest the use of disposable (single use) instruments where possible. It is emphasized to minimize the use of aerosol-generating devices like high-speed handpieces, ultrasonic instruments and 3- way syringes along with the use of saliva ejectors to further reduce the production of droplets and aerosols.

Modulation of host immune response postalveolar bone surgery in patients with and after COVID infection

The post-operative sequel of implant surgery involves the metabolic response of soft tissue and alveolar bone surrounding the implant site. Viruses pose a significantly higher health risk and put an extra strain on the host immune system, which in turn hurts the bone marrow. The metabolic component of the host immune response consists of cells of innate immunity, which are known to change their activity depending on conditions within the human body, including an active viral infection. Viruses can similarly alter the metabolic state of the cells, because of their synthetic genome, especially those with significantly small and reduced ones

Financial impact

Factors affecting implantology practice globally include: Functioning of production units of Dental implant fixtures, all its accessories; availability of Protection gear; Patient's apprehension to opt for the high-cost surgical procedure partially because of the paused economy and partially because of the risk of cross-infection involved at dental clinics

It is of extreme importance presently to consider every patient as a potential carrier of the virus and thus treat accordingly. It has become almost mandatory in the current scenario to use WHO recommended guidelines, recommended PPE kits

Install advanced HEPA filtration systems to continually clean and filter the air, and clear plastic room dividers to isolate each treatment area. When necessary, utilize ‘vapor vac’ units to contain and extract any airborne particles produced during certain dental treatments. Furthermore, the clinic should undergo a total ozone sanitization process every night to eliminate contamination from all surfaces.

Finally keeping dental implants clean is vital to maintain their lifespan. Regular cleaning and maintenance of your implant is the only way to prevent peri-implant disease. During COVID-19, patients won't be able to regularly visit the dentist and hygienist, so it's essential to look after your implants well at home. Following oral hygiene practices should be recommended to all implant patients:

- Clean your teeth with a soft-bristle toothbrush, at least twice a day, including under and around the crown of the implant
- Use an interdental brush coated with nylon, clean around the implant daily, or use an unwaxed floss tape or “Superfloss”

Volume 1 Issue 4 November 2020

©All rights reserved by Dr. Swati Jain.