

SUPPLEMENTARY MATERIAL - Efficacy and safety analysis of repetitive transcranial magnetic stimulation in patients with persistent postural perceptual dizziness: a single-center, single-blind, randomized placebo-controlled trial

Wenze Li, MD,^{1*} Chang Liu, MD,^{1*} Yuqing, Zhang, PhD,¹ Maolin Peng, B.Med,¹ Xiuhang Luo, B.Med,³ Hongfa Zhang, MD,¹ Hairong Lan, B.Med,⁴ Zhipeng Li, MD,¹ Yankun Chen, MD,¹ Zhen Li, MD,¹ Zhimin Xiao, MD,⁵ Linyan Tong, MD,^{1*} Yangmei Chen, MD^{1,2*}

¹Department of Neurology, the Second Affiliated Hospital of Chongqing Medical University, Chongqing, China;

²Key Laboratory of Major Brain Disease and Aging Research (Ministry of Education) Chongqing Medical University, Chongqing, China;

³Department of Neurosurgery, the Second Affiliated Hospital of Chongqing Medical University, Chongqing, China;

⁴Department of Geriatrics, the Second Affiliated Hospital of Chongqing Medical University, Chongqing, China;

⁵Rehabilitation Medical Center, Southwest University Hospital, Chongqing, China

Corresponding authors:

Linyan Tong (E-mail: 300264@hospital.cqmu.edu.cn) and

Yangmei Chen (E-mail: chenym1997@cqmu.edu.cn)

Inclusion criteria:

1. Meet the diagnostic criteria for PPPD established by the Barany Association;
2. Age between 18-80 years;
3. No 5-hydroxytryptamine reuptake inhibitor (SSRI) or 5-hydroxytryptamine norepinephrine reuptake inhibitors (SNRIs) class of drugs in the 3 weeks before the study;
4. Patients with a right levitation hand; 5. Have not been treated with rTMS.

Exclusion criteria:

1. Dizziness due to Trauma, surgery, tumor, encephalitis, cerebrovascular malformation, and other neurological causes of central dizziness in the brain;
2. Contraindications to rTMS, including intracranial placement of metallic foreign bodies, cardiac pacemakers, cochlear implantation, traumatic brain injury with increased intracranial pressure, signs of brain abnormality, epilepsy, etc.;
3. Accompanied by clinically relevant psychiatric disorders, medical and neurological diseases;
4. Alcoholism or substance abuse;
5. Head trauma with a history of loss of consciousness and history of pregnancy;
6. History of loss of consciousness and pregnancy;
7. Being involved in other research projects

Table S1. Inclusion and exclusion criteria

	DHI				Effect Analysis		
Group	Baseline	Week 2	Month 1	Month 3	Time Effect (F / η^2 /P)	Group Effect (F / η^2 /P)	Interaction Effect (F / η^2 /P)
TMS-group	52.12(15.41)	33.88(13.22) *	29.82(12.12) *	37.00(12.31) *	135.85/.68/<0.01	14.30/.18/<0.01	27.34/.30/<0.01
SHAM-TMS group	54.67(12.17)	45.03(10.42) *	47.09(11.01)	49.33(10.35)			
t	-0.74	-3.81	-6.06	-4.24			
p	.46	< 0.01	< 0.01	< 0.01			

*: Significant difference compared to the baseline period within the group. * indicates $P < 0.0$

	VAS				Effect Analysis		
Group	Baseline	Week 2	Month 1	Month 3	Time Effect (F / η^2 /P)	Group Effect (F / η^2 /P)	Interaction Effect (F / η^2 /P)
TMS-group	4.85(1.42)	3.18(1.47) *	2.67(1.08) *	3.70(1.38) *	67.24/.51/<0.01	9.52/.13/<0.01	13.31/.17/0.01
SHAM-TMS group	5.51(0.91)	4.12(0.96) *	4.24(1.28) *	4.67(1.05)			
t	-1.34	-3.08	-5.42	-3.21			
p	0.30	< 0.05	< 0.01	< 0.05			

*: Significant difference compared to the baseline period within the group. * indicates $P < 0.05$.

	HAMA	Effect Analysis
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Group	Baseline	Week 2	Month 1	Month 3	Time Effect (F / η^2 /P)	Group Effect (F / η^2 /P)	Interaction Effect (F / η^2 /P)
TMS-group	17.00(8.59)	9.55(5.56) *	8.76(5.17) *	9.94(5.03) *	59.55/.48/< 0.01	7.72/.11/< 0.01	2.46/.04/0.12
SHAM-TMS group	16.27(8.12)	12.39(5.98)	12.06(6.10)	13.70(6.14)			
t	0.35	-2.00	-3.37	-2.66			
p	0.73	< 0.05	< 0.05	< 0.05			

*: Significant difference compared to the baseline period within the group. * indicates P < 0.05.

	HAMD				Effect Analysis		
Group	Baseline	Week 2	Month 1	Month 3	Time Effect (F / η^2 /P)	Group Effect (F / η^2 /P)	Interaction Effect (F / η^2 /P)
TMS-group	11.39(6.90)	6.39(4.26) *	6.36(4.55) *	7.70(3.96)	32.50/.34/< 0.01	5.92/.09/0.03	0.20/.003/0.6 6
SHAM-TMS group	9.97(5.97)	7.79(4.39)	8.12(4.55)	7.91(3.78)			
t	0.90	-1.31	-1.57	-0.22			
p	0.37	0.20	0.12	0.82			

*: Significant difference compared to the baseline period within the group. * indicates P < 0.05.

Table S2. Effect analysis between TMS and SHAM-TMS groups.

DHI		
	r	p
HAMA	0.065	< 0.01
HAMD	0.575	< 0.01

Table S3. Correlation analysis among DHI, HAMA, and HAMD.