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Introduction

- Renal failure (RF) is known to be reversible in multiple myeloma (MM) and is associated with improved survival , and very common . [1]

Case presentation

- We present a 52-year female who was diagnosed with Bi-clonal Multiple Myeloma, where the immunofixation showed 2 pics, IgGκ and free light chain kappa, associated with acute renal failure. Also, her Lab test showed creatinine of 7 mg/dl and Hb of 7 g/dL.(Figure 1)
- A bone marrow biopsy showing a Multiple Myeloma with 18 % aberrant plasma cells (PCs). The immunohistochemistry study showed CD38+ and kappa+.
- Chemotherapy with VRD, bortezomib 1.3 mg/m², revlimid 25 mg, and steroid dexamethasone 40 mg was initiated for 2 cycles, with hemodialysis. 2 cycles of VRD, a transient clinical improvement was noted but without enhanced renal function amelioration.
- The Serum protein electrophoresis (SPEP) for IgGκ found to be decreased, from 42 g/l to 1.9 g/l, with major increases in the free light chain kappa from 42 to 995 mg/dl and B2-microglobulin from 24 to 47 mcg/l.
- Decision on the second line treatment with daratumumab 16 mg/kg, cyclophosphamide 600 mg/m², and dexamethasone 40 mg, taking into consideration that the patient was resistant to proteasome inhibitor and immunomodulatory drugs (IMiDs).
- 2 months post treatment, an amelioration of kidney function, with normalization of creatinine to 3.2 mg/dl, with decreasing of the free light chain kappa decreased to 53 mg/dl. (Figure 2)

- Plan to have a ASCT post the second line treatment and reevaluation
- This case report describes a rare case of renal failure reversal in Bi-Clonal Multiple Myeloma .
- No reported cases in Bi-clonal Multiple Myeloma treated in 2 different line with resolution of the hemodialysis .
- Main strategy in the management of RF in MM is to lower FLC concentration immediately.
- Nonetheless, there are no clinical studies or genetic studies, concerning the renal failure reversal in Bi clonal Multiple Myeloma
- Daratumumab can prevent progression in Renal failure

Figure 1:

HB	CREA	TSP/AL	SPEP	IF	B2	BJ	BONE
7	7	74/38	8.4 G/L	Large IgGgk Small Band K 42	24	+k	>3

Figure 2:

HB	CREA	TSP/A LB	SPEP	K	B2	BJ	BMR
11	3.2	50/33	TRACE	53	16	NEG	MRD<0.01

Conclusions

- Our case of a 52-year-old female with Bi-Clonal Multiple Myeloma following 2 lignes of treatments is quite unique and warrants to be reported.
- Daratumumab become integral in the treatment of MM , It has rapidly shifted from being an agent to be used in relapsed/refractory settings to a drug with a putative role in the early disease course.[2]
- There is a need to conduct more observational and experimental studies to understand the mechanisms of association between the Bi-clonal multiple myeloma and the chemotherapy .
- Continue monitoring of response to treatment ,PET CT Scan highly recommended for hepatic lesions of extra medullary myeloma [3]

References

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