

Supplementary Material

Supplementary eTable 1: Review of literature on central effects of BoNT injections in dystonia

Publication	Form of dystonia	Time post-BoNT injection (months)	Imaging technique	Experimental condition	Change in brain activity after BoNT injection from baseline
Suzuki et al., 2007 ¹	Blepharospasm	1.5	¹⁸ F-FDG PET	Resting	None
Jochim et al., 2018 ²	Blepharospasm/ Meige's syndrome	1	fMRI	Resting	Mixed increased/decreased
Dresel et al., 2006 ³	Blepharospasm / Meige's syndrome	1	fMRI	Whistling	Decreased
Dresel et al., 2011 ⁴	Blepharospasm / Meige's syndrome	1	fMRI	Tactile stimulation	Decreased
Brodoehl et al., 2019 ⁵	Cervical dystonia	0.5	fMRI	Resting	Mixed increased/decreased
Delnooz et al., 2013 ⁶	Cervical dystonia	1 to 1.25	fMRI	Resting	Increased
Delnooz et al., 2015 ⁷	Cervical dystonia	1 to 1.25	fMRI	Resting	Increased
Feng et al., 2021 ⁸	Cervical dystonia	1	fMRI	Resting	Decreased
Hok et al., 2021 ⁹	Cervical dystonia	1	fMRI	Resting	Decreased
Nevrlý et al., 2018 ¹⁰	Cervical dystonia	1	fMRI	Sequential finger opposition	Increased
Obermann et al., 2010 ¹¹	Cervical dystonia	1.5	fMRI	Passive forearm flexion	Increased
Opavský et al., 2011 ¹²	Cervical dystonia	1	fMRI	Sequential finger opposition	Decreased
Opavský et al., 2012 ¹³	Cervical dystonia	1	fMRI	Electrical median nerve stimulation	Decreased
Ali et al., 2006 ¹⁴	Laryngeal dystonia	1	H ₂ ¹⁵ O PET	Speech production	Mixed increased/decreased
Haslinger et al., 2005 ¹⁵	Laryngeal dystonia	1.5	fMRI	Vocalization and whispering	None
Mantel et al., 2020 ¹⁶	Laryngeal dystonia	1	fMRI	Tactile stimulation and Resting	None
Simonyan et al., 2018 ¹⁷	Laryngeal dystonia	1	fMRI	Speech production	Decreased
Ceballos-Baumann et al., 1997 ¹⁸	Writer's cramp	1	H ₂ ¹⁵ O PET	Writing	Mixed increased/decreased
Mohammadi et al., 2012 ¹⁹	Writer's cramp	1	fMRI	Resting	None

Abbreviation: PET – position emission tomography; FDG - fluorodeoxyglucose; fMRI – functional magnetic resonance imaging

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