Supplementary Online Content

Chang T-P. Schubert MC. Association of the video head impulse test with improvement of dynamic balance and fall risk in patients with dizziness. *JAMA Otolaryngol Head Neck Surg*. Published online June 28, 2018. doi:10.1001/jamaoto.2018.0650

eTable 1. Subjective Improvement of Dizziness of the Study Patients

eTable 2. Youden Index for Different Cutoff Points of ΔVOR and ΔDGI To Predict Subjective Improvement of Dizziness

eFigure. ROC Analysis for Using ΔVOR and ΔDGI to Predict Subjective Improvement of Dizziness

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Subjective Improvement of Dizziness of the Study Patients

| Case No.	Age	Gender	Functional Diagnosis	ΔVOR	ΔDGI	Improvement of dizziness
1	73	M	UVH	0.17	5	Yes
2	71	F	UVH	0.18	3	Yes
3	54	F	UVH	-0.06	3	No
4	59	F	UVH	-0.06	1	No
5	51	M	UVH	0	3	Yes
6	60	F	UVH	0.14	3	Yes
7	32	F	UVH	-0.26	3	No
8	80	F	UVH	-0.04	1	No
9	61	F	UVH	0	3	Yes
10	70	M	UVH	0	3	Yes
11	51	F	UVH	0.12	2	Yes
12	62	M	UVH	-0.02	4	Yes
13	63	F	UVH	0.05	2	Yes
14	70	F	UVH	0.01	3	Yes
15	84	M	UVH	-0.01	2	Yes
16	60	F	UVH	-0.08	2	Yes
17	63	F	UVH	0.19	6	No
18	55	F	UVH	-0.21	0	Yes
19	82	M	BVH	-0.25	-3	No
20	77	F	BVH	-0.12	-1	No
21	66	M	BVH	-0.18	-1	No
22	66	F	BVH	-0.04	-4	Yes
23	49	M	BVH	0.28	6	Yes
24	75	F	BVH	0.27	1	Yes
25	83	F	BVH	0.095	3	Yes
26	86	M	BVH	0.21	3	No
27	83	F	BVH	0.255	2	Yes
28	85	M	BVH	-0.02	3	No
29	72	F	BVH	-0.085	1	Yes
30	30	F	DZ	0.115	0	No
31	67	F	DZ	-0.06	2	No
32	77	M	DZ	0.075	1	No
33	67	M	DZ	0	7	Yes
34	82	F	DZ	-0.19	-4	No
35	51	F	DZ	-0.065	-4	No
36	53	F	DZ	-0.015	4	No
37	45	F	DZ	0.08	6	Yes
38	71	M	DZ	-0.19	2	No

In this supplementary material, we used receiver operating characteristic (ROC) analysis to test improvement of VOR gain and improvement of DGI in predicting improvement of dizziness. All 38 study patients were questioned at the last follow-up visit, "Is your dizziness improved?"

eTable 2. Youden Index for Different Cutoff Points of ΔVOR and ΔDGI To Predict Subjective Improvement of Dizziness

Cut-off point	Sensitivity	1 – Specificity	Youden's Index
ΔVOR			
-0.04	0.857	0.353	0.504
-0.02	0.810	0.294	0.516
-0.01	0.762	0.235	0.527
0.01	0.524	0.235	0.289
0.03	0.476	0.235	0.241
ΔDGI			
≥0	0.952	0.706	0.246
≥1	0.905	0.647	0.258
≥2	0.810	0.471	0.339
≥3	0.571	0.353	0.218
≥4	0.238	0.118	0.120

The best cutoff points for ΔVOR and ΔDGI to predict improvement of dizziness are -0.01 and 2 and respectively. It is noted that ΔDGI ≥1 is a better cut-off point than ΔDGI ≥4 in predicting subjective dizziness improvement.

eFigure. ROC Analysis for Using ΔVOR and ΔDGI to Predict Subjective Improvement of Dizziness
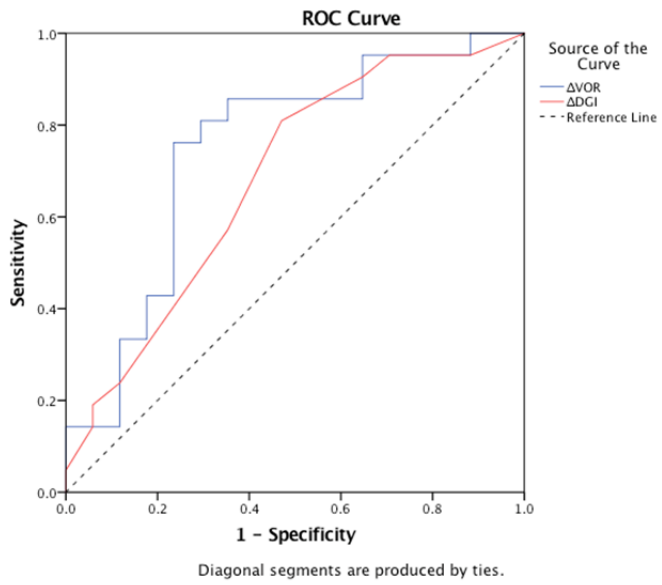
The areas under curve (AUC) are 0.748 for ΔVOR and 0.683 for ΔDGI.