

Fluoride Mouthrinses During Orthodontic Treatment in Cleft Patients. A National Survey.

Are we adhering to the, "Paediatric Standards of Dental Care for Cleft Children"?

Monica Neil, Susan Parekh, Brijesh Patel, Norman Hay

Dental and Maxillofacial Department, Great Ormond Street Hospital for Children

Background:

- The, "Paediatric Standards of Dental Care for Cleft Children" are national guidelines developed by the British and Irish Paediatric Dentistry Cleft Specialist Interest Group and approved by the Craniofacial Society of Great Britain and Ireland.
- They state that, "All patients undergoing orthodontic treatment should be using a fluoride mouthrinse, 0.05% sodium fluoride (NaF), taken at a different time to brushing".

Evidence to Support the Guidelines: (Level 1 evidence only)

Current evidence supports the use of regular fluoride mouthrinses to prevent white spot lesion demineralization and development of dental caries during orthodontic treatment:

- 1.Evidence that the use of a daily NaF mouthrinse reduces the occurrence and severity of white spot lesion demineralization during orthodontic treatment (Benson et al. 2005).
- 2.Regular use of fluoride mouthrinse is associated with a clear reduction in caries increment in children (Marinho et al. 2007).
- 3.Preventive dental care is even more so important in patients with CL/P compared with patients without clefts (Cheng et al. 2007).

Aim:

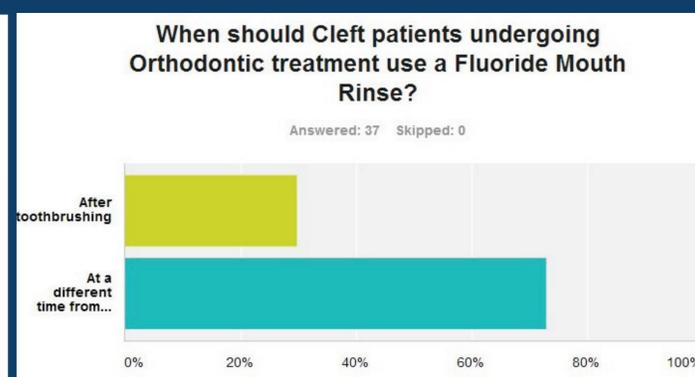
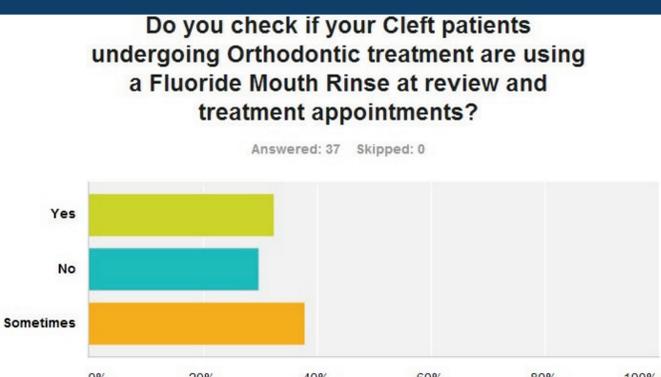
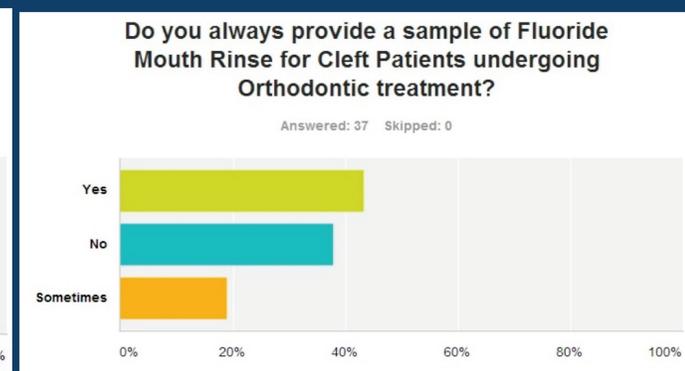
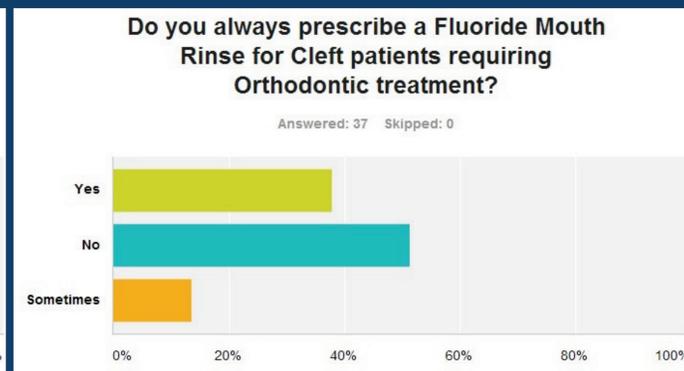
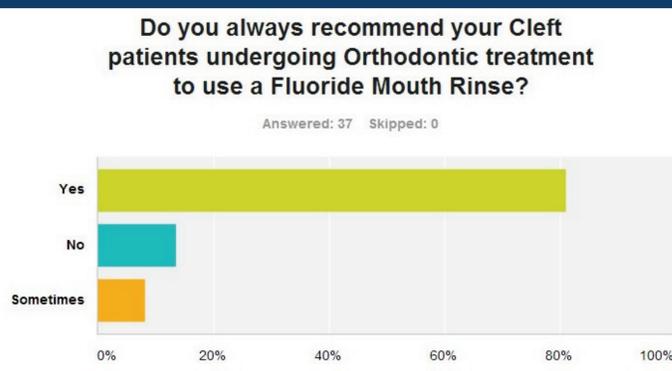
- To determine if the following national guideline is adhered to at cleft units across Great Britain and Ireland:

"All patients undergoing orthodontic treatment should be using a fluoride mouthrinse 0.05% sodium fluoride, taken at a different time to brushing"

Design:

- A survey was sent to all consultant cleft orthodontists asking if they recommended, supplied or prescribed fluoride mouthrinses when commencing orthodontic treatment and if so what dosage.
- The survey also asked if compliance with a mouth washing regimen was checked at subsequent appointments.

Results:



Comments included:

- "Our Trust is too mean to let me give them a sample bottle. The companies got fed up when we kept asking for free samples!"
- "Don't know the recommendation."
- "Do they need it, not sure it has any additional benefit."
- "Could be better at this!"
- "When I remember or if OH is poor!"
- "No source/funding for this."
- "Usually work with paedodontist who prescribes."
- "If OH isn't fantastic, the braces come off!"
- "If OH poor."
- "If caries prone."
- "In the past we did for all but more recently we target specific patients."

- 37 out of 38 responses were received from consultant cleft orthodontists and covered all the cleft centres and most of the spoke cleft units.

- Funding implications influenced whether a sample was provided.

- Cleft patients are generally not routinely checked for mouthrinse use whilst undergoing orthodontic treatment.

- Some uncertainty regarding dosage and timing.

Conclusion:

- This research highlights the need for a multidisciplinary approach towards prevention in cleft patients and raising awareness of the guidelines.

- Consistent preventive advice should be given and reinforced in accordance with national guidelines.

Acknowledgements: Jackie Smallridge and British and Irish Paediatric Dentistry Cleft Specialist Interest Group, orthodontists whom completed the survey and GOSH CL/P team.