

INTRODUCTION

There are no recommendations pertaining to AYA population. It is a prime area for collaborative research between pediatric and medical oncologists, as well as between providers in the community and in the consortia. Before any collaborative interventional research, we need the demographic data, patterns of care and outcome of AYA lymphomas in our country. Hence, HCC registry database can be utilized to do this analysis of all AYA lymphoma in India which will set the benchmark for future interventional research in this area.

AIM AND OBJECTIVE

AIM- To evaluate the patterns of care and outcome in AYA(15-30 years) lymphoma in India.

ENPOINTS

Primary Outcome:

1. To evaluate Event free survival(EFS) (Time from first cycle of chemotherapy to progression, relapse, second malignancy or death) Secondary Outcome:

2. To Evaluate Overall survival (OS)

2. 2. To evaluate response rates

METHOD

- An observational, multicenter, prospective Hematologic cancer consortium(HCC) registry study.
- 2. Data was collected using an online data capture program, which is already in place as part of the HCC registry and is in use for the past 5 years. Each center mantains source documents (physical or electronic) and maintain responsibility for the accuracy of data.
- 3. Eight centers across India participated in this study.
- 4. All patients diagnosed with lymphoma between January 01, 2020, and June 31, 2022, were included in the study

Patterns of care and outcome in AYA lymphomas-A multicenter registry study from India

Lingaraj Nayak, MBBS, MD, DM1,2,3*, Sushil Selvarajan, MD, DM4*, Hasmukh Jain, MD, DM6*, Prasanth Ganesan, M.D, DM6*, Prasanth Ganesan, M.D, D.M7*, Jayachandran Perumal Kalaiyarasi, MD, MBBS, DM, MRCP8*, Nikita Mehra, MD, DM6*, Anu Korula, MD, DM4*, Uday Kulkarni, MD, DM9, Aby Abraham, MD, DM10,11*, Alok Parekh12*, Ritam Joarder, MD13*, Santhosh Kumar Devadas14*, Jina Bhattacharyya, MD15*, Dubashi Biswajit, MD, DNB, DM16*, Vineetha Raghavan, MD17* and Mobin Paul, M.D, D.M

1Department of Medical Oncology, Tata Memorial Centre, MUMBAI, India, 2Department of Medical Oncology, Tata Memorial Centre, Mumbai, India 3Homi Bhabha National Institute, Mumbai, India 4Department of Haematology, Christian Medical College Vellore, 5Department of Medical Oncology, Tata Memorial Centre, Homi Bhabha National Institute, Mumbai, India 6Cancer Institute (WIA), Chennai, India 7Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Puducherry, India 9Department of Haematology, Christian Medical College Vellore, Ranipet, India 10Department of Haematology, Christian Medical College Vellore, Vellore, Tamil Nadu, India11Department of Hematology, Christian Medical College, Vellore, Ranipet, India 12Tata memorial hospital, Mumbai, Homibhaba National Institute, Mumbai, India, MUMBAI, Maharashtra, India 13Tata Memorial center, Homi Bhabha National Institute, Mumbai, Maharashtra, Mumbai, AL, IND 14Medical Oncology, Ramaiah Medical College, Guwahati, IND 16Jawaharlal Inst. of Postgraduate Medical Edu & Res., Puducherry, IND 17Department of hematology, MALABAR CANCER CENTRE, Kannur, IND 18Department of Clinical Haematology & Hemato - Oncology, Rajagiri Hospital, Kochi, India

RESULTS

. The median age of the cohort was 23 (IQR-19, 27) with 65% being males and the rest being females.

2. PETCT was done in 70% of patients at baseline.

3. Early-stage disease was seen in 233 patients (35%), advanced stage in 366 patients (56%), and 60 patients (9%) were not staged at baseline.

4. Bulky mediastinum was seen in 1/4th of the patients out of which the majority (85 %) were Hodgkin lymphoma and PMBCL

Extra nodal site involvement was seen in 43% of patients out of which marrow involvement constituted almost half.

6. Out of 677 patients, 582 patients (86%) received treatment at their respective centers.

Among 298 treated cases Hodgkin lymphoma, 245(82 %) patients received ABVD and escBEACOPP was given in 28(9%) patients.

8. In DLBCL, out of 87 patients, 59(68%) received CHOP-R, 10(11%) received DA-REPOCH, 8(9%) received GMALL NHL protocol and the rest 10(11%) received other intensive regimens.

9. Almost 160(36%) patients received radiation therapy out of which 90 patients (57%) received it as part of definitive treatment and 50 (31%) patients received it as consolidation to residual site.

10. Median follow up of the entire cohort was 13 month (IQR-8,12)

11. Out of 570 patients where follow-up was available, the overall EFS was 76. % ± 2.4%

12. Relapse or progression occurred in 72 patients (12.5%) out of which 50(72%) could receive any form of salvage therapy including transplant.

CONCLUSIONS

- 1. This is the one of largest real-world data on AYA lymphoma from India.
- 2. The majority were Hodgkin lymphoma followed by DLBCL.
- 3. Most patients received adult type regimens for Hodgkin as well as non-Hodgkin lymphoma.
- 4. The use of radiation was high (1/3 rd) which could be due to a higher burden of bulky and mediastinal disease in our cohort.

5. This data will set the benchmark for future collaborative studies in India and abroad for AYA lymphoma



subtypes in AYA lymphoma (N=670)

TCRBCL-T cell Rich B cell lymphoma DLBCL- Diffuse Large B cell lymphoma BL-Burkitt Lymphoma LBL-Lymphoblastic lymphoma ALCL- Anaplastic Large cell lymphoma PMBCL-Primary Mediastinal B cell lymphoma

	INC
	Gι
	Re
	an
	in
	58
2.	Se
	Ε.
	cli
	yo
	ϳοι
	Sc

Figure-1 A pie-chart depicting the distribution of histopathological

subtype.

T-LBL (N=32)

REFERENCES

Nayak, L., Jain, H., Bonda, A., Epari, S., Laskar, S., Gokarn, A., Shet, T., ujral, S., Khanna, N., Bagal, B., Punatar, S., Goda, J., Thorat, J., engaraj, K., & Sengar, M. (2021). Hodgkin Lymphoma in Adolescent nd Young Adults: Real-World Data from a Single Tertiary Cancer Center India. Journal of adolescent and young adult oncology, 10(5), 581-

engar, M., Akhade, A., Nair, R., Menon, H., Shet, T., Gujral, S., Sridhar, , Laskar, S., & Muckaden, M. (2011). A retrospective audit of inicopathological attributes and treatment outcomes of adolescent and oung adult non-Hodgkin lymphomas from a tertiary care center. Indian urnal of medical and paediatric oncology : official journal of Indian ociety of Medical & Paediatric Oncology, 32(4), 197–203.



6 Months	1 Year	2 Years
0.976±0.016	0.952±0.023	0.860±0.039
2	4	11
0.875±0.083		
2		
0.897±0.057	0.826±0.071	0.778±0.082
3	5	6
 0.962±0.011	0.890±0.019	0.785±0.036
11	29	40
0.909±0.062	0.849±0.083	
2	3	
0.835±0.068	0.762±0.079	0.637±0.094
5	7	10

Figure-2 EFS outcome according to important histopathological

ACKNOWLEDGEMENTS

- 1. Dr Manju Sengar, Dr Vikram Mathews
- 2. Mr Om Prakash, Biostatician, CMC, Vellore
- 3. Mr Bharat, Biostatician, CMC Vellore
- 4. Patients and families.

CONTACT INFORMATION

Dr Lingaraj Nayak

Professor, Medical Oncology, TMH, Mumbai, India R,N-1005, 10 th floor, HBB Buildiing, TMH, Parel Mail-lingarajnayak86@gmail.com, twitter- @lingarajnayak