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# Complications arising from percutaneous endoscopic- and radiologically-inserted gastrostomies in a cohort of patients with head and neck cancer

N. A. Bergin[1], A. Dale[2] and A. Holdoway[1]
[1]*Department of Nutrition and Dietetics and* [2]*Clinical Audit Department, Royal United Hospital Bath, Combe Park, Bath BA1 3NG, UK*

Gastrostomy placement is often required to help maintain and/or improve nutritional status in patients with head and neck cancer. In this hospital Trust radiologically-inserted gastrostomies (RIG) have been the preferred route for patients with head and neck cancer due to the physical problems associated with the percutaneous endoscopic gastrostomy (PEG) procedure in this patient group. Previous studies have revealed higher complication rates with RIG when compared with PEG(1,2). The present audit aimed to evaluate complications arising from PEG or RIG placement in this patient group.

Twenty-six patients with head and neck cancer who had either a PEG (*n* 5) or RIG (*n* 21) inserted between January 2006 and December 2007 were retrospectively audited. Methodology was based on a similar audit(1). Medical, nursing and dietetic documentation were reviewed.

Reasons for inserting a gastrostomy were reduced nutritional intake arising from anticipated dysphagia pre- or with treatment (65%), present severe dysphagia (15%), side effects related to treatment (8%), not documented (12%). Reasons for inserting a RIG instead of a PEG were anticipated failure of PEG (76%), contraindication for PEG (10%), not documented (14%). Complications that occurred in the PEG and RIG group within the first week of placement are detailed in the Table.

| | PEG (*n* 5) | RIG (*n* 21) |
|---|---|---|
| Major complications | | |
| Perforation, tube dislodgment, peritonitis | 0 | 3 (14%) |
| Minor complications | | |
| Minor infection | 0 | 1 |
| Inflammation | 0 | 0 |
| Trapped wind | 1 | 1 |
| Other* | 2 | 4 |
| Total minor complication | 3 (60%) | 6 (29%) |

*Abdominal discomfort, abdominal pain, abdominal tenderness, abdominal bloating, leakage around RIG or PEG site, pyrexia of unknown cause.

There were no major complications in the PEG group compared with 14% in the RIG group. Minor complications occurred in 60% of the PEG group and 29% in the RIG group. These data compare with the results of the earlier study that reported a major complication rate of 16% in RIG *v*. 2% in PEG(1). The higher major complications in the RIG group may reflect the fact that in this unit RIG are inserted in those with more advanced head and neck cancer. As the 2 groups are not evenly matched and the sample size is small it is difficult to draw absolute conclusions. However, due to the major complications experienced in the RIG group, this audit has prompted the head and neck multidisciplinary team, including the Radiologists and Gastroenterologists, to review procedures for selection criteria for type of gastrostomy tube inserted in this patient group and monitor closely for complications post-placement.

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