

PEDIATRIC HODGKIN LYMPHOMA

Ten-Year Treatment Outcomes and Survival in Pakistan

A Single-Center Experience | Shaukat Khanum Memorial Cancer Hospital & Research Centre

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BACKGROUND & AIM

Pediatric Hodgkin lymphoma is highly curable. LMIC cohorts often present younger and with mixed-cellularity histology; large Pakistani outcome datasets remain limited.

STUDY AIM

Describe clinical profile, treatment response and long-term survival in a decade-long Pakistani pediatric HL cohort.

- METHODS
- 1

Retrospective cohort: patients <18 years with HL, 2010-2019.
- 2

Ann Arbor staging; Euronet PHL risk stratification.
- 3

4 / 6 / 8 chemotherapy cycles by risk group.
- 4

COPDAC/ABVD from 2012; XRT for inadequate response.
- 5

Kaplan-Meier OS/EFS and Cox regression; p<0.05.

COHORT AT A GLANCE

973
Cases

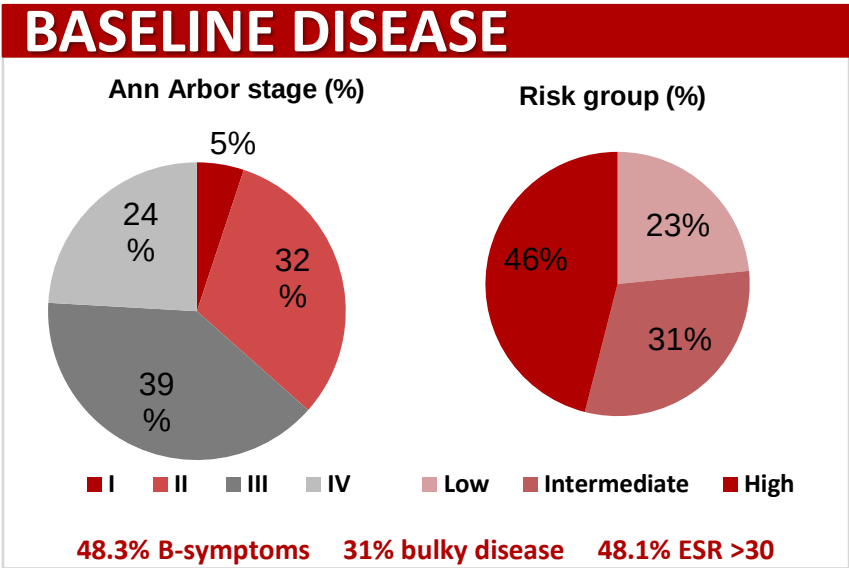
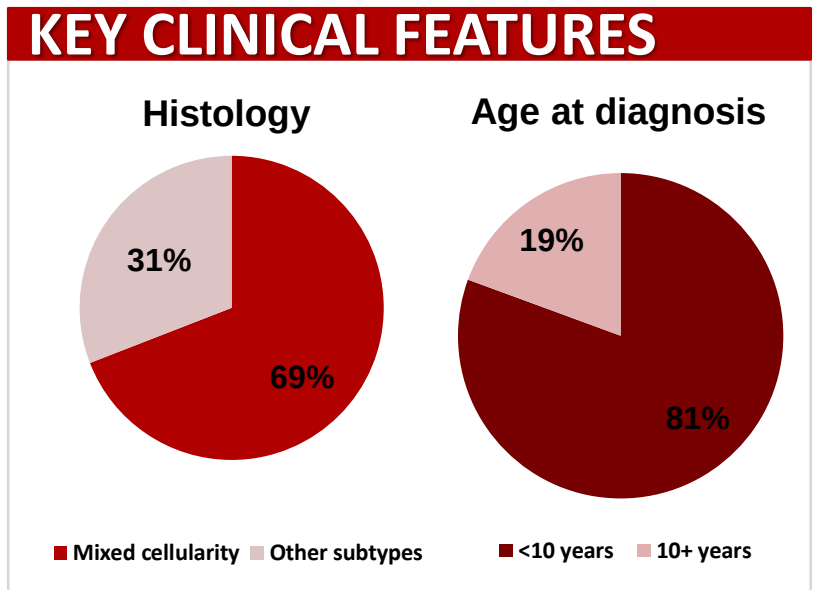
5.35 y
Median follow-up

4:1
Male : female

80.6%
Age <10 y

69.1%
Mixed cellularity

46%
High-risk

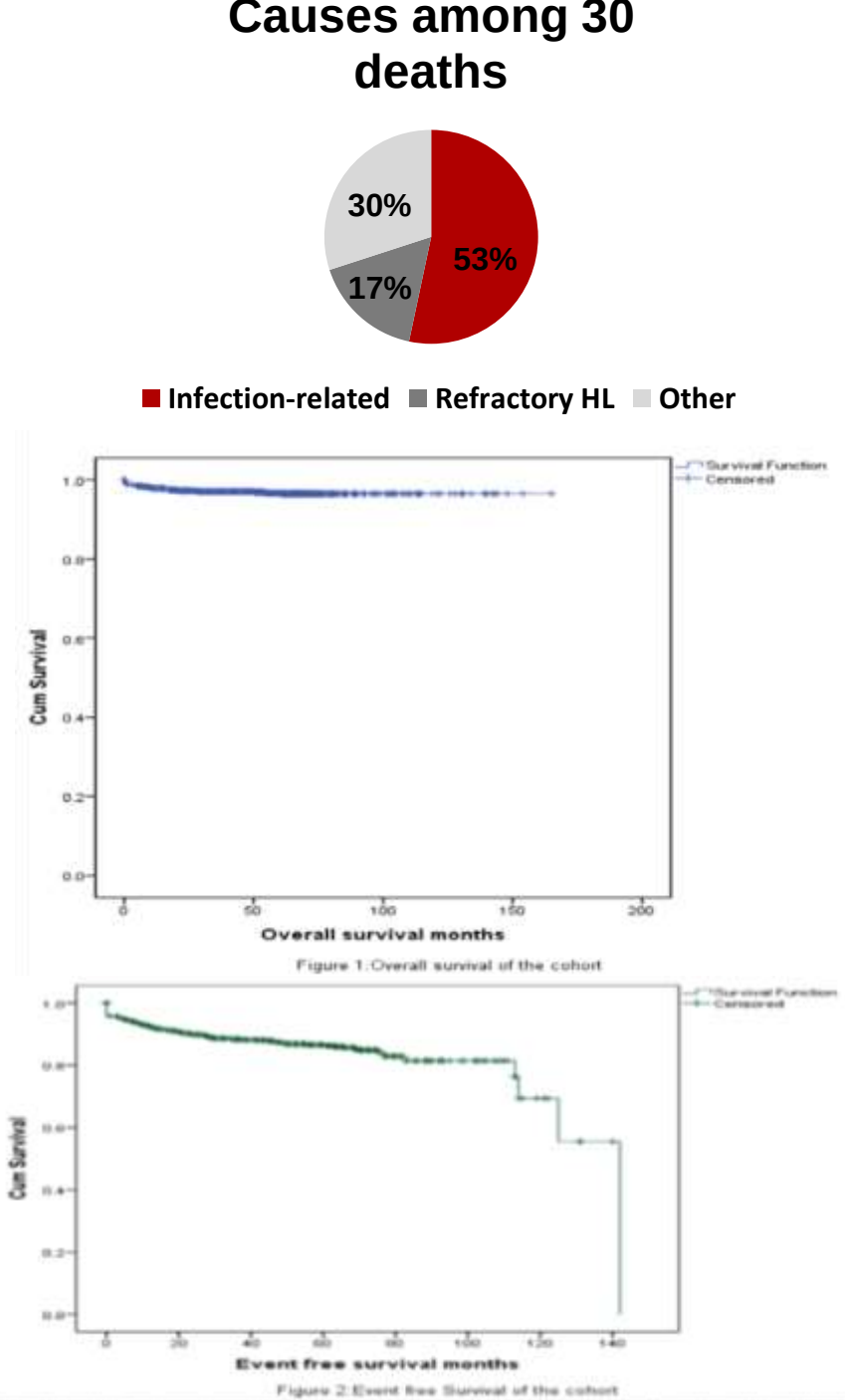


SURVIVAL OUTCOMES

96.9%
5-year overall survival

86.0%
5-year event-free survival

30 deaths (3.1%) during follow-up. Infection-related complications accounted for 16 of 30 deaths (53.3%). Relapse occurred in 5.3% and progression in 1.3%.



- DISCUSSION:
- Most children presented before age 10 (80.6%).
 - Mixed cellularity was the predominant histology (69.1%).
 - High-risk disease accounted for 46% of the cohort.
 - A unified outpatient COPDAC/ABVD approach was used in 93%.

SELECTED COX REGRESSION

Variable	Multivariable HR	p
Interim CR (EFS)	0.12 (0.04 – 0.34)	0.001
Interim PR (EFS)	0.17 (0.06 – 0.54)	0.001
EOT CR (EFS)	0.29 (0.10 – 0.83)	0.02
EOT CR (OS)	0.031 (0.002 – 0.483)	0.013

End-of-treatment response was the only independent predictor of overall survival in the multivariate model.

- LIMITATIONS
- Retrospective, single-center design.
 - Chart-review database may contain coding/documentation errors.
 - Low mortality and event rates limited power for some predictors.
 - 93% received one chemotherapy arm, limiting protocol comparisons.

CONCLUSION

Pediatric Hodgkin lymphoma showed excellent 5-year overall survival (96.9%) with lower event-free survival (86.0%). End-of-treatment response was the strongest independent predictor across outcomes.

Infection caused over half of deaths, reinforcing supportive care and infection prevention. Surveillance remains important for timely salvage after relapse.

TAKE HOME POINTS:

Among 973 children, 5-year OS was 96.9% and EFS 86.0%. End-of-treatment complete response was the clearest independent prognostic signal.

Supportive care, infection prevention and timely salvage remain priorities.

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