

Frequency of nasogastric tube insertions in acute stroke patients – a retrospective study

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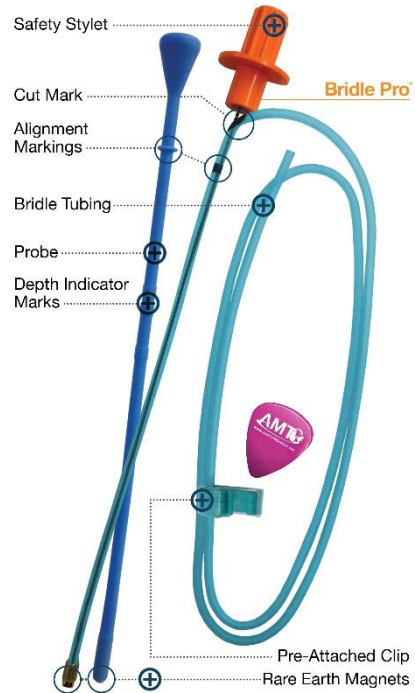
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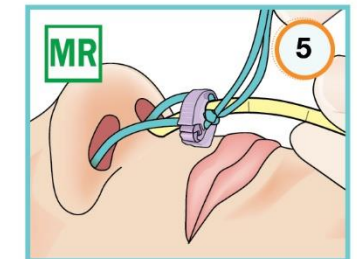
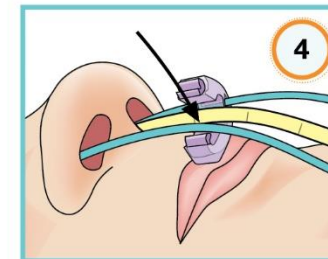
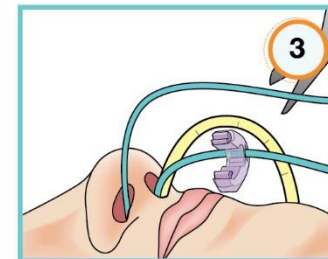
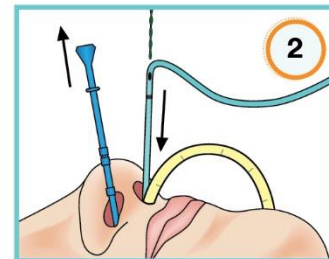
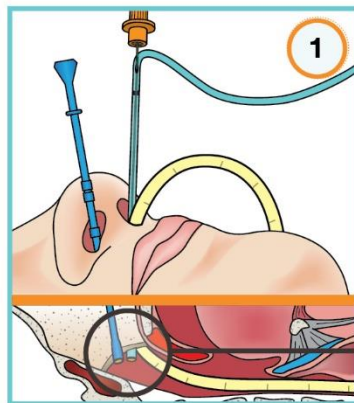
Background

- Dysphagia occurrence in stroke is approx. 20.7%¹
- Associated with post admission complications
- Nasogastric tubes (NGTs) are a common place intervention to allow medication administration or to prevent malnutrition²
- Recent policy change has prompted a review of NGT practices locally and wider research findings

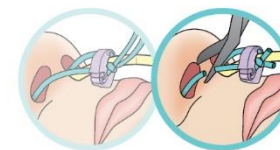
Bridle use



Safe Placement*



Advance probe in nare opposite the nasal tube, then safety stylet with bridle catheter in the other nare until magnets connect (you may hear an audible "click"). Remove safety stylet from the bridle catheter.



Device Removal

- Cut one strand of bridle catheter
- Pull the bridle & nasal tube out of the nose

*This is not a substitute for the directions for use. To find out how to secure all AMT Bridle™/Bridle Pro™ clips see our directions for use.

Images clockwise: Bridle equipment, bridle as it appears externally when used on patient and use instructions³

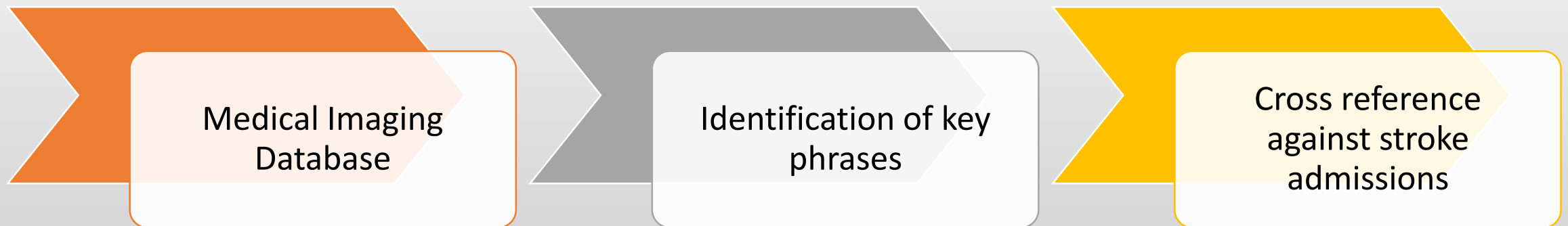
Aims

Determine the frequency of nasogastric tube insertion in a high volume metropolitan stroke centre

- What impact will this policy change on our patient cohort?
- What issues can be identified with the use of NGTs locally?

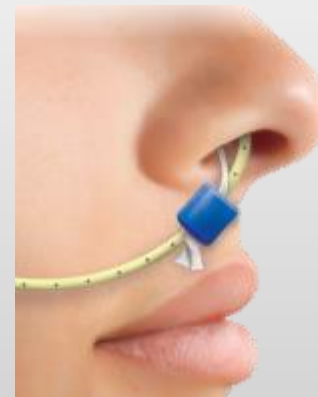
Method

- No ICD10 coding
- No WEIS codes
- Not currently captured in our stroke data or AuSCR data
- Not viable to review all stroke admissions
- Auditing of imaging with identified key phrases



Inclusion/ Exclusion

- ≥ 18 years of age
 - Diagnosis of Stroke/TIA in 2018
 - Required a NGT for nutrition or pharmacotherapies.
 - Any fixation method accepted
-
- +/- Intubation



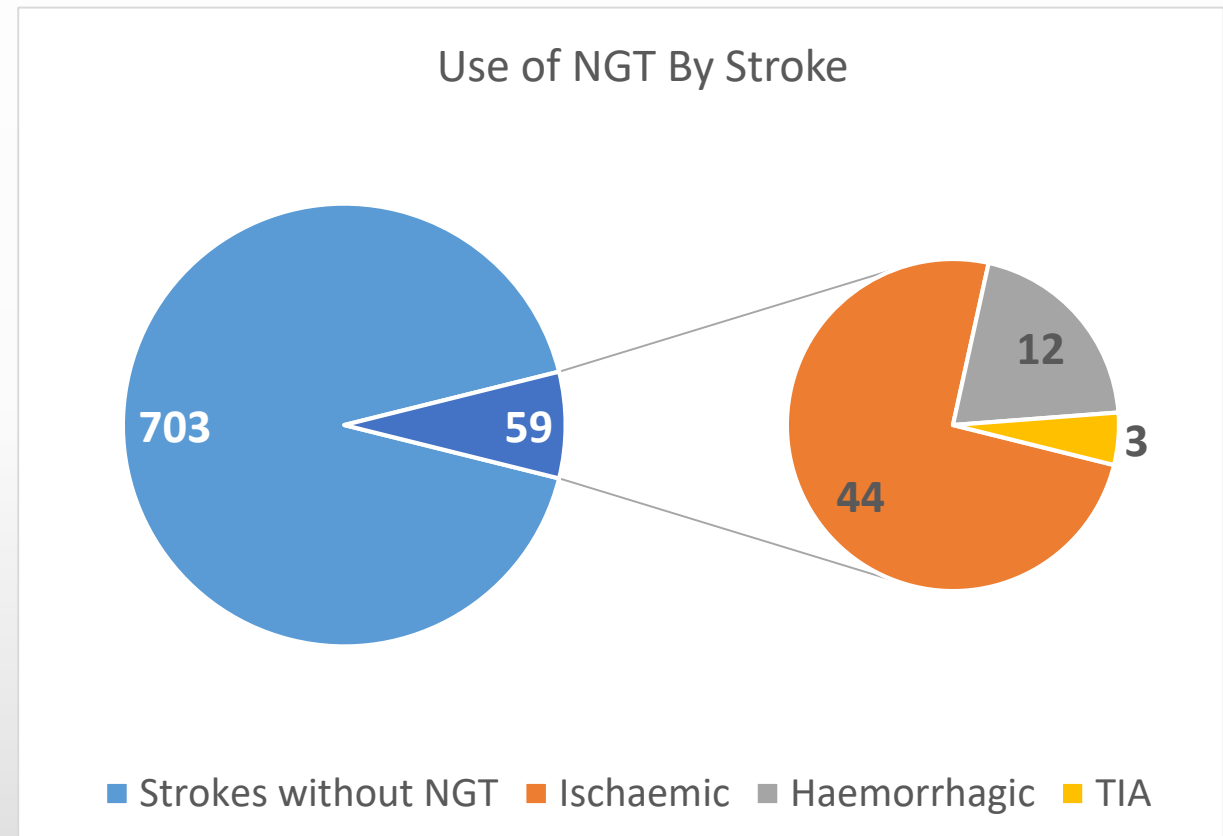
Bridle³



Nasofix⁴

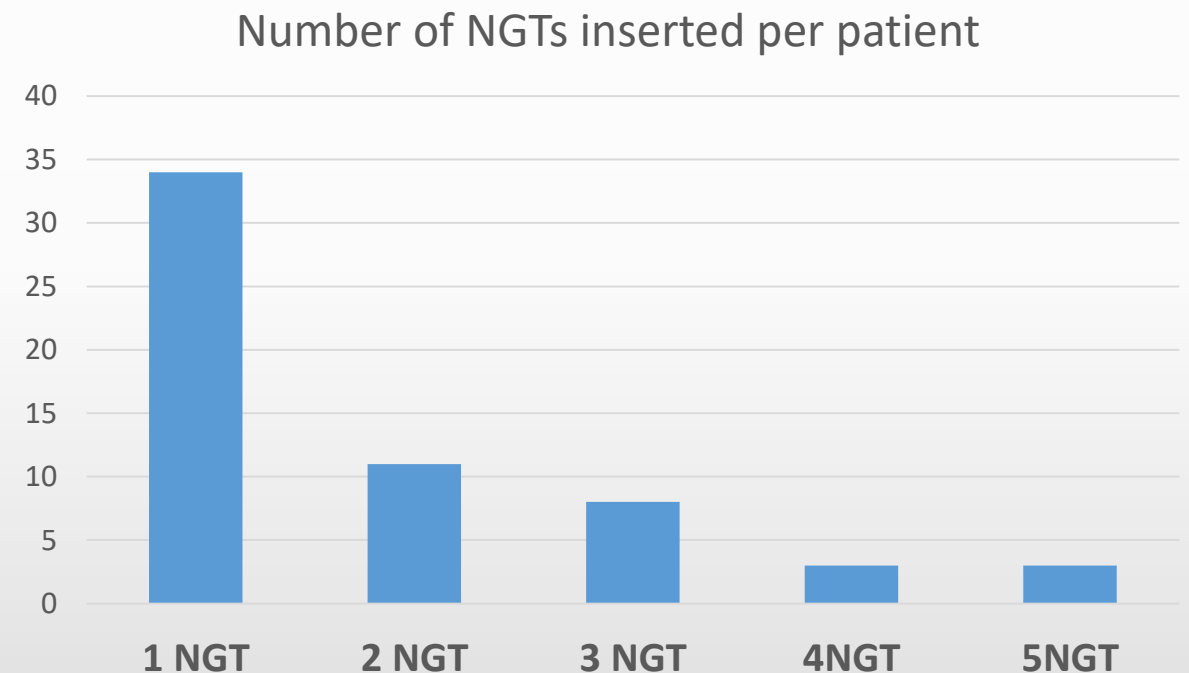
Results: Nasogastric Tube Rates

- 59 patients required ≥ 1 NGT (7.7%)
 - Ischaemic 74.6%
 - Haemorrhagic 20.3%
 - TIA 5.1%



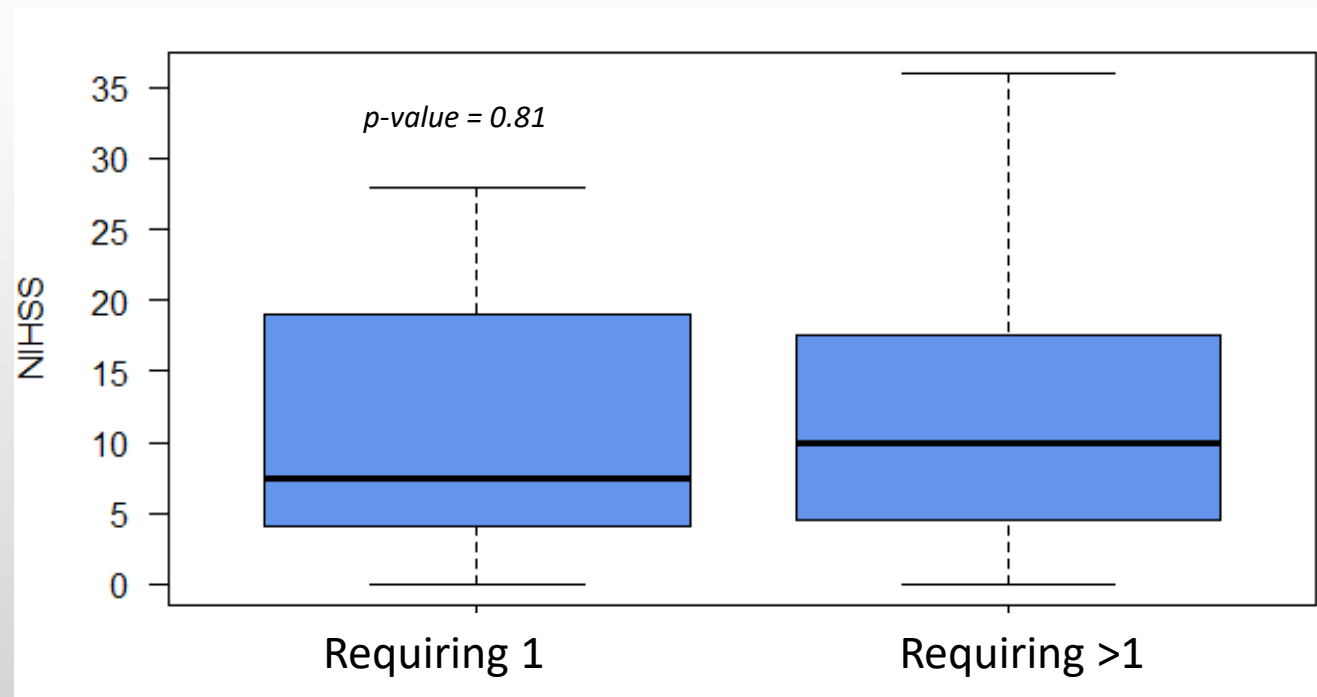
Results: Nasogastric tube rates

- 42.4% required ≥ 2 NGTs
- Predominant method of fixation was adhesive tape
- Dislodgement or removal by the patient documented in one-third of cases

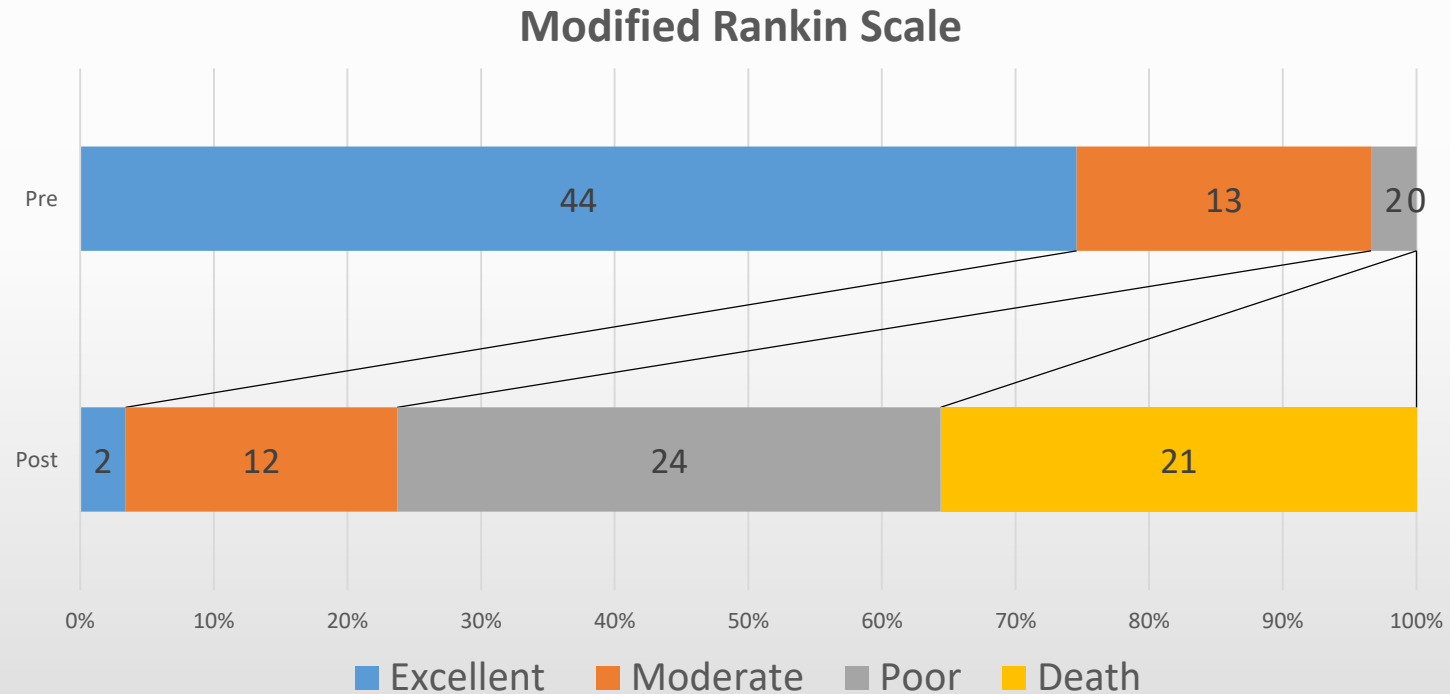


Results: Stroke Severity

- Patients requiring >1 NGT had a median NIHSS of 10, compared to 7.5 for those requiring only 1 NGT



Results: Disability



Results: Documentation Insights

- Contemporaneous notes are not current practice within the stroke unit, except in critical circumstances
- Where there was a difficult insertion requiring video fluoroscopy documentation was more concise

Conclusions

- 42% of patients required ≥ 2 NGT
- There was no significant difference in median NIHSS between NGT insertion cohorts
- 76% of patients requiring an NGT was associated with a poor outcome or death at discharge from the stroke unit.
- Where to from here?
 - Education required in the correct practice of documentation of NGT
 - Review of policy to support and guide fixation of NGTs
 - Implication of NGTs on patients at 3 months

Questions?



References

1. Arnold, M., Liesirova, K., Broeg-Morvay, A., Meisterernst, J., Schlager, M., Mono, M. L., ... Sarikaya, H. (2016). Dysphagia in Acute Stroke: Incidence, Burden and Impact on Clinical Outcome. *PloS one*, 11(2), e0148424. doi:10.1371/journal.pone.0148424
2. Dennis, M., Lewis, S., Warlow, C., FOOD trial collaboration (2006). FOOD: a multicentre randomised trial evaluation feeding policies in patients admitted to hospital with recent stroke. *Lancet*, 365(9461), pg 764-72.
3. AMT bridle family nasal tube retaining system (2019). Retrieved from: <https://www.appliedmedical.net/enteral/bridle/>
4. Nasofix securement device. Retrieved from: <https://www.convatec.com.au/products/pc-ccc-area-securement-devices/f146a845-e6cd-4bd7-a021-57a2126503c9>