Sway measure (EO-firm)	Control			pHD			mHD		
	ICC(1-1)	95%CI bounds		ICC(1-1)	95%CI bounds		ICC(1-1)	95%CI bounds	
	ρ	lower	upper	ρ	lower	upper	ρ	lower	upper
Jerk AP	0.815***	0.587	0.940	0.887***	0.729	0.965	0.855***	0.664	0.954
Jerk ML	0.473**	0.109	0.793	0.878***	0.710	0.962	0.764***	0.497	0.922
Total Sway Area	0.705***	0.404	0.899	0.805***	0.569	0.938	0.879***	0.713	0.962
Total Power AP	0.789***	0.540	0.931	0.644***	0.315	0.874	0.873***	0.700	0.960
Total Power ML	0.501**	0.139	0.808	0.815***	0.586	0.940	0.815***	0.586	0.940

Supplementary Table A: Test-retest reliability of postural sway measures across groups
Abbreviations: **pHD**: Premanifest Huntington's disease; **mHD**, Manifest Huntington's disease; **EO-firm**, Eyes open on firm surface; AP: Anteroposterior; ML: Mediolateral; ***** : $p < 0.05$; ****** : $p < 0.01$; ******* : $p < 0.001$;
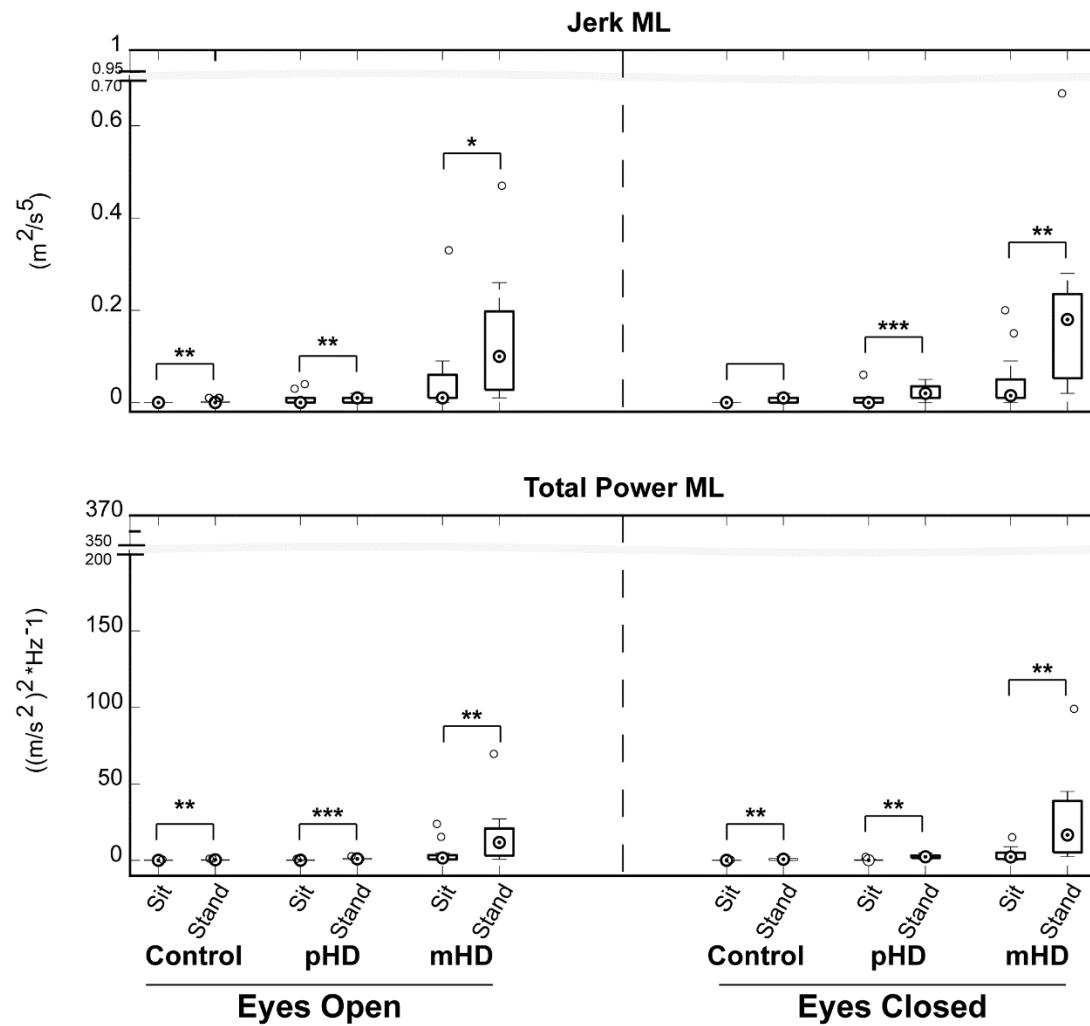
Supplementary Figure B: Modulation of postural control based on postural set in mediolateral direction

Abbreviations: **pHD**: Premanifest Huntington's disease; **mHD**: Manifest Huntington's disease; **ML**: Mediolateral; *p*-value: *: <0.05; **: <0.01; ***: <0.001

Measure	Condition	Control	pHD	mHD	Sig.	MC
Jerk AP	EO-firm	0.004 ± 0.003	0.013 ± 0.025	0.127 ± 0.119	-	
	EC-firm	0.009 ± 0.003	0.025 ± 0.042	0.175 ± 0.157	0.128	
	EO-foam	0.008 ± 0.005	0.031 ± 0.052	0.207 ± 0.186	0.004	b
	EC-foam	0.030 ± 0.010	0.135 ± 0.196	0.537 ± 0.581	< 0.001	a, b
	EO-sitting	0.005 ± 0.007	0.011 ± 0.033*	0.128 ± 0.209		
	EC-sitting	0.004 ± 0.006*	0.010 ± 0.023*	0.141 ± 0.302		
	Gaze-firm	0.003 ± 0.001	0.012 ± 0.027	0.123 ± 0.102		
	Gaze-foam	0.005 ± 0.001	0.029 ± 0.050	0.146 ± 0.109		
Jerk ML	EO-firm	0.005 ± 0.002	0.014 ± 0.021	0.136 ± 0.139	-	
	EC-firm	0.009 ± 0.004	0.025 ± 0.022	0.190 ± 0.186	0.097	
	EO-foam	0.014 ± 0.005	0.034 ± 0.031	0.282 ± 0.287	< 0.001	b, c
	EC-foam	0.059 ± 0.026	0.157 ± 0.113	0.587 ± 0.342	< 0.001	a, b, c
	EO-sitting	0.001 ± 0.001*	0.005 ± 0.010*	0.059 ± 0.101*		
	EC-sitting	0.001 ± 0.001*	0.007 ± 0.015*	0.047 ± 0.071*		
	Gaze-firm	0.003 ± 0.001	0.010 ± 0.015*	0.126 ± 0.116		
	Gaze-foam	0.008 ± 0.004*	0.028 ± 0.033*	0.178 ± 0.115		
Total Sway Area	EO-firm	0.004 ± 0.002	0.008 ± 0.009	0.087 ± 0.096	-	
	EC-firm	0.007 ± 0.003	0.016 ± 0.013	0.121 ± 0.118	0.119	
	EO-foam	0.009 ± 0.003	0.020 ± 0.019	0.144 ± 0.122	< 0.001	b, c
	EC-foam	0.033 ± 0.011	0.085 ± 0.074	0.324 ± 0.221	< 0.001	a, b, c
	EO-sitting	0.002 ± 0.003*	0.004 ± 0.008*	0.059 ± 0.105		
	EC-sitting	0.002 ± 0.002*	0.003 ± 0.005*	0.049 ± 0.093		
	Gaze-firm	0.003 ± 0.001	0.006 ± 0.009*	0.075 ± 0.063		
	Gaze-foam	0.005 ± 0.001*	0.017 ± 0.016	0.099 ± 0.070		
Total Power AP	EO-firm	1.129 ± 0.935	1.978 ± 1.897	30.817 ± 39.406	-	
	EC-firm	2.149 ± 0.915	3.873 ± 3.101	33.646 ± 32.757	0.154	
	EO-foam	1.784 ± 1.028	4.504 ± 5.596	42.712 ± 50.513	0.003	b,c
	EC-foam	7.307 ± 3.874	19.053 ± 21.059	86.574 ± 76.378	< 0.001	b
	EO-sitting	2.499 ± 5.801	2.187 ± 6.142*	31.624 ± 59.341		
	EC-sitting	1.955 ± 4.532	1.772 ± 4.270*	44.362 ± 111.690		
	Gaze-firm	0.757 ± 0.498	1.770 ± 2.193	22.243 ± 21.339		
	Gaze-foam	1.176 ± 1.080	3.432 ± 3.869	30.070 ± 25.312		
Total Power ML	EO-firm	0.552 ± 0.315	1.362 ± 1.125	15.992 ± 19.805	-	
	EC-firm	1.189 ± 0.554	2.873 ± 1.729	25.325 ± 28.658	0.004	b
	EO-foam	2.298 ± 1.503	4.766 ± 3.534	29.863 ± 26.073	0.003	b
	EC-foam	11.379 ± 4.809	24.167 ± 16.858	75.694 ± 40.627	< 0.001	b, c
	EO-sitting	0.119 ± 0.152*	0.293 ± 0.493*	5.028 ± 8.036*		
	EC-sitting	0.092 ± 0.114*	0.285 ± 0.577*	3.483 ± 4.813*		
	Gaze-firm	0.299 ± 0.119*	0.841 ± 0.938*	12.347 ± 12.490		
	Gaze-foam	1.090 ± 0.782*	3.185 ± 2.428*	20.364 ± 18.354		

Supplementary Table C: Postural sway values across sensory conditions and postural sets Abbreviations: **pHD**: Premanifest Huntington's disease **mHD**: Manifest Huntington's disease; **AP**: Anteroposterior; **ML**, Mediolateral; **MC**, Multiple comparisons; **a**: significant difference between Control vs pHD ($p < 0.05$); **b**: significant difference between Control vs mHD ($p < 0.05$); **c**: significant difference between pHD vs mHD ($p < 0.05$); *:Significant difference between Sit vs Stand ($p < 0.05$); or Gaze vs EO ($p < 0.05$)

Jerk AP

Total Sway Area

Total Power AP

Sway smooothness: Change in Jerk AP

Sway smooothness: Change in Jerk ML

Sway amplitude: Change in Total Sway Area

Sway frequency: Change in Total Power AP

Sway frequency: Change in Total Power ML

EC-firm   **EO-foam**   **EC-foam**

Sit vs Stand
(Jerk ML EC)

Sit vs Stand
(Jerk AP EC)

Jerk ML

Total Power ML