



Tube Feeding Initiation After PEG Tube Placement: Does Time to Feeding Matter?

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Background

Historically, tube feeds have been initiated 24 hours after PEG tube placement. Recent literature suggests early initiation is safe, however, there is limited literature within the adult trauma population

The aim of the study was to compare early versus late tube feed initiation after PEG tube placement within our adult trauma population

Outcomes

Our primary outcome is: feeding intolerance at 12 hours, 24 hours, 48 hours after initiation of feeds

Our secondary outcomes are: length of stay, complications such as tube leakage, bleeding, dislodgement of feeding tube, and mortality at 30 days

Methods

- Retrospective study
- Data accessed from our Level 1 Trauma Database from January 2014 to December 2018

Inclusion Criteria:

Older than 18 years old, PEG for long term nutritional access, performed in OR

Exclusion Criteria:

Less than 18 years old, PEG for non nutrition, Bedside, Open or Laparoscopic Technique

Table 1: Demographics

		N=295
ISS*	Mechanism of Injury^	27 (20, 35)
	MVC	53
	Fall	26
	GSW	10
	MCC	6
	Other	6
Injuries^	TBI	58
	Spinal Cord Injury	16
	Thoracic Injury	11
	Multiple Injuries	13

Abbreviations: ISS, injury severity score; MVC, motor vehicle collision; MCC, motorcycle collision; GSW, gunshot wound; TBI, traumatic brain injury

*Median and Interquartile Range (IQR)

^ Percentage

Table 2: Results

Feeding Intolerance	Feeding Time < 24 Hours, No. (n=164) (%)	Feeding Time > 24 Hours, No. (n=131) (%)	p-value
at 12 hours			
No	156 (95)	126 (96)	0.66
at 24 hours			
No	162 (99)	129 (98)	0.82
at 48 hours			
No	157 (96)	126 (96)	0.85
Post Operative Complications			
No	158 (96%)	121 (92)	0.13

Conclusions

Our findings suggest that within the trauma population, you can consider feeding earlier with no difference to feeding intolerance and complications.

Further prospective trials to determine the optimal feeding time are warranted

References

- Rahnemai-Azar AA, Rahnemaiazar AA, Naghshizadian R, Kurtz A, Farkas DT. Percutaneous endoscopic gastrostomy: indications, technique, complications and management. World J Gastroenterol 2014;20:7739-51.
- Loser C, Wolters S, Folsch UR. Enteral long-term nutrition via percutaneous endoscopic gastrostomy (PEG) in 210 patients: a four-year prospective study. Dig Dis Sci 1998;43:2549-57.
- Friginal-Ruiz AB, Lucendo AJ. Percutaneous Endoscopic Gastrostomy: A Practical Overview on Its Indications, Placement Conditions, Management, and Nursing Care. Gastroenterol Nurs 2015;38:354-66; quiz 67-8.
- Stayner JL, Bhatnagar A, McGinn AN, Fang JC. Feeding tube placement: errors and complications. Nutr Clin Pract 2012;27:738-48.
- Blumenstein I, Shastri YM, Stein J. Gastroenteric tube feeding: techniques, problems and solutions. World J Gastroenterol 2014;20:8505-24.

