

## Journal watch

### **A prospective evaluation of outcome in patients referred for PEG placement.**

Kenji Kobayashi; Gregory S. Cooper; Amitabh Chak; Michael V. Sivak Jr.; Richard C. K. Wong (*Gastrointest Endosc* 2002;55:500-6.)

Prepared by: Dr Yoko Tarumi

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#### **Abstract:**

Background: PEG feeding is not recommended for short-term use because the 30-day mortality after PEG placement is substantial. The primary aim of this study was to prospectively identify factors predictive of survival in patients referred for PEG placement. Methods: All patients for whom gastroenterology consultation was sought for feeding PEG placement were prospectively studied. Demographic data, Charlson comorbidity index, and functional status were recorded at entry. After PEG placement, patients were followed for up to 12 months.

Results: Of the 67 patients for whom consultation was requested, 58 were eligible for the study and 50 underwent PEG placement. The 7-day and 30-day mortality rates in the PEG placement group were 4% and 20%, respectively. In multivariate analysis, only the Charlson index  $\geq 4$  was associated with decreased survival time (relative hazard = 2.9: 95% CI [1.20, 7.21],  $p = 0.019$ ). Median survival in patients with Charlson comorbidity index  $\geq 4$  was significantly shorter than that in patients with Charlson index  $< 4$  ( $p = 0.013$ ).

Conclusions: A Charlson comorbidity index  $\geq 4$  was significantly associated with shorter patient survival after initial consultation. Careful consideration of predictive factors of survival may improve patient selection for feeding PEG placement. Note: Carlson Index is the comorbidity index that was developed to predict the long-term ( $\geq 1$ yr) risk of death from comorbid disease in longitudinal studies and was originally validated in a cohort of patients with breast cancer.

#### **Comments:**

##### Strengths:

This is a prospective study to establish the factors associated with poor prognosis after PEG placement for feeding purpose, in order to establish practical patient selection guidelines.

##### Weaknesses:

As the authors stated the number of gastrostomies has been increasing since PEG was introduced in 1980. The reasons for the wide-spread use of PEG-assisted nutrition may include the aging population, technical ease and availability of PEG placement, and the mandatory PEG placement required by some nursing homes for residents who are unable to swallow. In addition, certain physician-specific factors probably play an important role (e.g. clinical experience, personal belief, fear of malpractice) as well as other, less well-defined variables. It is thus difficult for this complex decision making process to be completely objective. Because of these reasons, it would be difficult to conduct a prospective randomized controlled study on PEG placement for feeding purposes.

The authors also suggest that the limitations of this study include the small patient numbers, incomplete follow-up of patients in terms of functional status and lack of assessment of patients' quality of life after PEG placement. Selection population bias is another issue as this study was conducted at a single urban, academic medical center in the US and thus the results may not be applicable to other patient populations and clinical settings.

Relevance to palliative care:

Although the majority of patients in this study were not cancer patients, it is important to be aware of the possible poor prognosis after PEG placement for feeding purposes. This is especially relevant in cancer patients who are incompetent to make decisions regarding PEG placement. This report also suggests potential controversy about referring patients who receive PEG feeding to hospice.