

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

Puneet Rathore, Sanjeev Kumar, Shweta, Neha Singh, V Krishnapriya, Alice Thankachan, Nengneivah Haokip, Shweta Bhopale¹, Brajesh Kumar Ratre, Sushma Bhatnagar

Department of Onco-Anaesthesia and Palliative Medicine, Dr. BRAIRCH, All India Institute of Medical Sciences, ¹Department of Onco-Anaesthesia and Palliative Medicine, National Cancer Institute, Jhajjar, All India Institute of Medical Sciences, New Delhi, India

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

Address for correspondence: Dr. Brajesh Kumar Ratre, Department of Onco-Anaesthesia and Palliative Medicine, Dr. BRAIRCH, All India Institute of Medical Sciences, New Delhi - 110 029, India.
E-mail: brajesh.ratre@gmail.com

Submitted: 22-May-20 **Accepted:** 26-May-20
Published: 30-Jun-20

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

How to cite this article: Rathore P, Kumar S, Shweta, Singh N, Krishnapriya V, Thankachan A, *et al.* A Child with Acute Lymphoblastic Leukemia in Institutional Isolation during the COVID Pandemic: A Multifaceted Responsibility. *Indian J Palliat Care* 2020;26:S170-2.

Access this article online

Quick Response Code:



Website:
www.jpalliativecare.com

DOI:
10.4103/IJPC.IJPC_167_20



Figure 1: Left: child with severe facial and neck swelling, right: child postquarantine

baseline chemotherapy (T-ALL protocol). Till the 8th day of chemotherapy, the child had a persistent cough, so a repeat sample was sent for COVID-19 which came positive. His chemotherapy was withheld and symptomatic management advised. He along with his mother were shifted to a tertiary center for the management of COVID infection.

Postscreening, he was observed in the ward for a day and later shifted to the isolation center. They had been accommodated in a single room with attached lavatory. The doctors on rounds kept a keen observation and monitored his condition daily. Evidence-based medication along with supportive care started. Dexamethasone was continued throughout his stay. All changes happened in a short period of time, so they were stressed and had many concerns.

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.^[5] 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.^[6] 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.^[7] Hence, a structured protocol must be planned to provide psychological intervention to their patients according to their concerns.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Gregurek R, Bras M, Dordević V, Ratković AS, Brajković L. Psychological problems of patients with cancer. *Psychiatr Danub* 2010;22:227-30.

2. Homans AC, Cohen JL, Barker BE, Mazur EM. Aplastic presentation of acute lymphoblastic leukemia: Evidence for cellular inhibition of normal hematopoietic progenitors. *Am J Pediatr Hematol Oncol* 1989;11:456-62.
3. Sliadaty M. Psychological Problem in Children with Cancer 6th International Congress on Child and Adolescent Psychiatry. Tabriz, Iran: Tabriz University of Medical Sciences; 2013.
4. Reisi-Dehkordi N, Baratian H, Zargham-Boroujeni A. Challenges of children with cancer and their mothers: A qualitative research. *Iran J Nurs Midwifery Res* 2014;19:334-9.
5. Saxena R, Saxena S. Preparing children for pandemics. *Medical Virology: From Pathogenesis to Disease Control* 2020:187-98.
6. 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.
7. Gavillet M, Carr Klappert J, Spertini O, Blum S. Acute leukemia in the time of COVID-19. *Leuk Res* 2020;92:106353.