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RENAL IMPAIRMENT IN MULTIPLE MYELOMA :
A RETROSPECTIVE STUDY FROM NORTHERN MOROCCO

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INTRODUCTION

Multiple myeloma (MM) is a malignant hematologic disorder defined by the proliferation of a plasma cell clone infiltrating the bone marrow and producing a pathological paraprotein, leading to progressive end-organ damage (1).
Renal impairment (RI) affects 20–40% of patients with newly diagnosed multiple myeloma. It is linked to disease-related factors such as cast nephropathy, hypercalcemia, and amyloidosis, and is associated with higher toxicity, early mortality, and poorer overall survival (2).
Due to limited data on myeloma-associated renal impairment (RI) in North Africa, this study aims to describe the clinical, biological, and therapeutic profile of MM patients with RI in northern Morocco, assess renal and hematological responses to treatment, and highlight challenges in early diagnosis and access to novel therapies.

METHODS

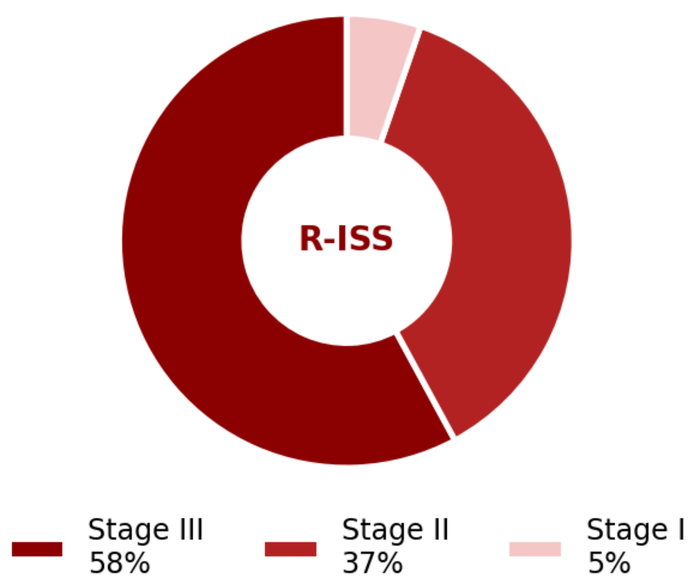
This monocentric retrospective study included multiple myeloma patients with renal impairment (eGFR < 40 mL/min/1.73 m²), managed at the Clinical Hematology Department of UHC Mohamed VI, Tangier, between January 2019 and December 2024. Patients were included if RI was present at diagnosis or developed during follow-up. Staging and renal/hematological responses were assessed according to IMWG criteria.

RESULTS

19 Patients	Rate of RI 13.6%	Mean age 60.8 Years	F/M 11/8

RI at diagnosis in 79% of patients, with a mean eGFR at presentation of 12.5 ml/min/1.73m².
Selective proteinuria was documented in the majority of evaluable patients.
Immunoglobulin isotype IgG was the predominant paraprotein (83%).
The mean bone marrow plasma cell infiltration was 37% (6–92%).
High-risk cytogenetic abnormalities were identified in 5 patients (26%).
Disease burden was uniformly advanced at presentation : ISS stage III in 95% of patients and R-ISS stage III in 58%.

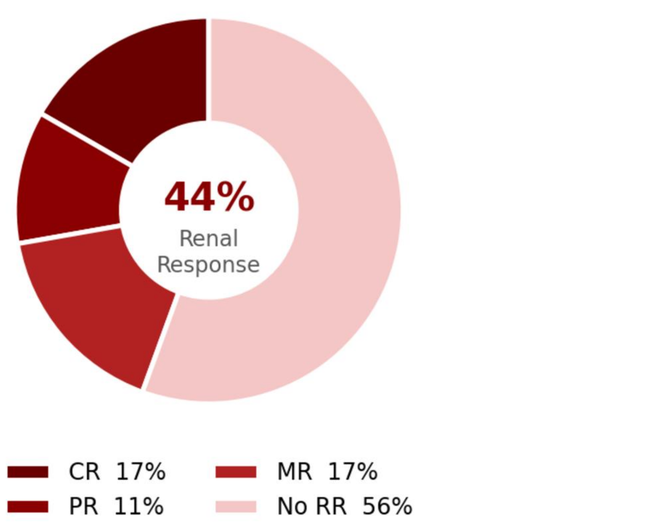
R-ISS Staging



Bortezomib-based regimens were used in 84% of cases.
Daratumumab-based therapy was accessible in only one patient.
ASCT was performed in 3 patients (16%), with 2 additional patients declining transplant despite eligibility.

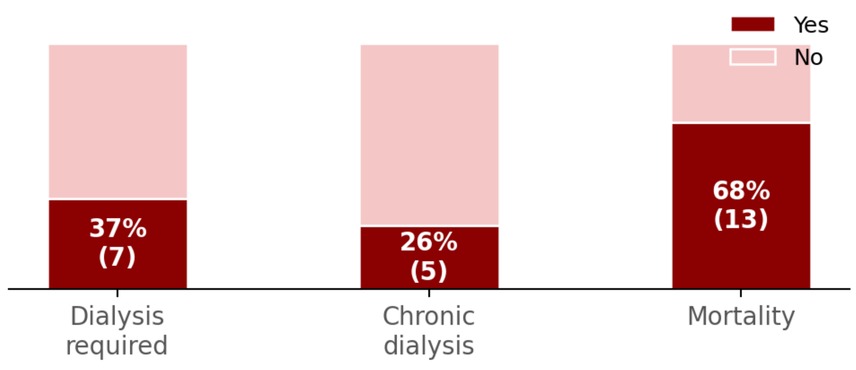
Renal response was evaluable in 18 patients. Overall renal response rate was 44% (8/18), comprising complete renal response (CR) in 3 patients, partial renal response (PR) in 2, and minor renal response (MR) in 3.

Renal Response (IMWG)



Renal recovery was typically observed after a median of 2 treatment cycles.
Dialysis was required in 7 patients (37%), with 5 (26%) becoming chronically dialysis-dependent.
Thirteen deaths were recorded (68%) over a median follow-up of 16 months (1–43), reflecting the poor prognosis of this heavily burdened population.

Key Outcomes



The main causes of death were MM progression (n=5), anuria/acute pulmonary oedema (n=3), hyperkalaemia (n=1), and unknown causes (n=4).

DISCUSSION

Our study reflects the aggressive presentation of MM-associated renal impairment in a resource-limited setting, with 79% of patients presenting with severe RI at diagnosis (mean eGFR 12.5 mL/min/1.73 m²) and an advanced staging (R-ISS III in 58%). This pattern is consistent with delayed referral and limited access to early screening.
The 44% overall renal response rate achieved with Bortezomib-based regimens is in line with the 40% complete renal response rate reported by other studies (2). Notably, Daratumumab-based therapy — now standard of care in many countries — was accessible in only one patient, illustrating a critical therapeutic gap.
The high rate of chronic dialysis dependency (26%) and an overall mortality of 68% at 16 months underscore the compounding effect of renal failure on MM prognosis.

CONCLUSION

This cohort underscores the frequency end severity of MM-associated renal impairment in northern Morocco. Improving outcomes in this population will require earlier diagnostic pathways, multidisciplinary nephrology-hematology collaboration, and expanded access to novel agents.

BIBLIOGRAPHY

(1)Try M, et al. Insuffisance rénale dans le myélome multiple : particularités de la prise en charge [Renal failure in multiple myeloma: management specificities]. Bull Cancer (Paris). 2024;111(7):733–740.
(2)Gonsalves WI & al. Improvement in renal function and its impact on survival in patients with newly diagnosed multiple myeloma. Blood Cancer J. 20 mars 2015;5:e296.