Table S1. Kinematic parameters for level walking with and without the EMG backpack

Kinematic parameter	control	EMG backpack
Pro. swing (deg)	–33.0±4.9	–38.6±2.8 [–12]
Pro. stance (deg)	–42.8±6.1	–42.9±3.8 [<1]
Sup. swing (deg)	1.8±5.3	–0.2±5.1 [–8]
Sup. stance (deg)	–0.3±5.2	–0.1±4.6 [1]
Lev. swing (deg)	31.8±7.1	30.9±6.5 [–3]
Lev. stance (deg)	27.1±2.8	23.6±3.7 [–11]
Ext. swing (deg)	110.5±4.0	110.2±5.5 [<1]
Ext. stance (deg)	88.2±4.7	86.8±3.5 [–2]

Values are means±s.d. of animal means (control, 5 animals, 10 steps per animal; EMG backpack, same animals, 18-33 steps per animal). Values in brackets indicate differences from level walking as a percentage of the range of the parameter (peak-to-peak amplitude of the parameter's mean time course) during the step cycle of control steps. Angles are net values averaged over each phase of the step cycle. Pro., protraction angle; Sup., supination angle; Lev., levation angle; Ext., extension angle. See Fig. 1B for angle conventions.

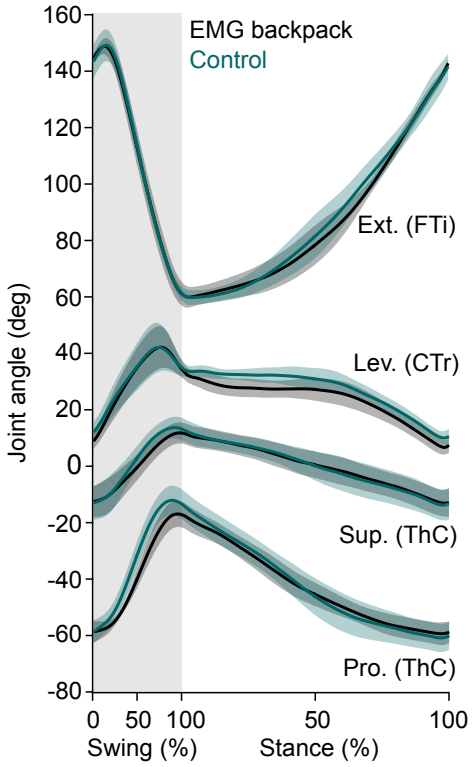

Fig. S1. Effects of the EMG backpack on hind leg kinematics. Joint angles of the hind leg during level walking normalized to swing and stance duration. Lines and error bands show means and 95% confidence intervals of animal means. Black lines show data with EMG backpack attached and electrodes implanted (5 animals, 18-33 steps per animal; same as black lines in Fig. 2H). Green lines show control data recorded from the same animals prior to backpack attachment and electrode implantation (5 animals, 10 steps per animal).