IntroductIon
Nasopharyngeal carcinoma (NPC) has a low incidence in India except in the north-eastern region of the country. Radiotherapy (RT) is the primary treatment modality for NPC because of the anatomical location and radiosensitivity of cancer. Early-stage disease is often successfully treated with RT alone with a 5-year overall survival of 87%-96% in Stages I and II.\(^1\) Cancer patients, facing a state of immune-compromised are regarded as a highly vulnerable group in the current COVID-19 pandemic. It is recommended that cancer patients receiving antitumor treatments should have vigorous screening for COVID-19 infection and should avoid treatments causing immunosuppression or have their dosages modified in case of COVID-19 co-infection.\(^2\)

Case Report
A 47-year-old male visited an otorhinolaryngologist with a chief complaint of bilateral hearing loss since July 2019, which was gradual in onset. In November 2019, the treating otorhinolaryngologist after managing conservatively and reporting no relief in symptoms referred the case to the medical oncology department of a private hospital in New Delhi. On examination by a medical oncologist, the patient reported the loss of hearing and pain. He complained of pain over the preauricular region, which was described as dull, aching, and bilateral. Pain which used to be on and off and started as mild but gradually increased on rare occasions which got relieved by taking tablet tramadol 50 mg. At the clinic, the patient got investigated, and one small growth was found at the posterior nasopharyngeal wall which was confirmed to be NPC on biopsy. PET scan report shows that the disease is confined to its anatomical site of origin and is not metastasized yet. He was given six cycles of chemotherapy (CT) over a span of 9 weeks. He responded to the treatment and planned for further therapies. Then, the patient was given concurrent chemoradiation. The patient got the last radiotherapy on April 10 and chemotherapy on April 8.

Abstract
A 47-year-old patient was referred from otorhinolaryngologist with a chief complaint of hearing loss to the medical oncology department where he was diagnosed to have nasopharyngeal carcinoma (NPC). The patient was given six cycles of chemotherapy and 35# of radiotherapy. After a week of therapies, he developed a low-grade fever. He was suspected of COVID-19, but the reverse transcription polymerase chain reaction test came out to be negative. He developed urinary retention, and he was planned for suprapubic catheterization. Before the procedure, he was retested for COVID-19 which came out to be positive. This case report aims to describe the condition of a patient of NPC with COVID-19 infection and to discuss the outcome of disease in this circumstance.

Keywords: Chemotherapy, COVID-19, nasopharyngeal carcinoma, radiotherapy

Concerns of a Post-Chemotherapy/Radiotherapy Patient of Nasopharyngeal Carcinoma Presenting with Sustained COVID-19 Infection

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One week later, he developed a low-grade fever which was considered as a complication of chemotherapy. However, when fever continued, he was suspected of corona infection, so he was sent to the COVID-19 testing center where he came negative. Then, the patient developed urinary retention the next day and found to have some growth in urinary bladder and bladder was overflowing according to CT scan. Urinary catheterization tried but failed, so the patient was planned for suprapubic catheterization. Before the procedure, he was again tested for COVID-19, and the report came out to be positive. Plan for suprapubic catheterization was changed and urinary catheterization tried which was successful this time with smaller size catheter (10 F). Then, the patient was sent to RML Hospital, New Delhi, on April 28, and from there, he was referred to the COVID care facility at NCI-AIIMS Jhajjar.

The patient is asymptomatic given COVID-19 infection and being managed conservatively. His vitals are stable; oxygen saturation is well maintained above 98% on room air. He has been tested thrice for COVID-19. He is still getting reverse transcription polymerase chain reaction (RT-PCR) positive for a month. As the patient got COVID-19 infection just after his therapies for NPC, immunosuppression can be the reason. This shows that cancer patients with ongoing treatments have a higher risk.

**Psychosocial concerns**

**Communication barrier**

He is not able to communicate properly with health-care workers and his family members on the phone as he has hearing difficulty. Due to a lack of communication, he feels lonely and unattended. His father is the main caregiver, and his family has been quarantined so he is unable to get a few items which he needs from home. As the father is unable to meet his son, he is also feeling guilty for not being able to fulfill his needs.

**Lack of trust in the report**

His first report was negative then subsequent 3 RT-PCR test reports came positive. He is regularly asking about his report and doubting the results. He is worried and in doubt that why others are getting negative after 2 tests, but he is not. He does not trust the report. His father is also repeatedly calling to ask why his report is coming positive.

**Anxiety and fear**

He has this fear that his condition will deteriorate as he is getting repeated positive reports. He is afraid that his cancer treatment plans will get delayed and will affect his outcome.

**Cancer treatment and COVID-19**

Due to the overwhelming number of people seeking medical care and the burden that COVID-19 is placing on health-care providers, it has become more difficult to access regular cancer treatments during this time. Further treatment of cancer and follow-up is getting interrupted due to COVID-19 infection. Delay in the treatment is making the patient more anxious and irritable. His father believes that his cancer will get cured if he gets further treatment. But due to COVID-19, his treatment is getting affected.

**Role of caregiver**

The role of a caregiver during this time is to provide support and stability. Recommend patient or family members to avoid watching the news if it causes them anxiety or concern. Reassure patient that you will always be available by phone or video call. Continue to remain in contact with your patient. As a caregiver, he should be the pillar of security and comfort. Preparing a safe environment and providing the right resources will ensure the patient.

**Conclusion**

The cancer therapies cannot be stopped, the change in dosage and duration should be considered. In COVID-19-positive patients, radiotherapy should be deferred until the patient become negative and asymptomatic. Immunity boosting diets and habits to be incorporated and encouraged. Patients and caregivers should be prognosticated about the condition and how it is going to affect the course of the original disease. These patients should be counseled regularly so that they do not lose hope.

**Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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**Conflicts of interest**

There are no conflicts of interest.

**References**

1. Kunheri B, Agarwal G, Sunil PS, Nair AR, Pushpaja KU. Nasopharyngeal carcinoma: Experience and treatment outcome with radical conformal radiotherapy from a tertiary care center in India. Indian J Cancer 2017;54:502-7.

2. Zhang L, Zhu F, Xie L, Wang C, Wang J, Chen R, et al. Clinical characteristics of COVID-19-infected cancer patients: A retrospective case study in three hospitals within Wuhan, China. Ann Oncol 2020. pii: S0923-7534 (20) 36383-3.

3. Adhikari SD, Gupta N, Sharma A, Deo SV, Bhatnagar S. Caring of cancer patients during COVID-19: A real-life challenge. Indian J Cancer 2020;57:218-20.