



Effect of knee angle and submaximal voluntary contraction intensity on vastus medialis and vastus lateralis rigidity

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Introduction

Methods

- **Statistical analysis:** Paired Student's t test for MVC | 3-way ANOVA for EMG RMS | 2-way ANOVA for SWE data (one for each muscle).

Box plot showing VL Young's modulus (kPa) for 25%, 50%, and 75% strain levels, comparing 50 and 100 Hz conditions. The y-axis represents VL Young's modulus (kPa) from 0 to 250. The x-axis shows strain levels: 25%, 50%, and 75%. The legend indicates blue boxes for 50 Hz and red boxes for 100 Hz. Significance markers (***) are present above the 25% strain level, and (*) is present above the 50% and 75% strain levels.

Strain Level	Condition	Median (kPa)	Q1 (kPa)	Q3 (kPa)	Min (kPa)	Max (kPa)
25%	50	~75	~55	~105	~30	~115
	100	~155	~135	~175	~115	~215
50%	50	~135	~100	~150	~30	~180
	100	~135	~85	~145	~30	~170
75%	50	~135	~65	~145	~40	~165
	100	~90	~65	~135	~15	~165

