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OTOTOXICITY MONITORING

Ototoxicity Monitoring as Part of the Emory Winship Head & Neck Multidisciplinary Cancer Clinic

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Abstract

Ototoxic medications including platinum chemotherapy drugs can cause permanent, life-altering hearing loss and tinnitus. As survivorship has improved for many cancer patients, the urgency for improving quality of life increases. This is my experience with starting an ototoxicity monitoring program as part of a multidisciplinary team in a cancer center. This Head & Neck team includes otolaryngologists, oncologists, radiation oncologists, speech pathologists, nutritionists, a dentist and dental hygienist, nurses, and advanced practice providers. Audiology is the newest addition to this team.

Objectives

- To assess the importance of monitoring the hearing for patients undergoing treatment with ototoxic drugs and radiation
- To become familiar with members of a Head & Neck cancer team
- To review materials used with patients and relevant providers

Methods & Materials

Attend MDC (Multidisciplinary Conference)
What patients will be treated with CRT

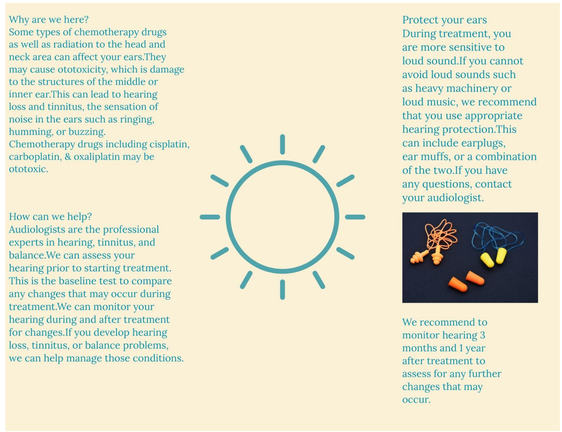
Schedule patients for baseline audiograms

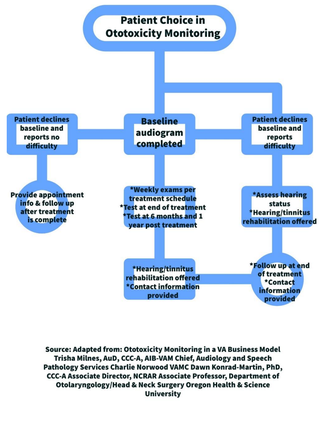
Perform Baseline
Education for patient of symptoms to look for and importance of protection from loud sound

Patient begins treatment
Monitoring as needed
Treatment may be adjusted for significant changes

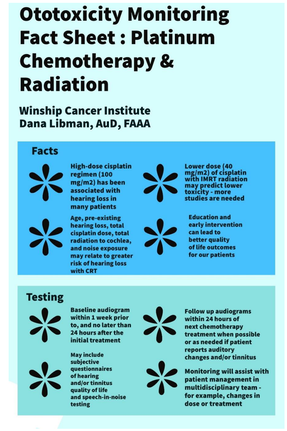
Results

More Head & Neck Cancer patients are being referred and seen for baseline and monitoring audiograms now that there is a dedicated position serving this population. Below are some of the materials used for patients and providers including a patient brochure, decision tree, and fact sheet.





Source: Adapted from: Ototoxicity Monitoring in a VA Business Model Trisha Milnes, AuD, CCC-A, AIB-VAM Chief, Audiology and Speech Pathology Services Charlie Norwood VAMC Dawn Konrad-Martin, PhD, CCC-A Associate Director, NCRAR Associate Professor, Department of Otolaryngology/Head & Neck Surgery Oregon Health & Science University



Conclusion

A recently published study in the Journal of Cancer Survivorship (Konrad-Martin et al, 2023) reported on audiologist views of the importance of ototoxicity monitoring and barriers of implementation in cancer patients in the VA setting. They found that although many audiologists recognize the importance of caring for these patients, there are several barriers to implementing these programs. There is a lack of consistent ototoxic monitoring in this setting, and here I look at some of the reasons why and describe my experience in joining a multidisciplinary team in a cancer center. Ototoxicity monitoring is an area of audiology that is emerging as a vital part in helping cancer patients preserve their quality of life. In addition to monitoring for changes, earlier intervention may be possible with this type of program in the form of hearing aids, tinnitus management, and hearing conservation.

References

- Fernandez, Katharine & Garinis, Angela & Knight, Kristin & Konrad-Martin, Dawn & Morata, Thais & Poling, Gayla & Reavis, Kelly & Sanchez, Victoria & Dreisbach, Laura. (2023). What's New in Ototoxicity Management?. Perspectives of the ASHA Special Interest Groups. 9. 1-11. 10.1044/2023_PERSP-23-00153.
- Karasawa T, Steyger PS. An integrated view of cisplatin-induced nephrotoxicity and ototoxicity. Toxicol Lett. 2015 Sep 17;237(3):219-27.
- Kros CJ, Steyger PS. Aminoglycoside- and Cisplatin-Induced Ototoxicity: Mechanisms and Otoprotective Strategies. Cold Spring Harb Perspect Med. 2019;9(11
- Lee, D.S., Travis, E.Y., Wong, S.K., Collopy, C., McClannahan, K.S., Ortmann, A.J., Rich, J.T., Pipkorn, P., Puram, S.V., Jackson, R.S., Paniello, R.C., Adkins, D.R., Oppelt, P., Thorstad, W.L., Wick, C.C., Zevallos, J.P. and Mazul, A.L. (2023), Audiologic Follow-up in Patients With Head and Neck Cancer Treated With Cisplatin and Radiation. The Laryngoscope, 133: 3161-3168.
- Licitra L, Keilholz U, Tahara M, Lin JC, Chomette P, Ceruse P, Harrington K, Mesia R. Evaluation of the benefit and use of multidisciplinary teams in the treatment of head and neck cancer. Oral Oncol. 2016 Aug;59:73-79. doi: 10.1016/j.oraloncology.2016.06.002. PMID: 27424185.
- Liu, J.C., Kaplon, A., Blackman, E., Miyamoto, C., Savior, D. and Ragin, C. (2020), The impact of the multidisciplinary tumor board on head and neck cancer outcomes. The Laryngoscope, 130: 946-950.
- Patatt FSA, Gonçalves LF, Paiva KM, Haas P. Ototoxic effects of antineoplastic drugs: a systematic review. Braz J Otorhinolaryngol. 2022 Jan-Feb;88(1):130-140.
- Primož Strojan, Katherine A. Hutcheson, Avraham Eisbruch, Jonathan J. Beitler, Johannes A. Langendijk, Anne W.M. Lee, June Corry, William M. Mendenhall, Robert Smee, Alessandra Rinaldo, Alfio Ferlito. Treatment of late sequelae after radiotherapy for head and neck cancer. Cancer Treatment Reviews. Volume 59. 2017,Pages 79-92.
- Prgomet, Drago. (2022). The Multidisciplinary Team (MDT) in the Treatment of Head and Neck Cancer – A Single-institution Experience. Acta Clinica Croatica. 61. 10.20471/acc.2022.61.s4.10.

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