

Changes in cerebral metabolites in obstructive sleep apnea: a systemic review and meta-analysis

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Supplementary Table 2 Sensitivity analysis of the results of changes in cerebral metabolite

Study	OSA	Control	Weight%	MD [95%CI]	<i>p</i>	I ² %	<i>p</i>	<i>P</i> _{Begg}	<i>P</i> _{Egger}
NAA/Cho in hippocampus(with exclusion of the study of Halbower et al)									
Algin et al ³³ ,2012	1.07±0.1	1.11±0.2	74.5	-0.04 [-0.18, 0.10]					
Kizilgoz et al ³⁴ ,2013	2.06±0.99	2.25±0.67	5.2	-0.19 [-0.71, 0.33]					
O'Donoghue et al ³² ,2012	4.15±0.52	4.04±0.45	20.3	0.11 [-0.15, 0.37]					
Pooled			100	-0.12 [-0.36, 0.10]	0.49	0	0.77	0.30	0.09
Cho/Cr in hippocampus(with exclusion of the study of Halbower et al)									
Algin et al ³³ ,2012	1.09±0.1	1.15±0.1	0.1	-0.06 [-0.14, 0.02]					
Kizilgoz et al ³⁴ ,2013	1.18±0.92	1.25±0.78	7.4	-0.07 [-0.63, 0.49]					
O'Donoghue et al ³² ,2012	0.38±0.04	0.41±0.04	92.4	0.43 [0.10, 0.76]					
Pooled			100	-0.01 [-0.10, -0.01]	0.75	0	<0.01	1.00	0.68
NAA/Cho in frontal lobe(with exclusion of the study of Alchanatis et al)									
Algin et al ³³ ,2012	1.48±0.08	1.99±0.36	59.8	-0.51 [-0.68, -0.34]					
Halbower et al ²⁶ ,2006	1.6±0.4	2.2±0.4	8.9	-0.60 [-1.04, -0.16]					
O'Donoghue et al ³² ,2012	4.56±0.41	4.92±0.44	31.3	-0.36 [-0.59, -0.13]					
Pooled			100	-0.32 [-0.64, -0.34]	0.49	0	<0.01	1.00	0.82
NAA/Cho in frontal lobe(with exclusion of the study of Algin et al)									
Alchanatis et al ³⁵ ,2004	1.89±0.43	1.78±0.42	36.3	0.11 [-0.11, 0.33]					
Halbower et al ²⁶ ,2006	1.6±0.4	2.2±0.4	27.6	-0.60 [-1.04, -0.16]					
O'Donoghue et al ³² ,2012	4.56±0.41	4.92±0.44	36.0	-0.36 [-0.59, -0.13]					
Pooled			100	-0.26 [-0.66, 0.15]	<0.0	84	0.21	1.00	0.57
NAA/Cho in frontal lobe(with exclusion of the study of Halbower et al)									
Alchanatis et al ³⁵ ,2004	1.89±0.43	1.78±0.42	32.8	0.11 [-0.11, 0.33]					
Algin et al ³³ ,2012	1.48±0.08	1.99±0.36	34.6	-0.51 [-0.68, -0.34]					
O'Donoghue et al ³² ,2012	4.56±0.41	4.92±0.44	32.5	-0.36 [-0.59, -0.13]					
Pooled			100	-0.26 [-0.63, 0.11]	<0.0	90	0.17	0.30	0.14
NAA/Cho in frontal lobe(with exclusion of the study of O'Donoghue et al)									
Alchanatis et al ³⁵ ,2004	1.89±0.43	1.78±0.42	26.4	0.11 [-0.11, 0.33]					
Algin et al ³³ ,2012	1.48±0.08	1.99±0.36	28.0	-0.51 [-0.68, -0.34]					
Halbower et al ²⁶ ,2006	1.6±0.4	2.2±0.4	19.3	-0.60 [-1.04, -0.16]					
Pooled			100	-0.32 [-0.78, 0.15]	<0.0	90	0.18	1.00	0.82

Abbreviations: NAA, N-acetylaspartate; Cho, choline;Cr, creatine; OSA, Obstructive sleep apnea; MD,

Mean difference; CI, Confidence Interval; *P*_{Begg}, *p*-value of Begg's test; *P*_{Egger}, *p*-value of Egger test