

INTRODUCTION

- Systemic AL amyloidosis is a rare plasma cell disorder characterized by extracellular deposition of misfolded immunoglobulin light chains, causing progressive organ dysfunction.
- Often linked to plasma cell dyscrasias like multiple myeloma, its heterogeneous presentation often delays diagnosis, leading to advanced organ involvement at presentation.

METHODS

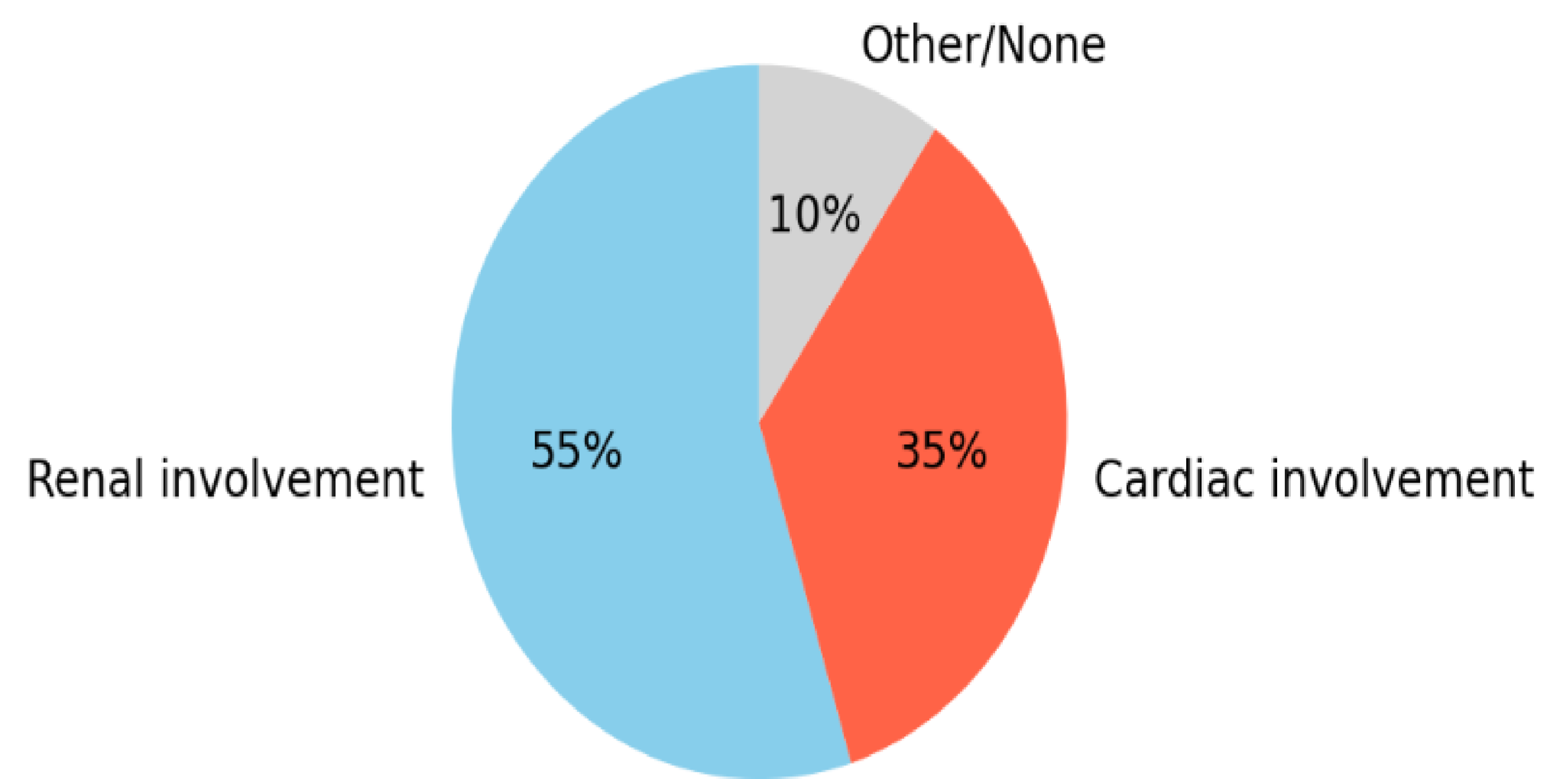
- ❖ **Study Type:** retrospective descriptive study
- ❖ **Population:** AL amyloidosis patients diagnosed at Farhat Hached University Hospital, Hematology Department (2017–2024).
- ❖ **Diagnosis:** based on clinical, laboratory, and histological criteria (Congo red staining, immunohistochemistry).
- ❖ **Data collected:** clinical presentation, organ involvement, treatment, and outcomes.

RESULTS

Tab.1 : Main characteristics of the 9 AL amyloidosis patients (2017–2024)

Features	Results
Number of patients	N = 9
Mean age (range)	63 years (43 - 89)
Sex ratio (M:F)	1.25
Associated symptomatic MM	89% (n = 8)
Bone marrow infiltration	Median plasma cell infiltration: 34%
Main symptoms	Asthenia (n = 5, 55%) Dyspnea (n = 4, 44%)
Disease stage (Mayo)	Majority stage III (n=6 evaluable)
Treatment (main regimen)	Predominantly Bortezomib–Cyclophosphamide–Dexamethasone (VCD)
ASCT	None (no patient underwent autologous stem cell transplantation)

Figure 1. Organ involvement in AL amyloidosis cohort (n=9)



CONCLUSION

- In this real-world cohort, AL amyloidosis presented at advanced stages with prominent cardiac (35%) and renal (55%) involvement.
- Earlier diagnosis and broader access to modern therapies are crucial to improve outcomes in plasma cell dyscrasias.

REFERENCES

1. Gertz MA, et al. *Blood* 2012 – Mayo staging system for AL amyloidosis.
2. Palladini G, et al. *Front Hematol* 2024 – overview of AL amyloidosis, staging, and treatment.
3. Singapore Myeloma Study Group. *Ann Acad Med Singapore* 2023 – diagnostic and management guidelines.
4. Muchtar E, et al. *Clin Kidney J* 2019 – cardiac vs. renal involvement and outcomes.
5. Wechalekar AD, et al. *AL amyloidosis: current treatment and outcomes* 2025.