

Clinical Case Study

SITUATION	60M “John” electively admitted for a Melphalan Autologous Stem Cell Transplant (AutoSCT) on b/g of IgG kappa Multiple Myeloma.
WHAT care was provided? (Action)	<ul style="list-style-type: none">• Initial malnutrition screening:<ul style="list-style-type: none">- <i>Malnutrition universal screening tool (MUST) completed by nursing staff within 8hrs of admission</i>- <i>Referred to dietitian for MUST score of 2 (high risk due to unintentional 5-10% LOW within the past 3-6 months)</i>• Initial nutrition assessment:<ul style="list-style-type: none">- <i>PG-SGA = 15B</i>- <i>John 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.</i>- <i>John was eating well at the time of assessment and meeting his nutritional requirements with only a mild reduction in appetite since admission and no other nutrition impact symptoms.</i>• Repeat malnutrition screening:<ul style="list-style-type: none">- <i>MUST was repeated by nursing staff weekly on ‘Wednesday weight day’.</i>• Nutrition reviews:<ul style="list-style-type: none">- <i>John was reviewed regularly by nutrition (from D0 onwards)</i>- <i>This included a Nutrition Assistant (NA) review as part of a lunchtime ‘meal round’ which involved documenting how much of his meal (incl. any oral nutrition supplements) he consumed.</i>• Repeat nutrition assessment:<ul style="list-style-type: none">- <i>PG-SGA was 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.</i>- <i>John’s oral intake gradually declined during his 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.</i>• Interventions:<ul style="list-style-type: none">- <i>Tailoring of hospital meals and assistance with texture modification due to mucositis with the help of the dietitian and nutrition assistant.</i>- <i>Addition of HEHP items from the supplemental menu.</i>- <i>Trial and consumption of oral nutrition supplement drinks</i>- <i>Initiation of parenteral nutrition (PN) to supplement nutrition. John was unable to tolerate enteral nutrition due to severe mucositis, nausea, vomiting and significant diarrhoea in the setting of neutropenic colitis.</i>

Clinical Case Study

	<ul style="list-style-type: none"> - <i>Education was provided on the importance of optimal nutrition, the presence of increased requirements during a transplant, and the recommendation for strict food safety practices while immunocompromised.</i>
WHO delivered the care? (Actor)	<ul style="list-style-type: none"> • Malnutrition screening - <i>nursing staff</i> • Nutrition assessment and review - <i>dietitian & nutrition assistant</i> • Symptom management - <i>medical staff</i> • Food service - <i>menu monitors</i>
WHERE was the care delivered? (Context)	<p>Acute inpatient setting</p> <p>The Alfred Hospital – a major tertiary metropolitan hospital in Melbourne</p>
WHO received care? (Target)	Adult inpatient admitted for a SCT
WHEN was care provided? (Time)	<ul style="list-style-type: none"> • Initial screening - <i>completed by within 8hrs of admission</i> • Initial nutrition assessment - <i>completed prior to stem cell transplant (D-5)</i> • Rescreening - <i>weekly</i> • Nutrition review - <i>every 1-4 days</i> • Repeat nutrition assessment (PG-SGA) - <i>weekly</i>
OUTCOMES	<p>By ensuring appropriate protocols and initiatives are in place to support regular screening and rescreening as part of usual care, changes in nutritional status can be detected early. In this case, nutrition support was commenced prior to the patient developing hospital acquired malnutrition and prevented any further LOW from occurring in hospital.</p> <p>By screening for malnutrition risk early, the dietitian can proactively implement strategies and educate patients to optimise their nutrition before they become unwell. Following this with regular rescreening and assessments, the dietitian was able to confidently advocate for nutrition escalation with the multidisciplinary team, resulting in better outcomes for the patient.</p>