IMPACT OF THE IMWG SLIM CRITERIA ON MULTIPLE MYELOMA MANAGEMENT: A TERTIARY CARE CENTER EXPERIENCE

Authors- Dhairya Gor MD[1], Tasnim Rehman MD[2], Anju Pradeep MD[2], Sunita Ghosh PhD[3], Philip Kuriakose MD[1]
[1]Henry Ford Cancer Institute, Detroit, MI, USA
[2]Henry Ford Hospital, Detroit, MI, USA
[3]Henry Ford Health System, Detroit, MI, USA

Background

- Multiple Myeloma (MM) is a malignancy of clonal plasma cells.
- In 2014, the IMWG updated diagnostic criteria by introducing the **SLiM** markers, allowing earlier identification of MM before end-organ damage.
- This study retrospectively evaluates the adoption and impact of **SLiM criteria in a single institution**. Focusing on patient demographics and outcomes of those diagnosed **exclusively by SLiM criteria**.

Methods

- Reviewed electronic medical records at**HFCI from Jan 2015 to Dec 2023**.
- Identified MM patients meeting **≥1 SLiM criterion** (≥60% plasma cells, FLC ratio >100, or ≥1 MRI lesion).
- **Excluded** patients with **CRAB features** at diagnosis.
- Collected data on **demographics, staging, treatment, and outcomes**.
- Outcomes analyzed through **Dec 2024**.

Study Period	2015 – 2023
Total MM Patients Diagnosed	495
Patients Meeting ≥1 SLiM Criterion	190
Excluded (with CRAB features)	177
SLiM-Only Diagnosed Patients	13

Results

Characteristic	Frequency (n=13)
Gender	
Male	6 (46.1%)
Female	7 (53.8%)
Ethnicity	
Caucasian	5 (38.4%)
African American	7 (53.8%)
Other	1 (7.6%)
SLiM criteria	
Plasma cell >60%	6 (46.1%)
SLFC ratio >100	11 (84.6%)
MRI	3 (23.1%)

Characteristic	Frequency (n=13)
R-ISS Staging	
Stage 1	8 (61.5%)
Stage 2	4 (30.7%)
Stage 3	1 (7.6%)
Cytogenetics Risk Stratification	
Standard Risk	5 (38.4%)
High Risk	7 (53.8%)
Systemic therapy	
Yes	12 (92.3%)
No	1 (7.6%)
Induction Regimen	
VRD	9 (64.2%)
Dara-VRD	1 (7.1%)
KRD	1 (7.1%)
VD	1 (7.1%)

Outcomes:
- **9 patients** remain in **ongoing remission**
- **2 patients** relapsed but are now in **remission after second-line therapy**.
- **1 patient** died (hospice care due to age/comorbidities).
- **1 patient**, diagnosed in **2017**, has **not required treatment** to date.

Conclusion

- Our study provides **real-world data** on the impact of the **IMWG SLiM criteria** for MM diagnosis.
- Patients diagnosed **solely by SLiM**—previously considered smoldering—were treated upfront, indicating real-time adoption of updated guidelines.
- This highlights the **practical applicability and positive impact** of the revised criteria.
- Notably, **one untreated SLiM-only patient** has not progressed, emphasizing the need for **appropriately powered randomized studies** to better define outcomes in this subset.

References

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