

# Predictors of vertigo after endolymphatic sac surgery identified in Meniere disease

November 1 2023, by Elana Gotkine

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Audiogram type and pure-tone threshold average can predict vertigo after endolymphatic sac decompression (ESD) in Meniere disease (MD), according to a study published online Sept. 25 in the *European Archives*

*in Oto-Rhino-Laryngology.*

Yiling Li, from the Air Force Medical Center in Beijing, and colleagues conducted a retrospective cohort study involving 56 patients with unilateral MD who underwent ESD surgery. Optimal modeling variables were selected using a stepwise regression method, and a logistic regression model was established with the outcome of [vertigo](#) after ESD.

The researchers found that the optimal modeling variables were the audiogram type and pure-tone threshold average of the patient's speech frequency. Based on these two variables, the [prediction model](#) exhibited good discrimination (area under the receiver operating characteristic curve, 0.72) and acceptable calibration (Brier score, 0.21).

"Using the abovementioned predictive model, individualized treatment plans can be prepared by evaluating preoperative data and unnecessary destructive surgeries selected due to the fear of failed vertigo control could be avoided," the authors write.

**More information:** Yiling Li et al, Development and validation of prediction model to estimate vertigo risk after endolymphatic sac decompression in Meniere's disease: a retrospective cohort study, *European Archives of Oto-Rhino-Laryngology* (2023). [DOI: 10.1007/s00405-023-08228-x](#)

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