

Virtual Nutrition Team (VNT) Guidance

your questions answered

**Dental care for
people on enteral
nutrition (EN)**



PINNT

A SUPPORT GROUP FOR PEOPLE
RECEIVING ARTIFICIAL NUTRITION

www.pinnt.com

Dental care for people on enteral nutrition (EN)

“Are there any studies or case-studies on patients on long term enteral tube feeding regarding their tooth and gum health, due to the effects of not chewing food?”

The virtual nutrition team (VNT) has received a number of replies and this article attempts to collate them into helpful advice for PINNT. This question exposes an area we probably don't think of as often as we should.

The responses have related to the problems of lack of oral fluid and nutritional intake and its impact on oral hygiene and dental care, the effects of frequent vomiting, avoidance of ventilation associated pneumonia and finally, treatments which affect buccal health and treatments available to help patients who can't take oral nutrition. Although this question applies to enterally fed patients, the same questions presumably apply in parenterally fed patients who cannot swallow fluids or nutrition. We must never forget that oral hygiene is possible and essential in all artificially fed patients, either by the patient or their attending carers in hospital and the community. This review could therefore apply as much to those on parenteral nutrition (PN) with gastroparesis as those with a percutaneous endoscopic gastrostomy (PEG) after a stroke or neurodegenerative disorder such as MND.

Proper care of the mouth and teeth is obviously essential with or without such a risk factor and should be built into the care packages of all patients. Stimulation of salivation may help to prevent gum and dental disease so anything which a patient can suck or chew without swallowing may be of some help.

Chewing gum comes to mind but I can find no mention one way or the other in the literature I have read although this would stimulate salivation. Sugar free sweets or gum would also reduce the risk of decay and caries. One Scottish respondent mentioned the risks to dental care of sucking sugar based “sweeties” to help dry mouth sensations on EN or PN. Mouth breathing will also contribute to the distress associated with a dry mouth.

There is some evidence that good oral hygiene can help reduce the risk of ventilation associated pneumonia in ICU situations. In the unconscious patient, perhaps receiving EN or PN, the pooling of secretions from nasal and oral cavities must be actively managed. However, the use of anticholinergic drugs to reduce these secretions may in turn promote gum disease and caries.

For those with chronic vomiting/regurgitation, acid damage to teeth may occur rapidly as seen in those with anorexia nervosa or bulimia. A respondent advises the following for her gastroparesis patients:

1. Rinse mouth after vomiting.
2. Do not brush teeth after vomiting because teeth are softest after acid has 'bathed' them.
3. Always use a soft tooth brush.

A pharmacist respondent has provided detailed advice which is worth detailing in full:

- Review all patient meds and withhold/substitute any anticholinergic drugs if possible to avoid exacerbation of dry mouth/bad taste.
- Offer **AS Saliva Orthana** or **Glandosane spray** TDS prophylactically (**AS Saliva Orthana** not suitable for vegetarians).
- If these do not work then consider **Biotene**® (as far as I am aware it is second line due to cost only).
- **Gelclair**® is only licensed for treatment of mouth lesions but I do use it prophylactically in this setting as well. Not suitable with manufacturer's instructions for patients unable to rinse and gargle or with unsafe swallow, but can be applied neat with a swab for these patients.

He modestly comments that he sees very few oral infections or problems in patients treated as above but he is not sure whether this is because the number of patients he sees is small or that the treatments are effective.

The only guidelines specifically mentioning oral care our VNT members have been able to locate are from Northern Ireland. (www.gain-ni.org/index.php/audits/guidelines). Each of the guidelines on EN of children and adults with naso gastric (NG) tube feeding, gastrostomy or jejunal feeding has a common section giving some brief but sensible advice.

- For example: Page 21, GAIN Patient/carers guide to NG feeding of children (ditto gastrostomy and jejunal enteral feeding).
- For children under 2 years of age – mouth care is recommended.
- Tooth brushing should be performed twice daily.
- If your child is not allowed oral fluids – additional oral hygiene maybe required to keep the mouth moist to prevent gum disease and stimulate saliva and gastric secretions.
- Your child should be registered with a Dentist
- If your child is unable to use toothpaste – speak to your Dentist about obtaining an alternative product to toothpaste.

In Summary

1. Oral hygiene is probably a neglected aspect of care in medium to long term artificial nutritional support when oral feeding and drinking is not possible.
2. Attention should be given to oral hygiene and tooth brushing on a regular basis – at least twice per day.
3. Measures to keep the mouth moist should be undertaken. Various useful products are available.
4. Regular dental checkups and hygienist care should be organised.
5. Dental pain should be considered in those unable to indicate this, particularly if agitation and fever is present. Oropharyngeal thrush (candidiasis) should always be sought and treated if present.
6. Avoid sugary drinks and sweets if possible.
7. Whether chewing itself is of itself a necessary factor in oral health in the context of artificial nutrition, we have no evidence.

These thoughts are for information and general guidance only. Always discuss with the team responsible for treatment/care.

Dr Barry Jones, PINNT – VNT lead

For further details on the VNT and its members visit:

<http://pinnt.com/About-Us/Virtual-Nutrition-Team-VNT.aspx>





Virtual Nutrition Team (VNT) Guidance

your questions answered

Price £5.00 Free to PINNT members

Disclaimer: PINNT and the VNT have made every reasonable effort to ensure that the content of this newsletter is accurate, but accepts no responsibility for any errors or omissions. The views expressed are not necessarily those of PINNT or the VNT and no reference to any product or service is intended as a recommendation or endorsement. You should always seek advice from your own team of healthcare professionals in relation to your specific needs/treatment.

©PINNT. No part of this VNT leaflet can be reproduced without the written consent of PINNT and the VNT.

www.pinnt.com

