A Child with Acute Lymphoblastic Leukemia in Institutional Isolation during the COVID Pandemic: A Multifaceted Responsibility

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Abstract

The occurrence of the COVID-19 pandemic has caused big challenges in medical communities due to its unpredictable and uncertain nature. It leads to a great deal of physical and psychological concerns. It is more prone to patients with comorbidities such as hypertension and diabetes mellitus and also to immune-compromised patients such as cancer patients. Children are no exception. Acute lymphoblastic leukemia (ALL) is the most common malignancy in the pediatric age group. In this case, we discuss the concerns and reflect the issues of a 10-year-old boy of ALL who was tested COVID positive during the evaluation and treatment of his disease and was admitted in a COVID isolation center along with his mother who was COVID negative.

Keywords: Acute lymphoblastic leukemia, children, COVID-19, psychological concerns

INTRODUCTION

The whole world is in the grip of COVID infection which poses a big challenge for the healthcare workers and the patients. Children are no exceptions. People diagnosed with cancers are more prone to psychological and spiritual concerns.[1] Acute lymphoblastic leukemia (ALL) is the most common malignancy in the pediatric age.[2] The child suffers right from the time of the diagnosis which can be seen in his educational and quality of learning. As a result of the infection and its treatment, cognitive and emotional concerns also aggravate.[3,4]

CASE REPORT

A 10-year-old boy, fifth-standard student, resident of Uttar Pradesh, complained of swelling and mild pain in the neck, which aggravated on swallowing for the past 3 months, and cough and mild difficulty in breathing for 1 month.

He got evaluated in a private hospital. On examination, he had enlarged tonsils, lymphadenopathy, and hepatomegaly. On the basis of peripheral smear, it was diagnosed as a case of ALL on March 13, 2020. His symptoms started aggravating, for which they referred to a government hospital in Delhi.

They reached Delhi on March 18 and got stuck in lockdown, which was imposed by the government to limit the transmission of COVID-19. Over the period of time, symptoms aggravated and facial swelling increased. They got admitted to a government hospital. X-ray was suggestive of mediastinal compression with periorbital puffiness suggestive of superior vena cava syndrome, for which he was shifted to the intensive care unit and managed symptomatically. His first testing for COVID was done which reported negative. Bone marrow was suggestive of ALL with blast 83%. He was started on

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The concerns of the child were as follows:

- **Physical concerns**: The child complained of swelling in the face and neck, mild pain during swallowing, and shortness of breath, which he could not understand. He wanted to know what is going on. “What is blood cancer?,” “what is corona?” were a few questions. His daily habits and activities were altered, and he was concerned whether the symptoms will keep on increasing. He wanted to be all right.

- **Social concerns**: “When will I go home,” “I want to go out and play,” “I want to go to school and meet friends.” As the child was living in a single isolated room, he was very bored and wanted to go and play as he would do before getting sick. He did not like to stay in the quarantine facility anymore.

- **Psychological concerns**: “What is happening to my face,” the boy was in fear that cancer is destroying his face and eventually destroying the entire body. “Will I be getting aggressive therapy as I got previously” a scary thought, this increased the stress and eventually led to anger. He would easily get irritated and be angry about small things.

- **Spiritual concerns**: “Why did I get cancer and the disease,” “is God punishing me.” The boy is a Muslim by religion and is in a phase of learning religious prayer. He fears and asks whether God has given him punishment for not being good.

The mother was taking care of the child; she was negative for COVID. It was very tough for her to digest that her child was diagnosed with both cancer and COVID. She was devastated and had many concerns.

- **Her psychological concerns**: As the mother is staying in the same room with the child, she is worried that she may acquire the infection. She is continuously worried about her child. She has no knowledge about the disease but stressed as she hears news about the mortality of patients due to the infection. “What will happen to my child?,” “Will he be fine,” “Will the treatment work” were a few questions which she kept on asking most of the doctors on the round.

She was angry that the cancer treatment was stopped in between and fears that will the treatment ever be started again or her son has to live with the disease. This made her stressed, and there is a feeling of helplessness and hopelessness within her regarding a child’s future.

- **Social and spiritual concerns**: Amid lockdown, she worries about her family members and regrets she is not able to take care of them. She is angry at God for this. She also fears being discriminated by society if they come to know about her son’s positive report.

They stayed in the isolation center for 14 days. Multiple visits to healthcare professionals were scheduled addressing each issue with an aim to provide comprehensive holistic care. They were discharged with two reports tested negative, advised home quarantine for 14 days, and are being followed by the doctors telephonically [Figure 1].

**Discussion**

As healthcare workers, we need to professionally communicate with children and their families. COVID-19 has created anxiety, turbulence, and fears in the young minds which create psychological concerns in both the child and parents. These issues should be dealt with empathy and compassion. The cancer treatment during COVID infection which is getting delayed should be based on the priority and be given complete holistic care. Delay in initiation therapy could affect prognosis in a negative way, particularly in young patients of ALL with favorable prognosis; chances of progression to high risk may be observed. Hence, a structured protocol must be planned to provide psychological intervention to their patients according to their concerns.

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**Conflicts of interest**

There are no conflicts of interest.

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