Title: Symptoms manifestation of multiple myeloma at Diagnosis; A retrospective review from Moi Teaching and Referral Hospital

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Multiple myeloma is a neoplastic disorder characterized by clonal proliferation of plasma cells.

Multiple myeloma accounts for about 1% of all types of malignancy and slightly more than 10% of hematologic malignancy.

In Moi Teaching and Referral Hospital, Multiple Myeloma Is the 4th common cancer and the 2nd most common hematological malignancy.
Introduction/Background

- Multiple myeloma presents with diverse varied symptoms at diagnosis.

- Late presentation, limited resources and weak referral system pose a diagnostic challenge in primary care and start of treatment.

- We conducted a chart review to evaluate presenting symptoms that leads to the diagnosis of Multiple myeloma.
Methodology

- A retrospective medical records study of 157 Multiple myeloma patients seen at Moi Teaching and Referral Hospital.

- Clinical characteristics include: age, gender, presenting symptoms at diagnosis and survival status were examined over the period 2013 to 2018.

- Survival time was from the time of initial treatment to time of death. Our event of interest was death, censoring was described as the patient who did not experience the event of interest.

- Kaplan Meier was used to estimate survival.
Percent of multiple myeloma by age group

- <40 years: 5.2%
- 40-49 years: 21.6%
- 50-59 years: 34.0%
- 60-69 years: 28.8%
- 70-79 years: 9.8%
- >80 years: 0.7%

Median age at Diagnosis: 57
Results/Findings

Gender Frequency

- Females 40%
- Males 60%

Mean Age (Gender)

- Males 56.06 ± 1.25
- Females 56.54 ± 1.10
<table>
<thead>
<tr>
<th>Presenting Symptoms</th>
<th>Percentage Occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bone Pain</td>
<td>44.0%</td>
</tr>
<tr>
<td>Lesion</td>
<td>14.1%</td>
</tr>
<tr>
<td>Anaemia</td>
<td>13.6%</td>
</tr>
<tr>
<td>Lower Limb Weakness</td>
<td>12.5%</td>
</tr>
<tr>
<td>Fracture</td>
<td>7.1%</td>
</tr>
<tr>
<td>Fatigue</td>
<td>4.3%</td>
</tr>
<tr>
<td>Renal Failure</td>
<td>1.6%</td>
</tr>
<tr>
<td>Vomit</td>
<td>1.1%</td>
</tr>
<tr>
<td>Epistaxis</td>
<td>1.1%</td>
</tr>
<tr>
<td>Neuropathy</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

** Patients presented with more than one symptom.**

** % represents the total symptoms at diagnosis.
Median overall survival is **21 months**

(95% CI, 12.9 – 40.4)
Discussions

- The median age of Multiple Myeloma patients at diagnosis is lower than that reported in other populations [57 years versus 66 years]

- Males were dominant compared to females (60% vs 40%)

- Bone pain was the common presenting symptoms.
Multiple myeloma patients at MTRH presented with diverse symptoms at diagnosis. Developing a tool for screening high-risk individual based on the above symptoms and referring the patient appropriately will reduce the effect of patient being found at late stage.
Thank you...