



Impact of COVID-19 pandemic on treatment duration in curable cancers: Comparison of patients with DLBCL treated before and during: A retrospective record-based study



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Abstract

- **Treatment delays** can compromise outcomes in aggressive hematological malignancies primarily treated with chemotherapy.
- Due to the burden of covid-19 pandemic on the healthcare systems, there is a potential risk of delayed therapy of various diseases including cancers.
- In this study we **aimed** to analyze the impact of the covid -19 pandemic on diagnosis and treatment procedures among patients with Diffuse Large B-Cell Lymphoma (DLBCL).
- And the **outcome** assessed had **no significant delay** in treatment duration among Diffuse Large B-Cell Lymphoma (DLBCL) patients during the covid-19 pandemic. Treatment completion rates were similar.
- Diffuse Large B-Cell Lymphoma (DLBCL) is a highly curable subset of lymphoma with chemotherapy. Ensuring treatment for curable cancer is required for better survival outcomes.
- It is likely that covid-19 pandemic induced restrictions would delay the start and completion of chemotherapy in DLBCL patients.

Background

Objective

- To compare the **time from diagnosis to treatment** in newly diagnosed patients with DLBCL before and during the Covid-19 pandemic.
- To compare the **time for completion** of planned chemotherapy in newly diagnosed patients with DLBCL before and during the Covid-19 pandemic.

Study design: Retrospective record based study.

Study setting: Multispecialty tertiary hospital in Southern India.

Materials & Methods

Medical records of 72 treatment naïve DLBCL patients registered between January 2019 till December 2019 (Group 1; pre pandemic) and January 2020 till December 2020 (Group 2: during pandemic) were accessed

The following data were collected:

1. Baseline characteristics,
2. Time from diagnosis to treatment,
3. Time for completion of planned chemotherapy.

Table:01 Baseline characteristics

Baseline characteristics	Group 1-(2019) (N=52)	Group 2-(2020) (N=20)
Age in years		
Median age (Q1,Q3)	49 (37, 63)	56 (34, 63)
Gender, N (%)		
Male	27 (52)	9(45)
Female	25(48)	11 (55)
Stage, N (%)		
I,II	27 (57)	8 (42)
III,IV	20 (43)	11 (58)
ECOG		
0,1	41 (79)	9 (45)
2,3	11 (21)	11 (55)
Response assessment, N(%)		
Responders	39 (75)	11 (55)
Non responders	4 (8)	1 (5)
Not done	9 (17)	8 (40)
Status of life, N(%)		
Alive	41 (79)	17 (85)
Dead	11 (21)	3 (15)

Table:02 Time from diagnosis to treatment and time for completion of planned chemotherapy

Variable	Groups	N (72)	Median days (Q1,Q3)	P-value
Time from diagnosis to start of chemotherapy	2019	52	29 (16,50)	0.21
	2020	20	19 (11,6)	
Time for completion of six cycles of chemotherapy	2019	52	110 (72-127)	0.88
	2020	20	103 (32-146)	

Summary

- The time from diagnosis to start of therapy was not prolonged during the Covid period.
- The median time to completion of chemotherapy was also not prolonged during the Covid period.

Discussion

- Despite the impact of covid-19 pandemic on multiple hospital services, JIPMER took efforts to ensure that treatment for curable cancers wouldn't be affected.
- Though more complications are expected if patients develop Covid while on chemotherapy, the treatment of curable cancers should not be compromised as the benefits outweigh the risks

References

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