

Figures and tables

Tables captions

Table 1. Means, standard deviations and peak values of anthropometric and functional characteristics for 25 paraplegic men and their injury level and age.

Table 2. Mean cardiac strains: heart rate (HR), absolute cardiac cost (ACC) and relative cardiac cost (RCC) for imposed (V_i) and comfortable (V_c) velocities at the 3 cross slopes (0/2%, 8% and 12%).

Table 3. Mean energetic strains: oxygen uptake (VO_2), energy cost per meter and per kg (ECmkg) and relative energetic cost (REC) for imposed (V_i) and comfortable (V_c) velocities at the 3 cross slopes (0/2%, 8% and 12%).

Table 4. Comparison of physiological strains when travelling in a MWC on flat ground. For each study with publication date are shown the number of subjects, the travelling velocity and the energetic cost per meter travelled (cVO_2 in $ml.kg^{-1}.m^{-1}$).

Figure caption

Figure 1. Mean strains and standard deviations for the 4 cross slopes and 2 travelling velocities. Absolute cardiac cost (ACC in bpm, rectangles), oxygen cost ($cVO_2 = VO_2 - VO_{2rest}$ in $ml.kg^{-1}.min^{-1}$, circles) and subjective strain (arbitrary unit, triangles). Full forms are for V_i and empty ones for V_c . Continuous for ACC, small dotted for RPE and large dotted for cVO_2 regression lines are plotted to simplify reading.

Table 1

	Mean (SD)	Minimum - Maximum
Age (year)	38.9 (9.5)	23 - 61
Height (cm)	178.0 (7.7)	163 - 192
Weight (kg)	75.3 (14.0)	57 - 116
BMI (kg.m ⁻²)	23.8 (4.6)	16.5 - 34.6
VO ₂ max (ml.kg ⁻¹ .min ⁻¹)	25.0 (5.5)	19.4 - 38.0
Injury level		T3 - L4
Injury age (years)	10.6 (7.8)	2 - 32

Table 2

Cross slope (%)	HR (bpm)		ACC (bpm)		RCC (%)	
	Vi	Vc	Vi	Vc	Vi	Vc
0/2	92.2 (14.6)	106.5 (16.4)	19.9 (5.7)	33.7 (12.9)	19 (6)	31 (11)
8	104.4 (14.9)	117.8 (18.2)	34.5 (14.0)	45.0 (15.0)	32 (14)	42 (16)
12	114.7 (19.0)	129.5 (15.9)	43.7 (18.4)	55.1 (17.8)	40 (18)	51 (16)

Table 3

Cross slope	VO₂ (ml.kg⁻¹.min⁻¹)		ECmkg (J.m⁻¹.kg⁻¹)		REC (%)	
	Vi	Vc	Vi	Vc	Vi	Vc
0/2	8.0 (1.3)	11.2 (3.1)	1.20 (0.38)	1.50 (0.43)	16.8 (7.5)	32.0 (13.5)
8	10.8 (2.1)	13.3 (3.3)	2.11 (0.76)	2.33 (0.94)	29.6 (14.0)	42.3 (15.4)
12	11.9 (2.6)	15.7 (4.0)	2.76 (0.97)	3.37 (1.43)	37.5 (15.5)	52.4 (17.9)

Table 4

		Subjects number	V (m.s ⁻¹)	cVO2 (ml.kg ⁻¹ .m ⁻¹)
This study		25	0.95 1.41	0.145 0.132
Mukherjee, and Samanta	2001	17	0.95	0.123
Hilbers, and White	1987	9	1.12 1.59 2.18 2.92	0.136 0.118 0.110 0.138
Waters et al.	1985	124	1.2	0,160
Wolf et al. 1977	concrete carpet	15	1.35 1.1	0,144 0,197

Figure 1

