INTERIM PET SCAN AFTER TWO CYCLES OF ABVD CHEMOTHERAPY IS THE STRONGEST PREDICTOR OF OUTCOME IN HODGKIN LYMPHOMA: REAL WORLD SCENARIO

Krishnakumar Rathnam[1]; Arun Seshachalam[2]; Shashidhar Karpurmath[3]; Krishna Reddy Golmari[4]; Ganapahti Raman[5]; Patil Chenappal[6]; Neelesh Reddy[7]; Krishnaprasad Bhat[8]; Bharat Rangarajan[9]; Karthik Udupa[10]; Manjunath Nandennavar[3]; Janardhina Kani[5]; Prasad Gunari[11]

[1]Meenakshi Mission Hospital & Research Centre, Madurai, [2]GVN Institute of Oncology, Trichy, [3]Vydehi Institute of Medical Sciences, Begaluru, [4]Manipal Hospital, Vijayawada, [5]Madras Cancer Care Foundation, Chennai, [6]Apollo Hospital, Bengaluru, [7]Columbia Asia Jospital, Begaluru, [8]Mangalore Institute of Oncology, Mangalore, [9]Kovai Medical Centre, Coimbatore, [10]Manipal Hospital, Manipal, [11]HCG Cancer Centre, Hubli, India

Escalated BEACOPP (EB) improves complete response (CR) and overall survival in Hodgkin Lymphoma (HL) patients when compared to ABVD. But the increased cost and toxicity associated with EB precludes it's use in resource limited setting. We analyzed the ability of interim PET scan after 2 cycles (iPET2) to identify high risk HL.

Materials and methods: Cohort study of secondary data collected from 12 Cancer centers in south India during the year 2008 to 2018. Event free survival (EFS), determinants of EFS and factors associated with CR in iPET2 were calculated.

Results: We included 409 HL patients and the mean age was 34.5 years. Of 409 HL patients, 63% underwent PET based staging and the rest CT based staging (37%). Stage IV (28.9%) and bone involvement (9.2%) was more often seen in PET based staging than with CT based staging (9.2% and 2%). Among 171 patients with iPET2 scan, 24% did not achieve CR and no factors were able to predict it. The 5-year EFS of the entire cohort was 77%. Factors predicting outcome are sex, stage, and iPET2 response. Patients not achieving CR in iPET2 scan had a poor outcome in comparison with patients achieving CR (aHR: 5.13 (95%CI: 2.15 to 12.19))

Conclusion: Our study mandates doing PET-CT scan in all HL patients for both staging and response assessment. We noticed iPET2 positivity portend unfavorable outcome and mandates escalation to intense protocol.