

Malnutrition Matters, Joint BAPEN and Nutrition Society Meeting, 13–14 October 2009, Cardiff

Can a Nutritional Support Team improve the nutritional standard of care in patients with fractured neck of femur?

N. M. Smith¹, A. Padwick², N. Pendleton³, A. Myers², J. L. Shaffer² and K. Farrer¹

¹Nutrition and Dietetic Department, Salford Primary Care Teaching Trust, Salford, UK, ²Intestinal Failure Unit, Salford Royal NHS Foundation Trust, M6 8HD, UK and ³Orthopaedic Directorate Salford Royal NHS Foundation Trust, M6 8HD, UK

Despite a growing awareness of the dramatic impact on quality of life and treatment costs^(1,2) patients with a hip fracture often have a poor nutritional status⁽³⁾ which is associated with increased risk of complications, morbidity and mortality. Adequate nutrition is essential in the care of the hip fracture patients in order to achieve recovery without complications. The aim of this pilot was to investigate the effects of an improved care intervention in relation to nutritional status. Following patient consent, Mid Arm Circumference (MAC) and Hand Grip Strength were measured on admission and discharge and length of stay recorded (Table 1).

From January 2008 to June 2008, a total of 81 patients over the age of 75 years with a fractured femur were seen by the Nutrition Support Team (NST). Seventy six patients (94%) were screened by the NST on admission using the Malnutrition Universal Screening Tool (MUST); 43 (57%) of patients were assessed as medium or high risk. Due to cognitive impairment only 31 and 21 patients respectively consented to MAC and grip strength being measured on admission and discharge,

	Low risk MUST on admission		Medium and high risk MUST on admission	
	Admission	Discharge	Admission	Discharge
Median	28.4	28.7	25.6	25.6
MAC cm (range)	(21.5–34)	(22–34)	(13.5–32)	(14–32)
Median	17	19	11.5	15.6
Hand grip kg (range)	(6–28)	(8–30)	(3–21)	(5–23)
Median	–	16 (4–39)	–	22 (3–65)
Length of stay; days (range)				

Sixty five percent of all patients were commenced on nutritional support; only 8% of patients required artificial nutrition support; 54% required two oral sip feeds per day; providing an additional 660kcal and 28g protein. Data from 2007 highlighted only 19% of orthopaedic patients were screened within 24h of admission, by introducing a team approach this improved documentation and ensured accuracy. The average length of stay was reduced to 23 days; a reduction of 7 days when compared to 2005/6 data. To conclude, nutritional standards can be improved and length of stay reduced in a high risk patient population by introducing a multi-disciplinary approach to nutrition.

1. Allman RM. (1997) *Clin Geriatr Med* **13**, 421–436.
2. Barczack CA, Barnett RI, Childs EJ *et al.* (1997) *Adv Wound Care* **10**, 18–26.
3. Bastow MD, Rawling J & Allison SP (1983) *Lancet* **1**(8317), 143–146.