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Interdisciplinary Collaboration

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Editorial

Speech-Language Pathologists (SLPs) often deal with individuals with swallowing impairments. These impairments can indicate a sensory or motor deficit and it is not uncommon to find the deficit closely related to a lack of taste sensation in the oral cavity. This gustatory function is rarely examined by SLPs with randomized controlled testing. It is generally superficially tested at bedside and often routinely screened by nursing or dietary services; however, the comprehensiveness of the nature of the testing is rarely reported. Recently, I have been involved in a randomized controlled taste testing of a cranial-facial clinical case. This was my first experience in the background and methodology of this procedure and as such, I partnered with professors and fellow investigators from the Family and Consumer Sciences Department at California State University, Long Beach. We also partnered with a maxillary-facial surgeon and a professor and nutritionist from the University of Brasilia in Brazil. This project became an international effort because the subject of the clinical case had been previously been tested for gustatory function at the University of Brasilia. The research required a division of labor which was certainly a learning experience for the primary investigator, and SLP. The neurophysiology of normal gustatory function was explored in the literature in addition to multiple reports of taste testing in the normal population. Due to the unique characteristics and absent oral cavity structure of the client in this case, a worldwide search of the literature on taste testing in similar cases was performed by the SLP [1-4].

The methodology for the study was designed by the investigators, registered dieticians from the Family and Consumer Sciences Department at CSULB. This across-department collaboration was a chance for each specialist to educate the other in their particular field of specialty. It also became an interesting and needed expansion for scope of practice for the SLP. The randomized controlled nature of the study demanded that each investigator have a defensible evidence-base for the procedures and interpretation of results. This collaboration was highly successful in identifying minimal thresholds of sweet, sour, bitter, and salty substances in the client's oral cavity. Theoretically, understanding how and which of these substances are perceived by the client can certainly assist in initiating the trigger of the swallow and have a profound effect in swallowing rehabilitation. Controlled and evidence-based taste testing should be a needed and effective part of every dysphasia therapist's scope of practice [5-8].

References

- Breslin PAS (2001) Human gustation and flavour. Flavour Fragr J 16: 439– 456.
- Kapila YV, Dodds WJ, Helm JF, Hogan WJ (1984) Relationship between swallow rate and salivary flow. Dig Dis Sci 29: 528-533.
- Kinnamon SC (2012) Taste receptor signalling from tongues to lungs. Acta Physiol (Oxf) 204: 158-168.
- Lindemann B (1999) Receptor seeks ligand: on the way to cloning the molecular receptors for sweet and bitter taste. Nat Med 5: 381-382.
- McMicken BL, Kunihiro AGK, Wang L, Salles F, Bezerra PC, et al. (2014) Randomized Testing of Taste Discrimination in a Case of Congenital Aglossia. Journal of Oral Biology and Craniofacial Research.
- 6. Miller IJ Jr, Reedy FE Jr (1990) Variations in human taste bud density and taste intensity perception. Physiol Behav 47: 1213-1219.
- 7. Spielman AI (1998) Chemosensory function and dysfunction. Crit Rev Oral Biol Med 9: 267-291.
- Steele CM, van Lieshout PH, Pelletier CA (2012) The influence of stimulus taste and chemesthesis on tongue movement timing in swallowing. J Speech Lang Hear Res 55: 262-275.