

The relationship between inadequate nutritional intake, length of stay and mortality for patients requiring percutaneous endoscopic gastrostomy feeding

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Percutaneous endoscopic gastrostomy (PEG) feeding has become a mainstay of nutritional support for individuals with swallowing impairment and intact gastro intestinal tract. However, the procedure can be associated with serious complications^(1,2). There were concerns raised locally relating to the mortality rate and the length of stay for these patients.

A retrospective case analysis was carried out on all PEG procedures over a 12-month period from June 2005 to June 2006.

During that time sixty-three consecutive patients who underwent PEG placement were identified. Two patients were excluded due to incomplete records. Therefore, sixty one patients were included in the audit, forty-seven (77%) inpatients, fourteen (23%) outpatients, and the mean age was 73 years. The most common cause of death was aspiration pneumonia (40%), which was most prevalent during the third week after PEG insertion. Of the forty-seven inpatients, 68% were without adequate nutrition for more than 5 d prior to PEG insertion. Of the patients who were inadequately nourished pre-PEG, 90% died within 30 d (Fig. 1). The patients with inadequate nutrition pre-PEG had a considerably longer duration of stay (27 additional days) than patients who were adequately nourished prior to PEG insertion (Table 1).

The audit would indicate that patients who received inadequate nutrition have a longer duration of stay and higher mortality. The reasons for receiving inadequate nutrition are multi-faceted. This audit highlights the need for an organized multi-disciplinary nutrition team to coordinate pathways of care for all patients requiring nutritional support.

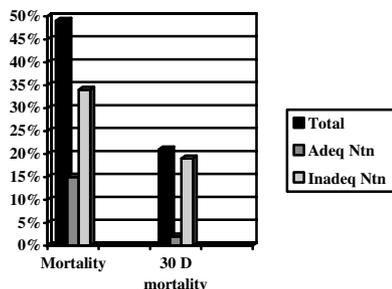


Fig. 1 Mortality

Table 1. Length of stay

	Adequate nutrition	Inadequate nutrition
Average length of stay (d)	41	68

- Clarke J, Cranswick G, Dennis MS, Flaig R, *et al* (2005) *Lancet* 365, 764–772.
- NCEPOD (2004) The 2004 report of the national confidential enquiry into patient death. Scoping our practice. www.ncepod.org.uk/2004.htm.