

A Trial of Combined use of Corgrip and AMT Nasogastric Tube Retention Devices (Nasal Bridles) to increase number of successful Nasal Bridle placements



Tadhg O’Ferrall¹

¹Tipperary University Hospital, Clonmel.

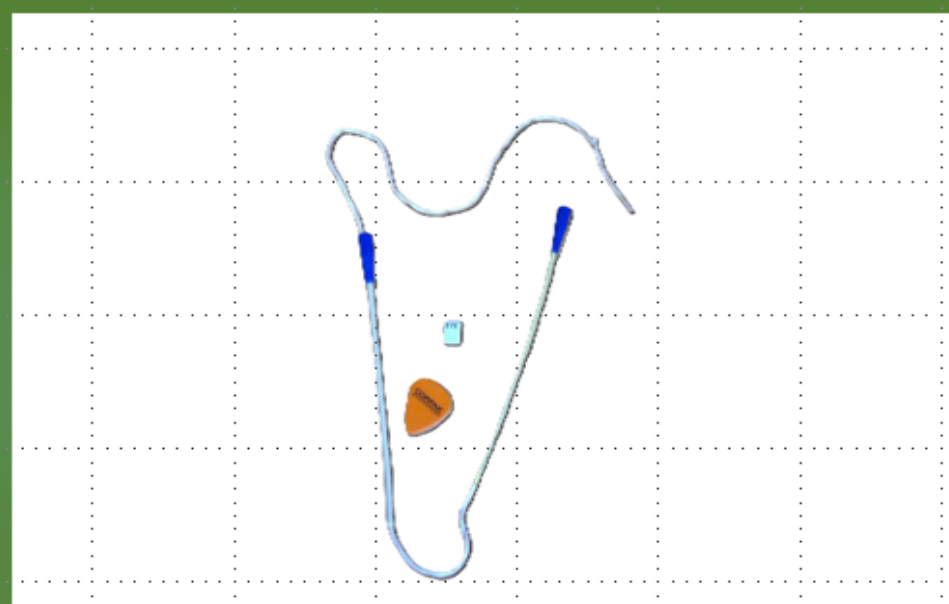
Introduction

Nasogastric Tube Retention Devices (more commonly known as nasal bridles) can be used to try prevent nasogastric tube (NGT) displacements. These devices typically involve a loop of cotton or polymer material being created around the vomer bone of the nose with an external clip attaching to the loop and the NGT to fix it in place. This procedure is not always successful and sometimes the loop cannot be created and the nasal bridle placement fails. This trial looked to increase the number of successful Nasogastric Tube Retention Device (Nasal Bridle) placements in the hospital through use of two different brands of Nasal Bridles. There was a secondary aim of reducing costs associated with Nasal Bridle and Nasogastric Tube placements.

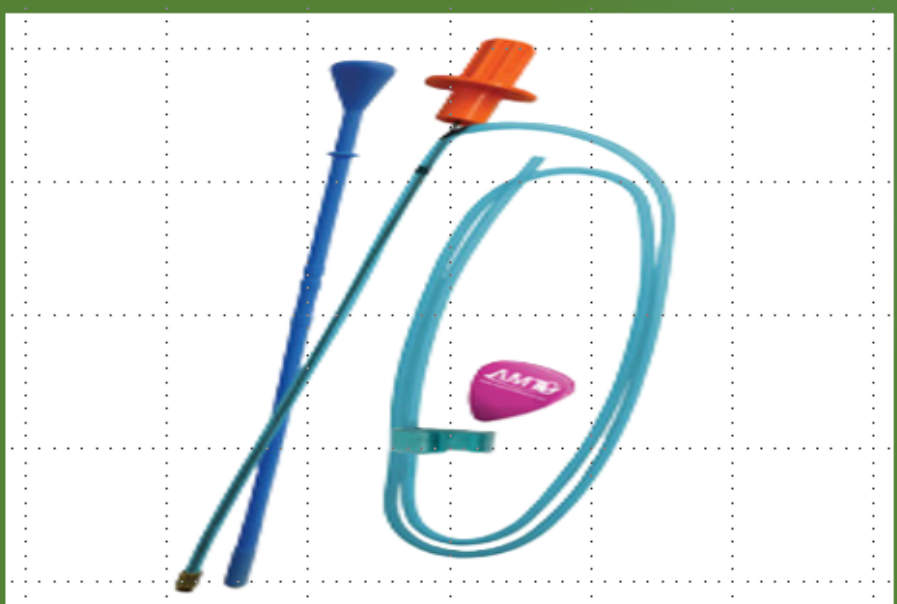
Methods

The two types of nasal bridles used in the trial were the Corgrip nasal retention system and the AMT nasal bridle Pro. 5 AMT nasal bridles were provided free of charge by Technopath to trial. Corgrip was attempted as first line insertion, followed by AMT if required. This was done as the Corgrip device was the main nasal retention device used in TippUH at the time, and was also the less expensive of the two. The study started from the first nasal bridle required after the AMT device arrived and finished once the last AMT device was used. The study took place from 14.10.23 and 14.02.24. Results of insertions from all staff that reported the insertion were included in the study.

What is the difference between Corgrip and AMT Bridle Pro?



Corgrip (AVANOS)



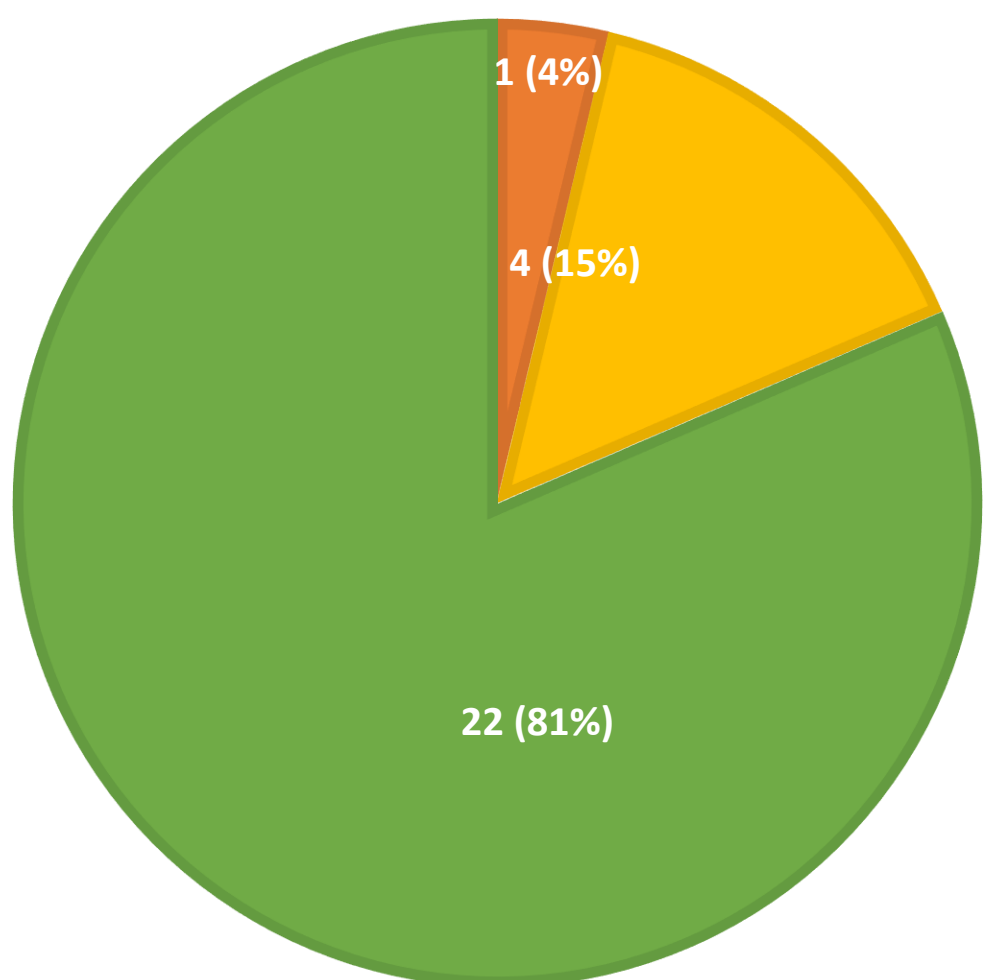
AMT Bridle(TECHNOPATH)

Results

27 Insertions were attempted over 4 months. Both the Corgrip and AMT failed on the 27th insertion. This was also when the last AMT nasal bridle Pro was used so this was when the study/audit finished. There were no failed insertions of the AMT device before this. 22 insertions were done with the Corgrip, 4 were done with the AMT. Without the AMT, there would have been a 15% failure (4/26) in nasal bridle insertions.

- Failed CORGRIP and AMT
- CORGRIP failed, AMT successful
- Used CORGRIP, No need for AMT

RESULTS OF TRIAL



Conclusion and Next Steps

Having availability of both the AMT and Corgrip nasal bridles increases number of successful nasal bridle insertions as in certain cases the AMT nasal bridle can be inserted where the Corgrip fails to be inserted.

In this trial, 15% of patients would not have had a successful nasal retention device insertion to help prevent their NGT being misplaced if the AMT nasal bridle was not available.

However, it is not cost effective to just switch to using the AMT nasal bridle. In a cost comparison, it was found to be cheaper to try Corgrip insertion followed by AMT if needed (€714 per 26 insertions or approx. €2000/year).

Financial Costing of Corgrip & AMT nasal bridle devices

CORGRIP cost €91

AMT cost €140

$26 \times 91 + 4 \times 140 = €2926$

$26 \times 140 = €3640$

Use of a combination of the two devices led to a saving of €714 euro in 4 months which would be >€2000/year

Following this trial, a decision was made to stock the AMT nasal bridle Pro to use in cases where the Corgrip device was unsuccessful. A database was created to document insertions (both failed and successful) of nasal retention devices in TippUH. This again found that the AMT device helped reduce number of failed insertions. In a two year period between 16.05.2024 and 16.05.2026 there were 6 instances where the AMT device succeeded where the Corgrip device failed (6/82, 7%). This was lower than the original trial (15%) failure rate. This trial shows the importance of having multiple providers of devices to ensure optimum patient outcomes.

Disclaimer/Conflict of Interest

This author did not receive any funding, payment, nor gratuity from either company that produced the nasal retention devices used in the trial. There is no conflict of interest.



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