



W : Gastrostomy; Mortality rate; Statistics; Radiological

Radiologically inserted gastrostomy (RIG) is an interventional radiology (IR) procedure with a history four decades long [1]. Broadly speaking, there are two insertion mechanisms, one by which the gastrostomy catheter passes into the stomach through the skin (Percutaneous Radiological Gastrostomy-PRG), and the other by which the gastrostomy catheter passes out of the skin through the stomach (Per-Orum Inserted Gastrostomy-

Citation: Hennessy M (2022) Exploring 30 day Mortality Variability in the Context of Radiological Gastrostomy: How Important Are Month to Month Differences? J Gastrointest Dig Syst.12:678.

would die within 30 days each month can be calculated by Poisson probability. These are displayed, alongside the actual observed frequency, in (Table 2). Chi-squared test of these observed and expected numbers is not significant ($p=1$). In other words, the observed RIG 30 day mortality is statistically indistinct from predicted random variation. A Poisson probability distribution assumption predicts a probability that more than two patients die within 30 days of gastrostomy in any month is 1.3%.

Citation: Hennessy M (2022) Exploring 30 day Mortality Variability in the Context of Radiological Gastrostomy: How Important Are Month to Month Differences? J Gastrointest Dig Syst.12:678.

Inserted Gastrostomy. Dig Dis Sci 58(12):3558-3565.

13. Spiegelhalter DJ (2002) Mortality and volume of cases in paediatric cardiac surgery: Retrospective study based on routinely collected data. *BMJ* 323:1-5.
 14. Spiegelhalter D (2019) *Statistics: The Art of Learning from Data*. PELICAN.
 15. NHS Health Research Authority. *NHS HRA Decision Tools: Glossary*.
 16. R Core Team (2020) *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing.
 17. RStudio Team (2020) *RStudio: Integrated Development Environment for R*. RStudio, Inc.
 18. Spiegelhalter DJ (2005) Funnel plots for comparing institutional performance. *Stat Med* 24:1185-1202.
 - 19.
-

47. Blondet A, Lebigot J, Nicolas G (2010) Radiologic versus Endoscopic Placement of Percutaneous Gastrostomy in Amyotrophic Lateral Sclerosis: Multivariate Analysis of Tolerance, Efficacy, and Survival. *J Vasc Interv Radiol* 21(4):527-533.
 48. Leeds JS, McAlindon ME, Grant J, Robson HE, Lee FKT, et al (2010) Survival analysis after gastrostomy: A single-centre, observational study comparing radiological and endoscopic insertion. *Eur J Gastroenterol Hepatol* 22(5):591-596.
 49. Pruthi D, Duerksen DR, Singh H (2010) The Practice of Gastrostomy Tube Placement Across a Canadian Regional Health Authority. *Am J Gastroenterol* 105(7):1541-1550.
 50. Lowe AS, Laasch HU, Stephenson S (2012) Multicentre survey of radiologically inserted gastrostomy feeding tube (RIG) in the UK. *Clin Radiol* 67(9):843-854.
 51. La Nauze RJ, Collins K, Lyon S (2012) Outcomes of percutaneous endoscopic gastrostomy versus radiologically inserted gastrostomy tube insertion at a tertiary hospital. *Clin Nutr* 7(4):e144-e148.
 52. Power S, Kavanagh LN, Shields MC (2013) Insertion of Balloon Retained Gastrostomy Buttons: A 5-Year Retrospective Review of 260 Patients. *Cardiovasc Intervent Radiol* 36(2):484-491.
 53. Allen JA, Chen R, Ajroud-Driss S (2013) Gastrostomy tube placement by endoscopy versus radiologic methods in patients with ALS: A retrospective study of complications and outcome. *Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration* 14(4):308-314.
 54. ProGas Study Group (2015) Gastrostomy in patients with amyotrophic lateral sclerosis (ProGas): A prospective cohort study. *Lancet Neuro* 14(7):702-709.
 55. Delf J, Jepson S, Ramachandran S (2020) Predictors for 30-day mortality and complications following radiologically inserted gastrostomies: A single centre, large cohort review. *Clin Radiol* 75:375-382
-