Supportive care for oral cancer patients during the COVID-19 pandemic role of an oral and maxillofacial pathologist



COVID-19 pandemic is a global health threat today, which began in Wuhan, China, in December 2019, documented as the fifth pandemic since the 1918 flu pandemic.^[1] The International Committee on Taxonomy of Viruses officially named coronavirus as a severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2).^[1]

We are in the grip of a second wave due to the failure in the proper implementation of factors such as social distancing, use of mask, sanitizer and strict quarantine measures for infected patients. Long *et al.* sequenced the genomes of 5085 SARS-CoV-2 strains causing two coronavirus disease 2019 (COVID-19) waves in Metropolitan Houston. They reported that the second wave of COVID-19 is characterized by SARS-CoV-2-mutated strains with Gly614 amino acid replacement in spike protein.^[2]

The E484K mutation has been identified in South African (B.1.351) Brazilian (B.1.1.28) and UK (B.1.1.7) variants. This mutation has been observed in the spike proteins and is called as escape mutation as it helps the virus slip past the body s Immune defenses.^[3]

Iftimie *et al*, in a comparative study on hospitalized patients infected with Covid -19 in Rues, Spain, reported that patients were younger and duration of hospitalization and fatality rates were lower in the second wave compared to first wave. Also, the patients from the second wave frequently presented with renal and gastrointestinal symptoms.^[4]

Due to the high prevalence of oral cancer worldwide, we as oral and maxillofacial pathologists have a pivotal role to play in providing supportive care to the patients during this pandemic to improve quality of life and survival. The Multinational Association of Supportive Care in Cancer defines supportive care as the prevention and management of adverse effects of cancer and its treatment. This includes

management of physical and psychological symptoms and side effects across the continuum of the cancer experience from diagnosis through treatment to posttreatment care. Enhancing rehabilitation, secondary cancer prevention, survivorship and end-of-life care are integral to supportive care. [5]

A multidisciplinary team (MDT) approach is necessary to ensure holistic care for oral cancer patients. [6] This approach improves communication between different disciplines and decision-making to obtain best treatment plan. To achieve this, we should embrace Virtual Tumor Board with oral diagnosticians, oral and maxillofacial surgeons, medical oncologists, radiation oncologists, psychologists, cancer nutritionists and physical fitness experts as members.

How do we provide the supportive care? We can assist the patients through phone and video calls to reduce the interpersonal contact and identify high-risk cases. Teledentistry is a novel approach for educating, interviewing and examining patients through applications such as zoom, messengers and teams.^[7]

Biopsy should be performed only if the lesion is suspicious for malignancy as a high viral load exists in the oropharyngeal region of infected patients. Prior to the appointment for biopsy, a telephone call to the patient to inquire any flu-like symptoms developed is important. Patients already diagnosed with oral potentially malignant disorders should be regularly monitored to observe any changes in the appearance of the lesion. Patients should also be counseled for cessation of oral habits.

The AO CMF International task force recommends nonsurgical methods such as radiation for the management of patients with oral cancer, if similar results as a surgical approach can be achieved. Radiotherapy may also provide symptomatic relief and delay the need for the surgery for some time. Surgery is warranted if poor outcome is expected, cancers obstructing the airway, high grade salivary gland malignancies, sino-nasal malignancies and T3/T4 Melanomas.^[8]

There are reports of many patients avoiding hospital visits due to fear of acquiring the infection, thus delaying the treatment protocol. Thus, the patients have to be educated about the adjuvant therapies and the negative impact on prognosis and disease-free survival in case of delaying the treatment.

Patients already under chemotherapy may develop mucositis and difficulty in eating, thus compromising the treatment. Oral gels, mouthwashes and pain killers can be advised to provide relief to the patients. They are urged to follow a healthy, balanced diet during and after treatment with added proteins, vegetables, fruits and low-fat dairy products. Regular exercise is also an important part of cancer treatment plan to improve physical and mental health during and after treatment. Psychological distress among cancer patients is very common leading to reduced compliance with treatment. Nutrition, exercise and distress can be addressed through virtual calls by cancer nutritionists, fitness experts and psychologists who are a part of the MDT.

The world is ramping up measures to become fully vaccinated and prevent COVID-19. The genome of CoVs is a single-stranded positive-sense RNA. It contains four major structural proteins. Nucleocapsid protein (N) forms capsid outside the genome, and the genome is packed by an envelope which is associated with three structural proteins: membrane protein (M), spike protein (S) and envelope protein (E). S protein is the main protein used as a target in COVID-19 vaccines. [9]

India launched its vaccination drive in January 2021, with two vaccines – Covishield and Covaxin. Covishield is manufactured by Serum Institute of India, developed by Oxford University and AstraZeneca, while Covaxin is manufactured by Bharat Biotech in collaboration with the Indian Council of Medical Research.

But the cancer patients are in a dilemma whether to take the vaccine or not. Why this vaccine hesitancy? The chief reasons are the fear of side effects, lack of information on the effectiveness of the vaccine, fear of contracting the infection in hospital, lack of long-term studies demonstrating safety, short duration of clinical trials and lack of trust that the vaccines are safe for cancer patients.^[10] The patients should be encouraged to take the vaccine, as protection by the vaccine outweighs the side effects. Positive impressions of safety and efficacy of the vaccine improve the patient's attitude.

Patients benefit from the experience of a large number of professionals in the MDT, who determine the treatment

plan crucial for the outcome in oral cancer patients. We, Oral and Maxillofacial pathologists should be part of MDT and render the best supportive care and improve quality of life of oral cancer patients.

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