Comparison of three nutrition screening tools for patients with cancer in a regional cancer centre

S. M. Lewis
Velindre Cancer Centre, Whitchurch, Cardiff CF14 2TL, UK

The National Institute of Clinical Excellence (NICE) guidelines recommend that nutrition screening be carried out on all hospital admissions by health care professionals with appropriate skills and training in order to identify patients who are at risk of malnutrition(1). In the cancer setting, there is no consensus on the most appropriate screening tool to use so many patients at risk of malnutrition are left undetected. The study compared three nutrition screening tools; Patient Generated-Subjective Global Assessment (PG-SGA), which is a validated nutrition assessment tool for patients with cancer and recommended by the American and Australian Dietetic Association as the gold standard for assessment; Malnutrition Universal Screening Tool (MUST), which is a recognised nutrition screening tool in the UK though not validated for use in patients with cancer; The Moreland Score, which is the current nutrition screening tool used within the regional cancer centre. Each of the three nutrition screening tools were completed on 30 participants being admitted for planned chemotherapy by a trained researcher.

Of the 30 participants, 33% were diagnosed with cancer of the head and neck, 30% diagnosed cancer of the oesophagus and the remaining were of a variety of tumour sites. Variation in the prevalence of malnutrition was observed between the three nutrition screening tools. The PG-SGA identified 70% of participants as malnourished, whereas the MUST identified 60% and the Moreland Score 67%. Both the MUST and Moreland Score showed a significant correlation with the PG-SGA showing that the two measures are highly related (P<0.03 and P<0.0001, respectively).

Evidence indicates that MUST is easy to use(2) and has a high inter observer reliability(3) but there have been reports of problems accessing calculation charts for BMI and % weight loss(4). The PG-SGA has been found to require a more labour intensive training due to the need for a physical examination(5) which may not be realistic to undertake in a busy hospital setting. However, results show a high inter observer reliability(6). The Moreland Score has never been validated or tested for inter observer reliability(6). The Moreland Score is the preferred nutrition screening tool for use with patients in the regional cancer centre due to its relative ease for completion, recognition within the cancer centre and no need for complex calculations or physical examination. Further research is required to validate and test the reliability of the Moreland Score.