**IS EARLY RELAPSE AFTER AUTOLOGOUS STEM CELL TRANSPLANTATION IN MULTIPLE MYELOMA STILL PROGNOSTIC IN THE ERA OF NOVEL AGENTS?**

**ABSTRACT**

**INTRODUCTION:** Significant improvements in the prognosis of Multiple Myeloma (MM) have recently been observed in the era of novel agents. Induction treatment including new agents followed by conditioning regimen and upfront autologous stem cell transplantation (ASCT) has been accepted as the standard treatment approach for newly diagnosed fit MM patients. Even in the era of novel agents upfront ASCT is still superior to conventional chemotherapy alone. Previous studies revealed that duration between ASCT and relapse had predicted overall survival (OS) and meantime it was widely used to determine the potential benefit from a second ASCT. However, the majority of the data collected reflects the treatment modalities before the novel agents. In this study, we aimed to investigate the effects of post-transplantation early relapse (ER) on survival in the era of new agents.

**METHODS:** The results of 155 MM patients that underwent ASCT at our center between January 2010 and May 2018 were analyzed retrospectively.

**RESULTS:** The median follow-up duration was 20 months in the ER group, 27 months in non-ER group, and 24 months in all patients. 33.3% of the patients in ER group and 71.4% of the patients in non-ER group were alive at the time of analysis. Median OS was 20.77±3.66 months in ER group and 40.89±4.21 months in non-ER group. We found a statistically significant relationship between ER and the poor OS (p:<0.001).

**CONCLUSION:** Our study reveals that in the era of novel agents, ER is still related to poor survival. Therefore, comprehensive studies needed to develop new strategies for early relapsed patients.

**KEYWORD**S: Multiple myeloma, autologous stem cell transplantation, early relapse