



Percutaneous Endoscopic Gastrostomy & Gastrostomy Tube Complications at a Rural Referral Hospital: Aetiology & Outcomes



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Anecdotal reports of high complication rates after Percutaneous Endoscopic Gastrostomy (PEG) placement at Manning Rural Referral Hospital (MRRH) led to a decision to undertake this study. Previous studies of PEG/Gastrostomy tube complication rates at hospital sites elsewhere reported rates of complications ranging from 2% to 70% depending on the definition of “complication”, the patient population used, and the time period of the study.

This study determined rates and types of complications for patients who had a PEG tube placed, were admitted (for any reason) with an existing PEG/Gastrostomy tube, had an existing PEG tube removed, had another PEG tube inserted, or who presented to ED with a PEG/Gastrostomy tube at MRRH over a five year period (2002–2007). Data was collected by the researcher using a retrospective medical file audit involving 54 individual patients (137 admissions to hospital and 20 Emergency Department presentations), and a staff questionnaire targeting 142 participants (37 non-nursing, and 105 nursing staff).

The overall complication rate for patients admitted to the hospital who had a PEG tube placed or who had an existing PEG/gastrostomy tube was 28%. The overall minor complication rate was 15% in comparison to major at 13%. The complication rate for patients who had PEG tube placed at Manning Rural Referral Hospital was 42%, with minor complications at 26%, compared to major at 16%. The complication rate, both overall (28%), and for PEG tubes placed (28%) is within previously reported ranges of 2% to 70%. However the reported range is wide and the complication rate for PEG tubes placed (42%) was at the range’s higher end. This raises the question of preventability and the importance of analysis of the data to identify effective strategies to reduce complications.

Potential contributing factors to PEG tube complications at MRRH included patient characteristics (such as age), lack of monitoring of patient weight, no standard policy/procedure on PEG tube management (including pre and post insertion), no clear guidelines on patient selection suitability criteria for PEG placement, inappropriate medications, and lack of staff knowledge (self rated). Recommendations from this study include standardising patient screening and preparation for PEG tube placement with the implementation of the Hunter New England Area Health Service guideline for PEG/Gastrostomy tube management, and the provision of ongoing training and education for staff on PEG/Gastrostomy tube care.

For the full report on this project visit our website, follow the link to the Rural Research Capacity Building Program and click on ‘view completed projects’

Michelle is a Clinical Dietitian working at Manning Rural Referral Hospital at Taree. She has worked in a number of clinical areas and has an interest in enteral/parenteral feeding, and quality improvement.



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