

Materials List for

Systematic Hearing Performance Evaluation Process for Adolescents with Cochlear Implantation at Early Ages

Ruijie Wang^{1,2}, Nan Zhao³, Jianfen Luo^{1,2}, Xiuhua Chao^{1,2}, Zhaomin Fan¹, Haibo Wang¹, Lei Xu^{1,2}

¹Department of Otolaryngology-Head and Neck Surgery, Shandong Provincial ENT Hospital, Shandong University, ²Department of Auditory Implantation, Shandong Provincial ENT Hospital ³Shandong Provincial Hearing and Language Rehabilitation Center

Corresponding Author

Lei Xu
sdphxl@126.com

Citation

Wang, R., Zhao, N., Luo, J., Chao, X., Fan, Z., Wang, H., Xu, L. Systematic Hearing Performance Evaluation Process for Adolescents with Cochlear Implantation at Early Ages. *J. Vis. Exp.* (193), e64552, doi:10.3791/64552 (2023).

Date Published

March 24, 2023

DOI

10.3791/64552

URL

jove.com/video/64552

Materials

Name	Company	Catalog Number	Comments
INVENTIS PIANO audiometer	Russia		This audiometer is mainly used for the behavioural audiometry in this study.
HOPE software	Chinese PLA General Hospital		This software is used for testing the speech performance including adequate test lists for testing the monosyllable recognition in quiet, spondee (disyllable) speech recognition in quiet, sentence recognition in quiet, and sentence recognition in noise
JAMO Loudspeaker	China		these loudspeakerw are used for all the tests in the sound booth.
Lenovo computers	China		They are used for mapping and manipulating all the test softwares.
MAESTRO mapping device	MED-EL		These devices include the MAX box and programming cable used for connecting the processor to the mapping software.
MAESTRO software	MED-EL		This software is used for mapping
Mandarin Tone Identification in Noise Test (MTINT)	Beijing Tongren Hospital		This software is used to measure tone recognition. A 4-alternative forced-choice (4AFC) Mandarin lexical tone task is used. The test material consists of 25 monosyllabic words spoken with the four Mandarin lexical tones to create 100 different words for each talker.
Musical Sounds in Cochlear Implants (MuSIC)	MED-EL		The MuSIC test battery consists of six objective subtests assessing several areas of music perception. This software is chosen as it takes less time and thus helps keep the overall test time rather short. The battery contains approximately 2800 sound files recorded at the Royal Scottish Academy of Music and

		Drama by professional musicians playing natural instruments.
--	--	--