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PRIMARY MEDIASTINAL B-CELL LYMPHOMA DURING PREGNANCY

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INTRODUCTION

Primary mediastinal B-cell lymphoma (PMBCL) during pregnancy is rare, with limited data on how pregnancy impacts disease outcomes [1].

AIM

To evaluate the outcomes of PMBCL in pregnant women.

METHOD

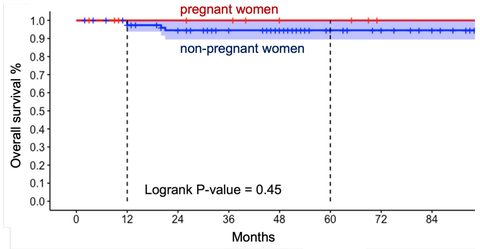
A prospective study from 2009 to 2024, with a median (Me) observation period of 54 months (range 2–121 months). Treatment was administered at the National Medical Research Center for Hematology (Moscow, Russia).

The study included 13 pregnant and 80 non-pregnant women of childbearing age, diagnosed with PMBCL. Groups were matched by age, disease stage, and aIPI score. Me gestational age at diagnosis was 26 weeks (range 9-37 weeks): 2 patients were between 9 to 11 weeks pregnant, 7 were between 15 to 25 weeks pregnant, and 4 were between 27 to 37 weeks pregnant.

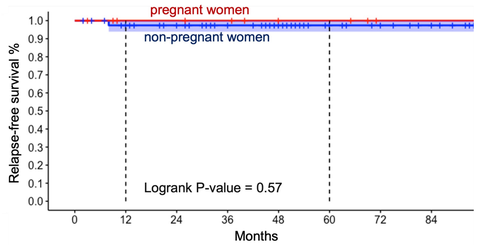
In cases diagnosed in the first trimester, pregnancy was either terminated for medical reasons (n=1) or managed with glucocorticosteroids until the 12th week (n=1). Chemotherapy was initiated post-labor induction for diagnoses after 34 weeks (n=1), or during the second trimester and early third trimester. Treatment ranged from 1 to 6 cycles of chemotherapy (median 4 cycles), with second-line therapy initiated in five instances due to partial response. Three patients with complete response underwent autologous hematopoietic stem cell transplantation. The control group received six cycles of the R-DA-EPOCH regimen.

RESULTS

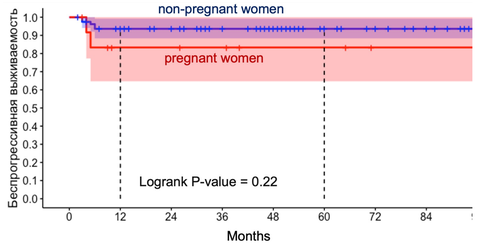
At 60 months, overall survival was 100% in pregnant women compared to 94.5% in the control group (95% CI 0.89-1.00, p=0.45). Relapse-free survival was 100% in pregnant and 97.4% in non-pregnant women (95% CI 0.94-1.00, p=0.57). Progression-free survival was 83.3% in pregnant versus 93.6% in non-pregnant women (95% CI 0.88-0.99, HR 2.699, p=0.22). Thirteen healthy children were born, including a set of twins, all developing normally.



Overall survival: 100% in pregnant, 94.5% in non-pregnant (p = 0.45)



Relapse-free survival: 100% in pregnant, 97.4% in non-pregnant (p = 0.57)



Progression-free survival: 83.3% in pregnant, 93.6% in non-pregnant (p = 0.22)

CONCLUSIONS

Survival rates between pregnant patients and the non-pregnant control group were comparable across the study period, confirming the effectiveness and safety of the R-DA-EPOCH protocol during pregnancy.

REFERENCES

1. **Annunzio K et al**. Treatment of primary mediastinal B-cell lymphoma with dose-adjusted REPOCH during pregnancy. *Blood Adv. 2023; 7;: 2241-2244*

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