Low Risk Case

Moderate Risk Case

High Risk Case

Preliminary Screening Tool Review

Project Overview

• The tool was created for the dental hygienist in private practice by funding from GSK, and utilizes ADHA Standards for Clinical Dental Hygiene Practice regarding the assessment, etiology, and management of conditions.

• The tool comes to a conclusion or determination of overall susceptibility to hypohyposalivation and xerostomia, using a simple grading scale ranging from low to moderate to high risk.

II Evaluation II Collection II

Evaluation

Collection

Proposed Validation Methods and Measurements

One hundred participants in a selected clinical setting with the primary symptom of xerostomia are instructed not to drink, eat, smoke, perform oral hygiene or put anything into their mouths for 60 minutes before the appointment.  

1. Each participant is first evaluated using the developed Screening Tool by a dental hygienist to determine the patient's risk level for hypohyposalivation.

2. Next unstimulated saliva is collected after asking the participant to swallow any saliva in their oral cavity first, then stay motionless and allow the saliva to drain passively for five minutes over the lower lip into a preweighed 15 ml test tube fitted with a 55 mm diameter funnel, avoiding any further swallowing. After the five-minute collection period, the participant is asked then to void the result of saliva by spitting into the funnel.

3. Next stimulated saliva is collected after asking the participant to draw on a piece of paraffin wax at approximately 45 strokes per minute. The participant will void the result of saliva by spitting into another similar collection tube every minute for a total of five minutes.

4. Both collection tubes are weighed immediately after each collection with the numbers entered using the Saliva Collection Form (see Form to right).

5. Later the participant's salivary flow rate for both the unstimulated and stimulated saliva is calculated by dividing the amount (weight) of collected saliva by the duration of the collection period (five minutes).

The responses to the tool and salivary flow rates for each patient will undergo data analysis in comparison to known values to determine the validity of the Screening Tool to adequately evaluate the risk level for hypohyposalivation.

Screening Tool

One of the primary functions of the project is the implementation of interventions for hyposalivation with xerostomia that allows for planning and implementation of interventions per level by the dental hygienist and rest of the dental team.

• The purpose of the project is the validation of the screening tool in a clinical setting so it can be used in dental practices as an aid to provide early intervention, and to raise awareness of the importance of the management of hypohyposalivation due to increased number of xerostomia cases.

Screening Tool

Saliva Collection Form

ADHA HYPOSALIVATION with XEROSTOMIA SCREENING TOOL PROJECT
Margaret J. Fehrenbach, RDH, MS
Consultant, Dental Hygiene Education, Seattle, WA

Illustrated anatomy of the head and neck
Illustrated dental embryology, histology, and anatomy
Illustrated anatomy of the head and neck

Margaret is a Dental Hygiene Education Consultant, Oral Biologist, and Dental Science Technical Writer residing in Seattle, WA. She has obtained her Certificate in Clinical Research from the University of Washington School of Dentistry, a BSC in Dental Hygiene, a AB in Science, and a BFA in Graphic Design. She is the recipient of the 2012 ADHA Award of Excellence (2012) and the Ray C. Force Award (2013) and Award of Excellence (2006). She can be reached at www.dhed.net or margaret@dhed.net

Acknowledgments: Maddie Hilpert, ADHA Corporate Development & Conference, Jean Majek, ADHA Access Managing Editor, and Marilyn Rothlin, RDH, MS, Clinic Manager, of the Regional Clinical Dental Research Center, University of Washington, Seattle, WA.

Updated Project References

1. ADHA: Standards of Clinical Dental Hygiene Practice at www.adha.org/resources-docs/S1_Standards_Clinical_Hygiene.pdf


7. Fehrenbach MJ, Harding SW. Illustrated anatomy of the head and neck. Cappelli D, Mobley C: Salivary Glands: Anatomy, Physiology and Therapeutics Branch, NIDCR. As the author of the ADHA continuing education course on anatomy, physiology, and pathology, she has taught the anatomy of the dental community but its validation would serve to confirm this


9. Ship J, Fox PC, Baum BJ: If I spit, they will take my spit and frame it as great art.

10. Maddie Hilpert, ADHA Corporate Development & Conference, Jean Majek, ADHA Access Managing Editor, and Marilyn Rothlin, RDH, MS, Clinic Manager, of the Regional Clinical Dental Research Center, University of Washington, Seattle, WA.


12. Ship J, Fox PC, Baum BJ: If I spit, they will take my spit and frame it as great art.

13. Maddie Hilpert, ADHA Corporate Development & Conference, Jean Majek, ADHA Access Managing Editor, and Marilyn Rothlin, RDH, MS, Clinic Manager, of the Regional Clinical Dental Research Center, University of Washington, Seattle, WA.


15. Ship J, Fox PC, Baum BJ: If I spit, they will take my spit and frame it as great art.

16. Maddie Hilpert, ADHA Corporate Development & Conference, Jean Majek, ADHA Access Managing Editor, and Marilyn Rothlin, RDH, MS, Clinic Manager, of the Regional Clinical Dental Research Center, University of Washington, Seattle, WA.


18. Ship J, Fox PC, Baum BJ: If I spit, they will take my spit and frame it as great art.

19. Maddie Hilpert, ADHA Corporate Development & Conference, Jean Majek, ADHA Access Managing Editor, and Marilyn Rothlin, RDH, MS, Clinic Manager, of the Regional Clinical Dental Research Center, University of Washington, Seattle, WA.

10. Maddie Hilpert, ADHA Corporate Development & Conference, Jean Majek, ADHA Access Managing Editor, and Marilyn Rothlin, RDH, MS, Clinic Manager, of the Regional Clinical Dental Research Center, University of Washington, Seattle, WA.


12. Ship J, Fox PC, Baum BJ: If I spit, they will take my spit and frame it as great art.

13. Maddie Hilpert, ADHA Corporate Development & Conference, Jean Majek, ADHA Access Managing Editor, and Marilyn Rothlin, RDH, MS, Clinic Manager, of the Regional Clinical Dental Research Center, University of Washington, Seattle, WA.


15. Ship J, Fox PC, Baum BJ: If I spit, they will take my spit and frame it as great art.

16. Maddie Hilpert, ADHA Corporate Development & Conference, Jean Majek, ADHA Access Managing Editor, and Marilyn Rothlin, RDH, MS, Clinic Manager, of the Regional Clinical Dental Research Center, University of Washington, Seattle, WA.


18. Ship J, Fox PC, Baum BJ: If I spit, they will take my spit and frame it as great art.

19. Maddie Hilpert, ADHA Corporate Development & Conference, Jean Majek, ADHA Access Managing Editor, and Marilyn Rothlin, RDH, MS, Clinic Manager, of the Regional Clinical Dental Research Center, University of Washington, Seattle, WA.