MM-307

Adolescents and Young adults with Multiple Myeloma , Kuwait Experience

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Background

Multiple myeloma MM is an incurable plasma cell malignancy with a median age of 65 years at diagnosis worldwide, a small number of publications were focused on young adult Multiple myeloma MM with special characteristics and clinical outcomes.

Objectives

To evaluate the incidence of MM among adolescent and young adults (AYA) in Kuwait aged 40 and below. Also, to describe the clinical characteristics, high risk features and treatment outcomes at the Kuwait Cancer Control Centre (KCCC).

Materials & Methods

Adolescent and Young adult Multiple Myeloma were defined as onset of MM at the age of 40 or below, In Kuwait a total number of 340 patients were diagnosed by multiple myeloma from 2015 till 2022 , We collected data retrospectively from the hematological malignancy registry at KCCC and looked at AYA patients (pts) with a confirmed diagnosis of Multiple myeloma at our centre from 2015 till 2022, we looked at age of onset, gender, nationality, year of myeloma diagnosis, presence of extramedullary disease, International Staging System score (ISS score), cytogenetic aberrations, induction therapy, receipts of auto-transplant and maintenance therapy.

Tables

Table 1: Patient Demographics

SEX		Nationality		Extra medullary		ASCT		Maintenance		Relapses			FISH				
M	F	K	NK	Y	N	Y	NA	NA	Y	Y	No	NA	t(11.14)	+1q	t(14,16)	Del 17p	t(4,14)
10	1	3	8	4	7	10	1	1	10	2	7	2	0	1	0	0	0

M:Male, F:Female, K:Kuwaiti, NK:Non-Kuwaitii, Y:yes, NA:not available, ASCT:Auto Stem Cell Transplantation

Table 2:Age at diagnosis

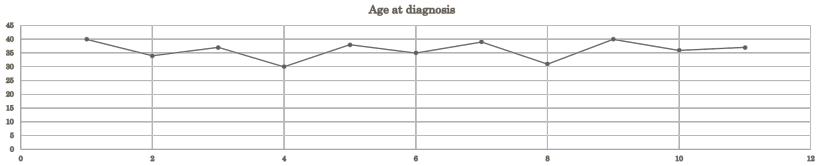


Table 3: ISS Staging

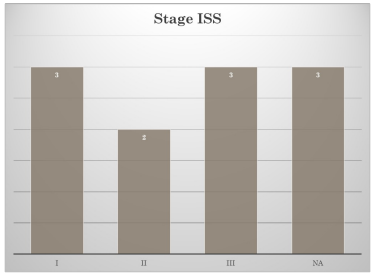
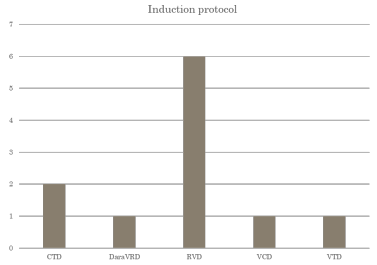


Table 4: Protocol



Discussion

From 2015 till 2022, 340 pts were diagnosed with MM in Kuwait, eleven pts were found 40 years old or younger, only one was female pt, the median age was 35 years old, around a third were Kuwaiti, 73% were non-Kuwaiti of middle eastern background, 4 pts were found to have extramedullary disease at diagnosis, with advanced stage ISS III found in 3/9 pts. One pt was found with 1Q gain and the rest of the 10 patients were with negative del17p, t(4,14), t(14,16), gain1q and t(11,14). Of note, interphase FISH cytogenetic is not done with CD138 selection. Six pts were treated with RVD induction (lenalidomide, Velcade, Dexamethasone), two pts treated by CTD (cyclophosphamide, Thalidomide, dexamethasone), one pt treated by VCD, one pt treated by Daratumumab RVD, and one patient treated by VTD. Overall response rate (ORR) was 90.9%, (10/11) responded patients proceeded to HDCT/ASCT and all these patients went on maintenance post-transplant, two patients were lost to follow up while 9 patients still under follow up, median follow up 33 months, one pt had a relapse after transplant.

Conclusion

MM is an uncommon disease among AYA in Kuwait (3.2%) of all myeloma patients, with favorable durable responses in this group of pts.

References

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Keywords

MM: Multiple Myeloma
HDCT:High dose Chemotherapy ,
ASCTAutologous Stem Cell Transplantation.