

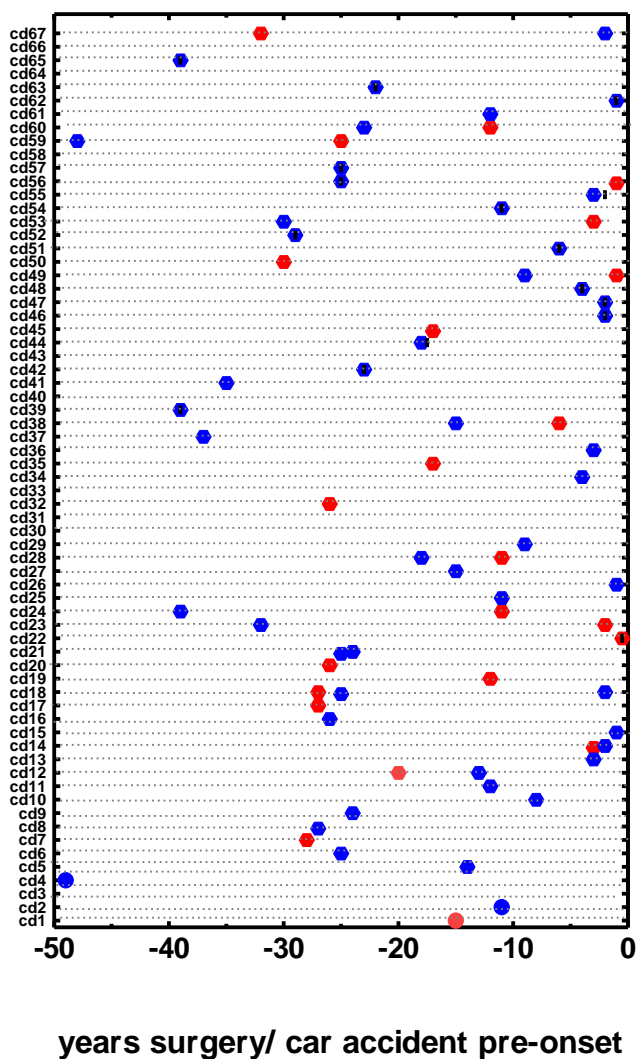
reported exposure	cervical dystonia patients n/N (%)	unaffected siblings n/N (%)	p-value
perinatal adversity	17/51 (33.3%)	19/47 (40.4%)	0.467
developmental delay	3/53 (5.7%)	1/56 (1.8%)	0.282
childhood infection	53/60 (88.3%)	52/61 (85.2%)	0.616
vaccines	44/48 (91.7%)	36/40 (90%)	0.787
neck/ torso injury	9/39 (23.1%)	5/36 (13.9%)	0.308
all head injuries	15/53 (28.3%)	8/47 (17%)	0.181
head injury without LOC	7/53 (13.2%)	5/47 (10.6%)	0.693
head injury with LOC	8/53 (15.1%)	3/47 (6.4%)	0.165
anaesthetic	44/62(71%)	37/58 (63.8%)	0.402
depression	5/49 (10.2%)	1/47 (2.1%)	0.102
surgeries	52/55 (94.5%)	43/59 (72.9%)	0.002*
tonsillectomy	14/56 (25%)	10/55 (18.2%)	0.383
appendicectomy	12/55 (21.8%)	8/53 (15.1%)	0.585
wisdom tooth extraction	11/47 (23.4%)	8/49 (16.3%)	0.384
other tooth extraction	23/37 (62.2%)	21/39 (53.8%)	0.463
other surgery	30/59 (50.8%)	25/52 (48.1%)	0.771
car accident/ no hospital attendance	10/56 (17.9%)	7/60 (11.7%)	0.346
car accident / hospital attendance	13/56 (23.2%)	2/60 (3.3%)	0.001*
llmb injury	19/45 (42.2%)	17/43 (39.5%)	0.798
smoking	37/67 (55.2%)	40/66 (60.6%%)	0.530
tea	56/58 (96.6%)	54/58 (93.1%)	0.402
coffee	37/61 (60.7%)	42/63 (66.7%)	0.486

supplementary table e-1: all chi- squared (χ^2) frequencies in cases versus controls

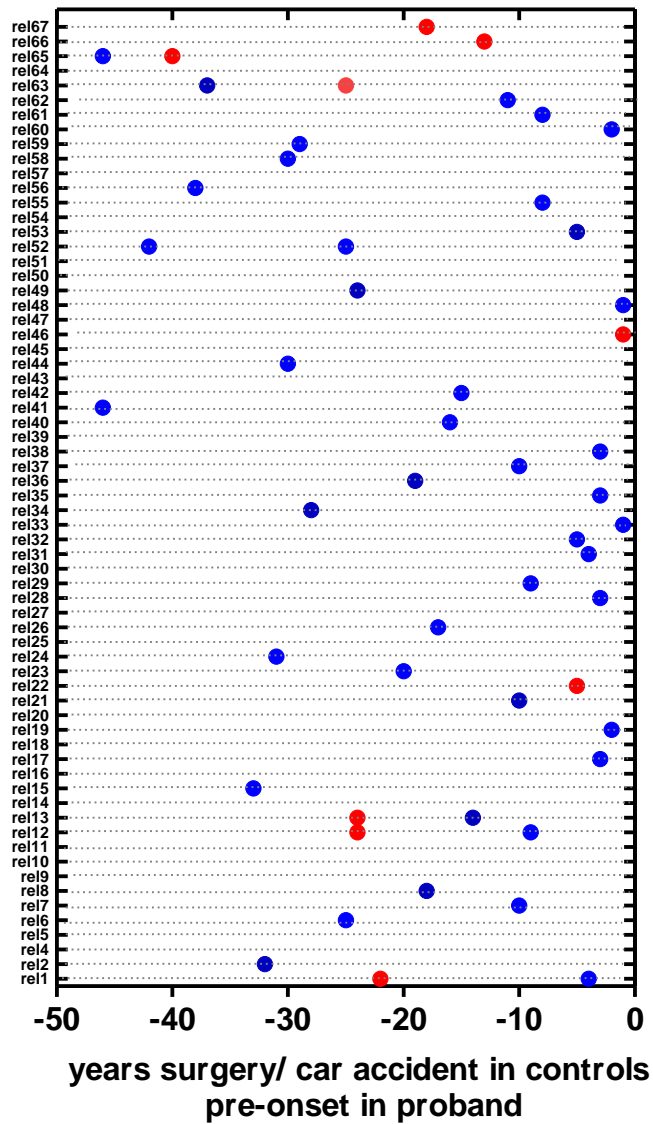
reported exposure	beta	p-value	odds ratio	95% C/I
perinatal adversity	-0.305	0.467	0.74	0.32-1.68
developmental delay	1.194	0.308	3.30	0.33-32.76
childhood infection	0.270	0.617	1.31	0.45-3.78
vaccines	0.201	0.787	1.22	0.29- 5.23
neck/ torso injury	0.621	0.312	1.86	0.56- 6.20
all head injuries	0.655	0.185	1.92	0.73- 5.06
head injury without LOC	0.362	0.564	1.44	0.42- 4.92
head injury with LOC	1.007	0.159	2.74	0.66- 11.10
anaesthetic	0.327	0.402	1.39	0.65- 3.0
depression	1.65	0.138	5.23	0.59- 46.54
surgeries	1.86	0.005*	6.45	1.76- 23.61
tonsillectomy	0.405	0.385	1.50	6.0- 3.74
appendicectomy	0.451	0.371	1.57	0.59- 4.21
wisdom tooth extraction	0.449	0.386	1.57	0.57- 4.32
other tooth extraction	0.342	0.464	1.41	0.56- 3.41
other surgery	0.111	0.771	1.12	0.53- 2.36
all car accidents	1.37	0.002*	3.95	1.63- 9.58
car accident/ no hospital attendance	0.541	0.143	2.21	0.77- 6.38
car accident/ hospital attendance	2.31	0.004*	10.05	2.13- 47.41
limb injury	0.111	0.798	1.12	0.48- 2.62
smoking	-0.221	0.530	0.80	0.40- 1.60
tea	0.730	0.411	2.07	0.37- 11.79
coffee	-0.260	0.487	0.77	0.37- 1.61

supplementary table e-2: binary univariate logistic regression results in cases

versus controls and their associated p-values.



supplementary graph e-3: graph shows each proband (cd1-67) represented on the y-axis with corresponding points relating to years of relevant event (last surgery; in blue, or last car accident; in red) from onset of dystonia are points on the x-axis. Abbreviations: “cd” cervical dystonia.



supplementary graph e-4: graph shows each unaffected relative of each proband (rel-61-67) represented on the y-axis with corresponding points relating to years of relevant event (last surgery; in blue, or last car accident; in red) from onset of dystonia are points on the x-axis. Abbreviations: “rel” unaffected relative.

Legends for supplementary tables:

supplementary table e-1: Chi- squared (X^2) frequencies of various exposures in cases versus controls are shown. Number of individuals reporting the exposure (n), total number of individuals who answered the question (N), percentages who reported the exposure (%) are shown, in addition to p- values. Significant associations are marked with an asterisk. All variables are shown including non-significant results. Abbreviation: LOC: loss of consciousness

supplementary table e-2: All univariate binary logistic regression results in cases versus controls are shown. Odds ratios, 95% confidence intervals and p-values are shown in relation to each variable. Significant p- values are marked with an asterisk. All variables are shown including non- significant results. Abbreviation: LOC: loss of consciousness.

supplementary graph e-3: : graph shows each proband (c61-67) represented on the y-axis with corresponding points relating to years of relevant event (last surgery; in blue, or last car accident; in red) from onset of dystonia are points on the x-axis. Relevant events are those (all car accidents and all surgical procedures) that were present in a significantly higher proportion of probands than unaffected siblings. Abbreviations: “cd” cervical dystonia

supplementary graph e-4: graph shows each unaffected relative of each proband (rel 61-67) represented on the y-axis with corresponding points relating to years of relevant event (last surgery; in blue, or last car accident; in

red) from onset of dystonia are points on the x-axis. Relevant events are those (all car accidents and all surgical procedures) that were present in a significantly higher proportion of probands than unaffected siblings. Abbreviations: “rel” unaffected relative.