Fronto-parietal paired associative stimulation versus single-site stimulation for generalized anxiety disorder - a pilot

rTMS study



Figure 1. Physical appearance of the coils.

Coil number: ESWH8401; Coil racket structure size: width 191 mm; length 306 mm; thickness 19 mm. Coil cable length (including junction box) 2.5 m; Coil weight

0.9 kg.



Figure 2. The coil placement on the head.

Table 1. Resting motor threshold for each subject.

	rds-ccPAS-1500 group (N=13)	rds-ccPAS-750 group (N=9)	ss-PFC group (N=14)	ss-PPC group (N=14)
SUB-01	46	41	36	45
SUB-02	42	35	41	60
SUB-03	42	34	35	52
SUB-04	39	44	40	43
SUB-05	35	45	37	49
SUB-06	35	46	43	46
SUB-07	45	40	45	38
SUB-08	37	54	42	47
SUB-09	32	34	40	46
SUB-10	50		45	40
SUB-11	45		50	39
SUB-12	43		48	43
SUB-13	48		50	44
SUB-14			41	43

Table 2. The GEE model for HAMA.

GEE model	QICC
Without covariates	6192.599
With age as covariate	6653.319
With gender as covariate	6122.831
With age and gender as covariates	6677.686

QICC: Corrected Quasi Likelihood under Independence Model Criterion (QICC).

Table 3. Between-group differences with gender as covariate.

Adjusted difference	Mean difference, p, difference (95% CI)			
Aujusteu unterenee	post-treatment	10-day follow up	1-month follow up	
НАМА				
rds-ccPAS-1500 vs rds-ccPAS-750	-6.36, 0.004**, (-10.68, -2.05)	-3.47, 0.223, (-9.06, 2.11)	-3.97, 0.213, (-10.21, 2.28)	
rds-ccPAS-1500 vs ss-PFC	-6.81, 0.000**, (-10.14, -3.48)	-4.10, 0.105, (-9.05, 0.86)	-5.34, 0.057*, (-10.84, 0.16)	
rds-ccPAS-1500 vs ss-PPC	-6.21**, 0.003**, (-10.28, -2.14)	-3.14, 0.254, (-8.53, 2.25)	-3.17, 0.247, (-8.52, 2.19)	
HAMD				
rds-ccPAS-1500 vs rds-ccPAS-750	-3.75, 0.035**, (-7.23, -0.27)	-1.57, 0.437, (-5.54, 2.40)	-2.35, 0.387, (-7.67, 2.97)	
rds-ccPAS-1500 vs ss-PFC	-4.33, 0.003**, (-7.17, -1.49)	-2.34, 0.152, (-5.54, 0.86)	-3.20, 0.094*, (-6.94, 0.54)	
rds-ccPAS-1500 vs ss-PPC	-3.41, 0.027*, (-6.43, -0.38)	-1.20, 0.544, (-5.09, 2.68)	-1.99, 0.317, (-5.88, 1.90)	
PSQI				
rds-ccPAS-1500 vs rds-ccPAS-750	-1.75, 0.252, (-4.74, 1.24)	-0.64, 0.717, (-4.07, 2.80)	-1.60, 0.371, (-5.11, 1.91)	
rds-ccPAS-1500 vs ss-PFC	-3.14, 0.062*, (-6.44, 0.16)	-2.50, 0.132, (-5.75, 0.75)	-2.65, 0.102*, (-5.83, 0.53)	
rds-ccPAS-1500 vs ss-PPC	-3.74, 0.010**, (-6.57, -0.90)	-3.02, 0.059*, (-6.16, 0.11)	-3.17, 0.045**, (-6.27, -0.07)	

rds-ccPAS: repetitive dual-site paired associative stimulation; **: Significant difference (p<0.05). *: Trend-level difference (p<0.1). Degree of freedom is 1.

Table 4. Between-group differences with age and gender as covariates.

Adjusted difference	Mean difference, p, 95% CI			
Augusteu unterence	post-treatment	10-day follow up	1-month follow up	
HAMA				
rds-ccPAS-1500 vs rds-PAS-750	-6.43, 0.003**, (-10.69, -2.17)	-3.54, 0.210, (-9.07, 1.99)	-4.04, 0.200, (-10.21, 2.14)	
rds-ccPAS-1500 vs ss-PFC	-6.90, 0.000**, (-10.63, -3.17)	-4.18, 0.117, (-9.41, 1.04)	-5.43, 0.066*, (-11.22, 0.37)	
rds-ccPAS-1500 vs ss-PPC	-6.51, 0.003**, (-10.84, -2.18)	-3.44, 0.222, (-8.95, 2.07)	-3.47, 0.221, (-9.01, 2.08)	
HAMD				
rds-ccPAS-1500 vs rds-ccPAS-750	-3.66, 0.038**, (-7.13, -0.20)	-1.48, 0.456, (-5.38, 2.41)	-2.27, 0.397, (-7.49, 2.97)	
rds-ccPAS-1500 vs ss-PFC	-4.30, 0.005**, (-7.28, -1.32)	-2.31, 0.167, (-5.59, 0.97)	-3.17, 0.108, (-7.03, 0.70)	
rds-ccPAS-1500 vs ss-PPC	-3.51, 0.033**, (-6.73, -0.29)	-1.31, 0.513, (-5.38, 2.61)	-2.09, 0.308, (-6.11, 1.93)	
PSQI				
rds-ccPAS-1500 vs rds-ccPAS-750	-1.74, 0.262, (-4.77, 1.30)	-0.63, 0.725, (-4.11, 2.86)	-1.59, 0.382, (-5.16, 1.98)	
rds-ccPAS-1500 vs ss-PFC	-3.13, 0.066*, (-6.47, 0.20)	-2.49, 0.138, (-5.79, 0.80)	-2.64, 0.108*, (-5.86, 0.58)	
rds-ccPAS-1500 vs ss-PPC	-3.72, 0.012**, (-6.63, -0.80)	-3.00, 0.069*, (-6.24, 0.24)	-3.15, 0.054**, (-6.35, -0.05)	

rds-ccPAS: repetitive dual-site paired associative stimulation; **: Significant difference (p<0.05). *: Trend-level difference (p<0.1). Degree of freedom is 1.