

## Haematology

### SITUATION

60F “Mary Smith” electively admitted for a Melphalan Autologous Stem Cell Transplant (AutoSCT) on b/g of IgG kappa Multiple Myeloma.

### WHAT care was delivered? (Action)

- Initial malnutrition screening:
  - Malnutrition universal screening tool (MUST) completed by nursing staff within 8hrs of admission.
  - Unintentional loss of weight (LOW) 5-10% within the past 3-6 months. MUST = 2.
  - Referred to dietitian.
- Initial nutrition assessment:
  - PG-SGA 15 moderate/suspected malnutrition (B)
  - Mary had been weight stable for the past 1/12 however had a gradual 5% LOW within the 5/12 prior with signs of mild lean muscle and subcutaneous fat depletion.
  - Mary was eating well at the time of assessment and meeting her nutritional requirements with only a mild reduction in appetite and no other nutrition impact symptoms.
- Repeat malnutrition screening:
  - MUST repeated by nursing staff weekly on ‘Wednesday weight day’.
- Nutrition reviews:
  - Mary was reviewed regularly by nutrition. This included a Nutrition Assistant (NA) review as part of a lunchtime ‘meal round’ which involved documenting how much of her meal (including any oral nutrition supplements) she consumed.
- Repeat nutrition assessment:
  - PG-SGA repeated by the dietitian and included a physical assessment ensuring oedema was checked given the high occurrence of fluid retention in haematology patients which can mask LOW and detection of muscle wastage.
  - Mary’s oral intake gradually declined during her neutropenic phase with nutrition impact symptoms including reduced appetite, nausea, vomiting, mucositis, dysgeusia, and diarrhoea. This resulted in a gradual 3kg (3.5%) LOW prior to the initiation of supplemental nutrition.
- Interventions:
  - Tailoring of hospital meals and assistance with texture modification due to mucositis with the help of the dietitian and nutrition assistant.
  - Addition of HEHP items from the supplemental menu.
  - Trial and consumption of oral nutrition supplement drinks.

	<ul style="list-style-type: none"> <li>- Initiation of parenteral nutrition (PN) to supplement nutrition. Mary was unable to tolerate enteral nutrition due to severe neutropenic colitis.</li> <li>- Education was provided on the importance of optimal nutrition, the presence of increased requirements during transplant, and the recommendation for strict food safety practices while immunocompromised.</li> <li>• Multidisciplinary Care: <ul style="list-style-type: none"> <li>- Symptom management by medical staff.</li> </ul> </li> </ul>
<p><b>WHO</b> delivered the care? <b>(Actor)</b></p>	<ul style="list-style-type: none"> <li>• Malnutrition screening - <i>nursing staff</i></li> <li>• Nutrition assessment and review - <i>dietitian &amp; nutrition assistant</i></li> <li>• Symptom management - <i>medical staff</i></li> <li>• Food service - <i>menu monitors</i></li> </ul>
<p><b>WHERE</b> was care delivered? <b>(Context)</b></p>	<p>Acute inpatient setting Major tertiary metropolitan hospital</p>
<p><b>WHO</b> received care? <b>(Target)</b></p>	<p>Adult inpatient (≥18 years) admitted for a Stem Cell Transplant</p>
<p><b>WHEN</b> was care provided? <b>(Time)</b></p>	<ul style="list-style-type: none"> <li>• Initial screening - <i>completed by within 8hrs of admission</i></li> <li>• Initial nutrition assessment - <i>completed prior to stem cell transplant (D-5)</i></li> <li>• Rescreening - <i>weekly</i></li> <li>• Nutrition review - <i>every 1-4 days from D0 onwards</i></li> <li>• Repeat nutrition assessment (PG-SGA) – <i>weekly</i></li> </ul>
<p><b>OUTCOMES</b></p>	<p>By ensuring appropriate protocols and initiatives are in place to support regular screening as part of usual care, changes in nutritional status can be detected early. In this case, the dietitian was able to confidently advocate for nutrition escalation with the multidisciplinary team, resulting in better outcomes for the patient.</p> <p>On reflection, initiation of malnutrition and sarcopenia screening pre-treatment and referral for multi-modal prehabilitation may have optimised Mary's nutritional status and physical performance prior to transplant.</p>