

Aims: To provide a guideline for sending patients home with nasal bridle NJ/NG securement devices.

Patient meets the following Inclusion criteria for ongoing need for NG/NJ with a NB at discharge?

- Consider when patients needs NG/NJ for:
 - Enteral feeding (long term need, hypoglycemia, caloric intake, oral aversion, etc.)
 - Medication/fluid administration
- Consider when high risk for tube misplacement (anatomical abnormalities or intolerance of less invasive tube securement)
- Consider when difficulty in tube replacement (anatomical abnormalities, patient intolerance of tube replacement, burden on family/caregivers to travel for replacement)
- Must have discharge support available (Note 1)
- Family/caregivers agree with NB option

No

Yes

**Do not use NB
Off-guideline**

Provider/nurse places nasal bridle. (See Nasal Bridle Insertion and Nasal Bridle Removal procedures.)

Develop and Document (Discharge Orders and Summary) Discharge Plan

- **Provider:** determine outpatient ordering provider for planned replacements (Q 30 days) – Pediatric Surgical Associates, MN Gastroenterology, Other
- **RN:** Complete education with family/caregiver including written instructions, return demo (tube replacement, troubleshooting, monitoring)
- **Case Manager:** Assure supplies for home obtained for replacement, schedule first NB replacement visit (Note 2)
- **Provider+ Nutrition:** Develop and order home enteral feeding plan
- **Team:** Review replacement follow-up plan with family/caregiver

Discharge Patient

- RN to assure that NB replacement instructions are in discharge summary provided to family/caregiver
- Case manager to confirm first NB replacement in sedation procedural services (SPS) is scheduled (Note 2)

EXCLUSION GUIDELINES

Patients **excluded** from this guideline:

- Skin or nasal disorder precluding bridle placement.
- Patient requires Home Care but does not meet HC criteria.

NOTE 1

Discharge Support Considerations:

Are there adequate resources for the parent/caregiver to coordinate replacement of NG/NJ and monitor correct placement?

Does patient require Home Care to assist (assessment of tube, tube or NB replacement)? If yes, are the criteria for ongoing Home Care met?

NOTE 2

Planned Nasal Bridle Replacement (every 30 days/plan 1 hour SPS visit)

- Sedation Procedural Services (SPS)/Radiology (fluoroscopic placement)

Unplanned Nasal Bridle Replacement

- Patient specific plan developed prior to discharge

Efforts should be made to avoid ED visits for replacement if possible.

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KEY POINTS

1. Misplaced feeding tubes in a home setting are challenging as the signs of tube misplacement can initially be subtle, but quickly escalate, or signs of an acute change in the child can present immediately. (Northington)
2. The Nasal Bridle (NB) Discharge Guideline provides direction for safe discharge and follow up for the child requiring an NG/NJ following hospitalization. (Northington)
3. Use of the NB is associated with a significant reduction in tube dislodgement as compared to taped tubes. (Newton)
4. Misplacement of nasogastric feeding tubes may result in increased risk of aspiration or inadvertent administration of formula into the lung, more frequent trips to the hospital, increase in abdominal radiographs. (Newton)
5. Nasal bridles are secured with flexible monofilament tubing found to be a safe effective method of securement. The soft silicone material does not adhere to mucous or blood.

REFERENCES

- Bechtold, M. L., Nguyen, D. L., Palmer, L. B., Kiraly, L. N., Martindale, R. B., McClave, S. A. (2014). Nasal bridles for securing nasogastric tubes: A meta-analysis. *Nutrition in Clinical Practice*, 29(5), 667–671
- Black, C. M., Dungan, D., Fram, E., Bird, C. R., Reke, H. L., Beals, St. P. Raines, J. M. (1998). Potential pitfalls in the work-up and diagnosis of choanal atresia. *American Journal of Neuroradiology*, 19 (2), 326–329
- FDA, May 26, 2015
- Griffin, J. 2015. RS14 Focused on feeding-tube retention: A nurse-driven trial of nasal bridle system. *American Journal of Critical Care*, 24 (3), e36
- Gurram, K. C. (2011) Nasal bridle: Married to your tube. *Practical Gastroenterology* 91, 27–34
- Hardy A., Harrell, D., Gose, L., Mayes, T., Kagan, R. (n.d.). (Shriners Hospital for Children's – Cincinnati)
- Kang, K. A. Elger, Breanna, Medina, M., DiSomma, N., Esparaz, J. R., Aprahamian, C. J., Pearl, R. H. (2018). Nasal bridling of nasogastric feeding tubes. *Journal of Pediatric Surgical Nursing*, 7(1), 29–33. doi: 10.1097/JPS.000000000000162
- Linford, L., McGinnis, C. (n.d.) Enteral tube dislodgement: Prevention and recognition. *Perspectives* 9(2), 2–7
- Lynch, A., Tang, C. S., Jeganathan, L. S., & Rockey, J. G. (2018). A systematic review of the effectiveness and complications of using nasal bridles to secure nasogastric feeding tubes. *Australian Journal of Otolaryngology*, 1(1).
- Mayes, T., Brumbaugh, C., Vitolo, S., Buchert, M., Tabangin, M., & Myer IV, C. (2020). Efficacy of commercial nasal bridle use in reducing feeding tube dislodgements in pediatric patients following double stage laryngotracheoplasty. *International Journal of Pediatric Otorhinolaryngology*, 109979.
- Newton L.E., Abdessalam, S.F., Raynor, S.C., Lyden, E.R., Cusick, R.A. (2016). Stabilization of Nasogastric feeding tubes using nasal bridles in paediatric patients. *Maternal and Pediatric Nutrition Journal*, 2(2). doi:10.4172/mpn.1000111
- Northington, L., Lyman, B., Guenter, P., Irving, S. Y., & Duesing, L. (2017). Current practices in home management of nasogastric tube placement in pediatric patients: a survey of parents and homecare providers. *Journal of Pediatric Nursing*, 33, 46–53.
- Parks, J., Klaus, S., Staggs, V., Pena, M. (2013). Outcomes of nasal bridling to secure enteral tubes in burn patients. *AJCC* 22(2) 136–142
- Seder, C. W., Stockdale, W., Hale, L., Janczyk, R. J. (2010). Nasal bridling decreases feeding tube dislodgment and may increase caloric intake in the surgical intensive care unit: A randomized, controlled trial. *Critical Care Medicine* 38(3), 797–801