

**Evaluation of frequency compression: effects on speech production in children.**

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Frequency compression signal processing has been proposed as a strategy for improving high frequency audibility in hearing aid fittings. This technology lowers the high frequency energy in speech, presenting it at a lower frequency for the listener. Children with hearing loss may be expected to have access to new and/or altered cues for high frequency speech recognition with such a strategy. Therefore, they may have altered speech production after a period of using frequency compression. In order to test this hypothesis, speech production samples were recorded from 10 children with moderately-severe to severe high frequency hearing loss, both before and after a trial with a prototype frequency compression hearing instrument. The speech production samples were evaluated to determine the effects of using the frequency compression signal processor on speech production.