## Haematology audit template

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| Date of completion | (To be inserted when completed) |
| Name of lead author/ participants | (To be inserted) |
| Specialty | Haematology |
| Title | An audit of compliance with the British Society for Haematology guideline for the diagnosis and management of monoclonal gammopathy of undetermined significance |
| Background | The British Society for Haematology (BSH) has published guidance on the diagnosis and management of the monoclonal gammopathy of undetermined significance (MGUS).1 This audit will review compliance with some of the main recommendations made. |
| Aim and objectives | This audit template is a tool to review whether:   * newly diagnosed patients with MGUS are being managed in an appropriate way   investigations are being performed appropriately. |
| Standards and criteria | **Criteria range:** 100%, or if not achieved, there is documentation in the case notes that explains the variance.  **Management of abnormal results**   1. Upon detection of a new M-protein, immunofixation (IFE) should be performed to confirm the type of monoclonal protein and a serum free light chain (FLC) assay should also be carried out to measure FLC levels and calculate the FLC ratio. 2. Laboratory diagnostic sets should be used to ensure all the correct tests are performed in patients with suspected MGUS or myeloma. 3. Appropriate laboratory flagging systems should be in place to alert primary or secondary care physicians to a significantly abnormal result and the appropriate referral pathway. 4. Patients with a positive dipstick for proteinuria should undergo a urine protein to creatinine ratio (PCR) or albumin to creatinine ratio (ACR) test and should be considered for appropriate nephrology referral.   **Risk stratification for MGUS**   1. Patients with newly diagnosed MGUS should be risk stratified at diagnosis using a validated published model. Models that do not involve a bone marrow (BM) examination are preferable. 2. Risk stratification should take place either in secondary care or in primary care, directed by local guidelines produced in secondary care. 3. Newly diagnosed patients with low- or low–intermediate-risk MGUS should not require BM examination or imaging investigations. 4. High–intermediate- or high-risk MGUS patients should undergo further blood and urine tests, a BM examination and a whole-body imaging investigation at diagnosis.   **Information and support for patients diagnosed with MGUS**   1. Any decision to treat monoclonal gammopathy of clinical significance (MGCS) with systemic chemotherapy should be made by a multi-disciplinary team (MDT) with suitable sub-specialty representation. 2. Patients with MGUS should be provided with clear information and psychological support at the time of their diagnosis. |
| Method | **Sample selection:**  All patients diagnosed with MGUS in the preceding 12 months up to a maximum of 20 consecutive patients.  **Data to be collected on proforma (see below).** |
| Results | (To be completed by the author)  The results of this audit show the following compliance with the standards.   |  |  |  |  | | --- | --- | --- | --- | | Investigation | No. audited | No. compliant | % compliance | | Management of abnormal results | | | | | Upon detection of a new M-protein, IFE was performed to confirm the type of monoclonal protein, and a serum FLC assay was carried out to measure FLC levels and calculate the FLC ratio |  |  |  | | Laboratory diagnostic sets were used to ensure all the correct tests were performed in patients with suspected MGUS or myeloma |  |  |  | | Appropriate laboratory flagging systems were in place to alert primary or secondary care physicians to a significantly abnormal result and the appropriate referral pathway |  |  |  | | Patients showing signs of renal impairment underwent a PCR or ACR test and were considered for appropriate referral |  |  |  | | Risk stratification for MGUS | | | | | Patients with newly diagnosed MGUS were risk stratified at diagnosis using a validated published model |  |  |  | | Risk stratification took place either in secondary care or in primary care, directed by local guidelines produced in secondary care |  |  |  | | Newly diagnosed patients with low- or low–intermediate-risk MGUS did not undergo BM examination or imaging investigations |  |  |  | | Newly diagnosed patients with MGUS underwent blood and urine tests to enable risk stratification using the Mayo criteria |  |  |  | | Information and support for patients diagnosed with MGUS | | | | | Any decision to treat MGCS with systemic chemotherapy was made by an MDT with suitable sub-specialty representation |  |  |  | | Patients with MGUS were provided with clear information and psychological support at the time of their diagnosis |  |  |  | |
| Conclusion | (To be completed by the author) |
| Recommend ations for improvement | How could the diagnosis and early management of MGUS patients be improved based on the results of this audit? |
| Action plan | (To be completed by the author – see attached action plan proforma) |
| Re-audit date | (To be completed by the author) |
| References | 1. Stern S, Chaudhuri S, Drayson M, Henshaw S, Karunanithi K, Willis F. Investigation and management of the monoclonal gammopathy of undetermined significance: A British Society for Haematology Good Practice Paper. *Br J Haematol* 2023;202:734–744. |

## Data collection proforma for patients (Investigation and management of the monoclonal gammopathy of undetermined significance)

## Audit reviewing practice

Unit number(s)

Date of transfusion:

(Note: a separate form should be completed for each transfusion episode.)

**Given to:**

Patient name:

Hospital number:

Date of birth:

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| **Standard** | **1**  **Yes** | **2**  **No** | **3** If shaded box not ticked, was there documentation to explain the variance? **Yes/No** plus free-text comment | **4** Compliant with guideline if shaded box ticked or an appropriate explanation from column 3. **Yes/No** (Record if standard not applicable) |
| **For patients experiencing abnormal results** | | | | |
| **1**  Where a new M-protein was detected, IFE was performed to confirm the type of monoclonal protein, and a serum FLC assay was carried out to measure FLC levels and calculate the FLC ratio |  |  |  |  |
| **2** Where MGUS or myeloma was suspected, laboratory diagnostic sets were used |  |  |  |  |
| **3**  Where a patient had a significantly abnormal result, an appropriate laboratory flagging system was used to alert primary or secondary care physicians |  |  |  |  |
| **4**  Where a patient showed signs of renal impairment an ACR test was performed and patients were considered for appropriate referral |  |  |  |  |
| **Risk stratification for MGUS** | | | | |
| **1**  Where a patient was newly diagnosed with MGUS, they were risk stratified at diagnosis using a validated published model |  |  |  |  |
| **2**  Where risk stratification was performed, it was in either secondary care or primary care, and it was directed by local guidelines produced in secondary care |  |  |  |  |
| **3**  Where patients were newly diagnosed with low- or low–intermediate-risk MGUS, a BM examination and a whole-body imaging investigation were not performed |  |  |  |  |
| **4**  Where a patient was newly diagnosed with MGUS, they underwent blood and urine tests to enable risk stratification using the Mayo criteria |  |  |  |  |
| **Information and support for patients diagnosed with MGUS** | | | | |
| **1**  Any decision to treat MGCS with systemic chemotherapy was made by an MDT with suitable sub-specialty representation |  |  |  |  |
| **2**  Patients with MGUS were provided with clear information and psychological support at the time of their diagnosis |  |  |  |  |

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| **Audit action plan**  An audit of compliance with the BSH guideline (Investigation and management of the monoclonal gammopathy of undetermined significance) | | | | | | |
| Audit recommendation | Objective | Action | Timescale | Barriers and constraints | Outcome | Monitoring |
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