

RUNNERS: A PILOT CONTROLLED TRIAL



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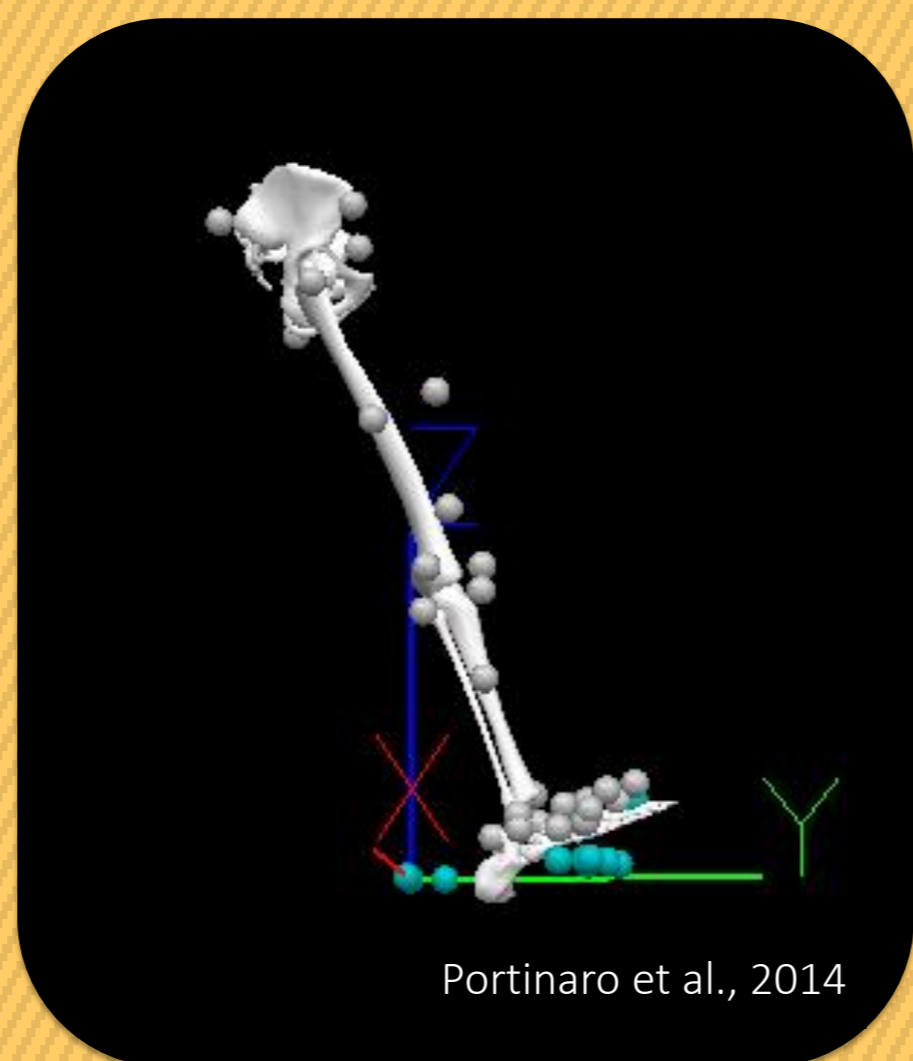
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NCT02306148

On account of the easy accessibility, distance running is practiced worldwide and its popularity continues to expand with the growing interest in disease prevention.

We proposed a randomized, prospective controlled and parallel clinical trial with blind assessment aiming to establish prophylactic measures for recreational runners while improving foot-ankle functionality and biomechanics.

To evaluate the feasibility of the proposed exercise protocol, and the effectiveness of the protocol on foot health and functionality, foot muscle trophism, and forces while running.

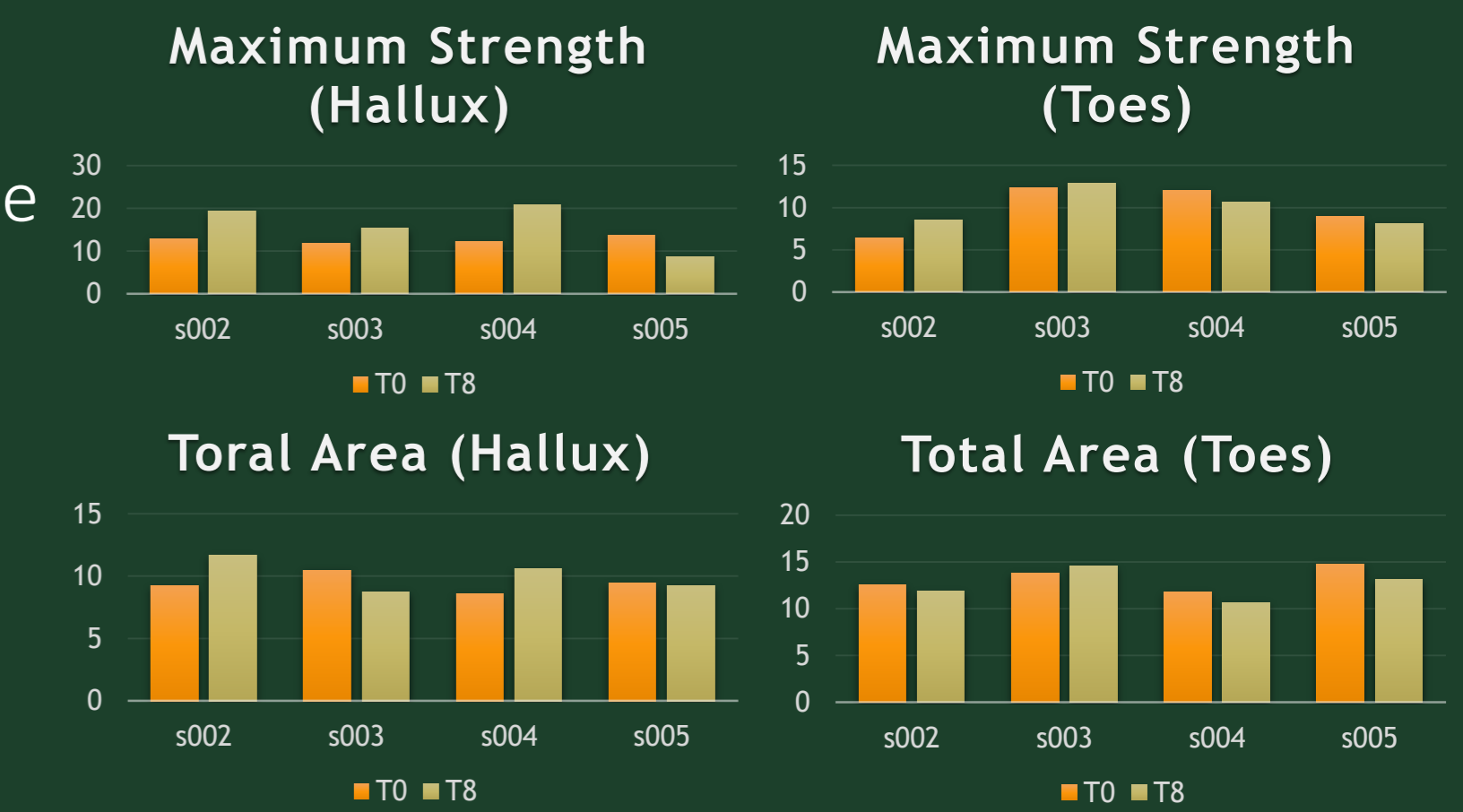
Methods



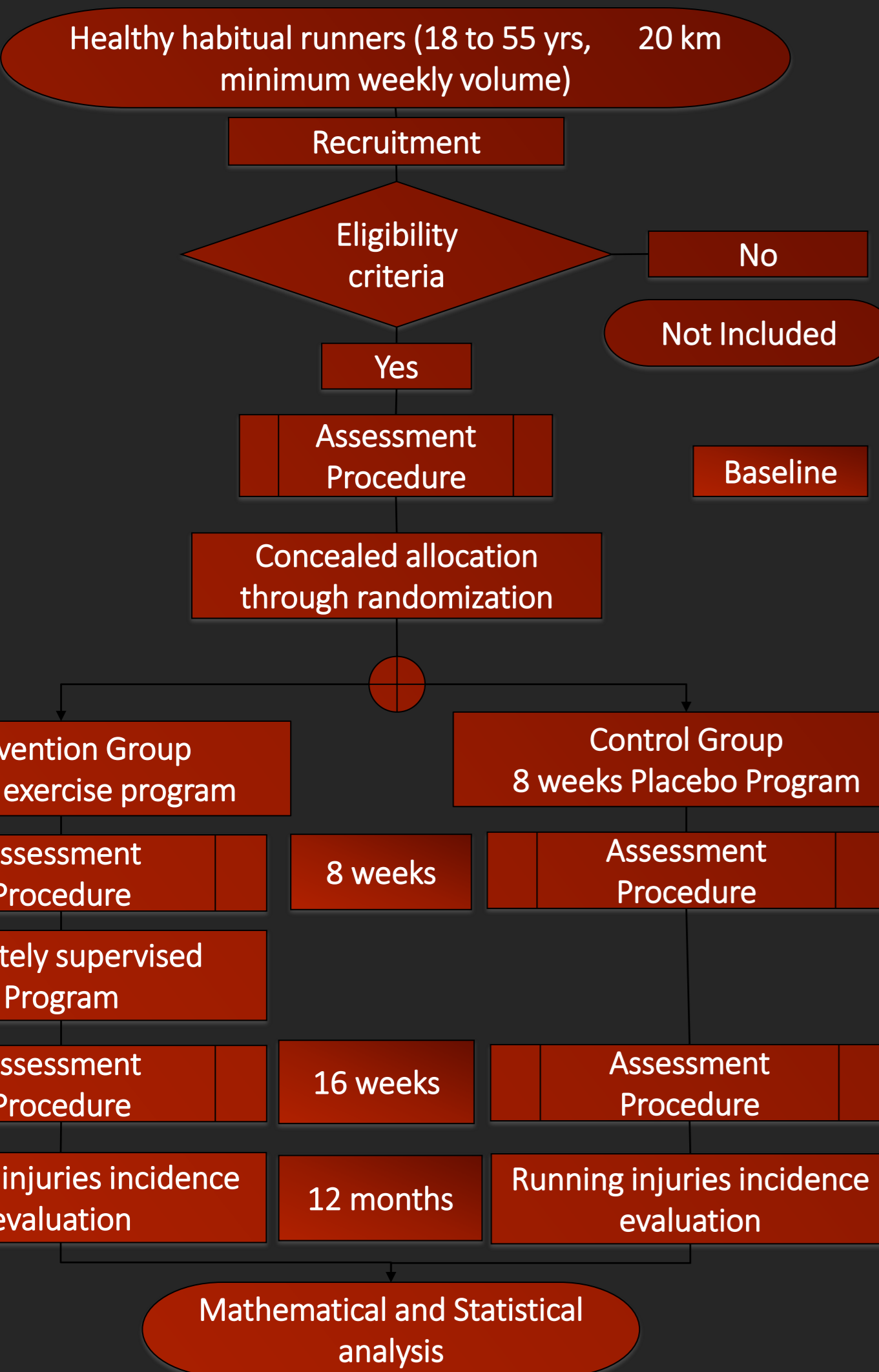
Foot strength

In general, better performance of the intervention group than the control subject

- CG = S005
- IG = S002, S003, S004



Foot muscle trophism – MRI



Matias et al. BMC Musculoskeletal Disorders (2016) 17:160
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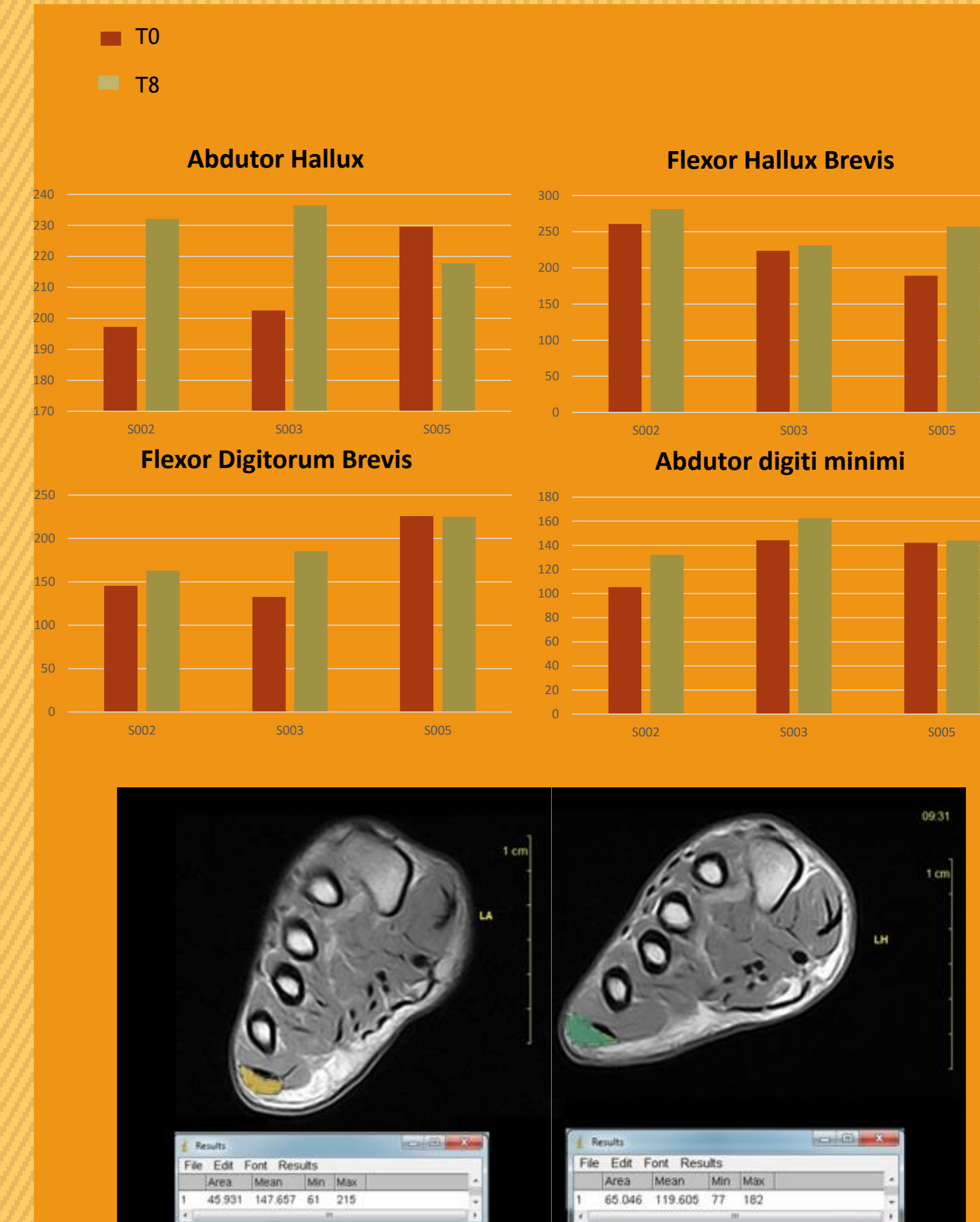
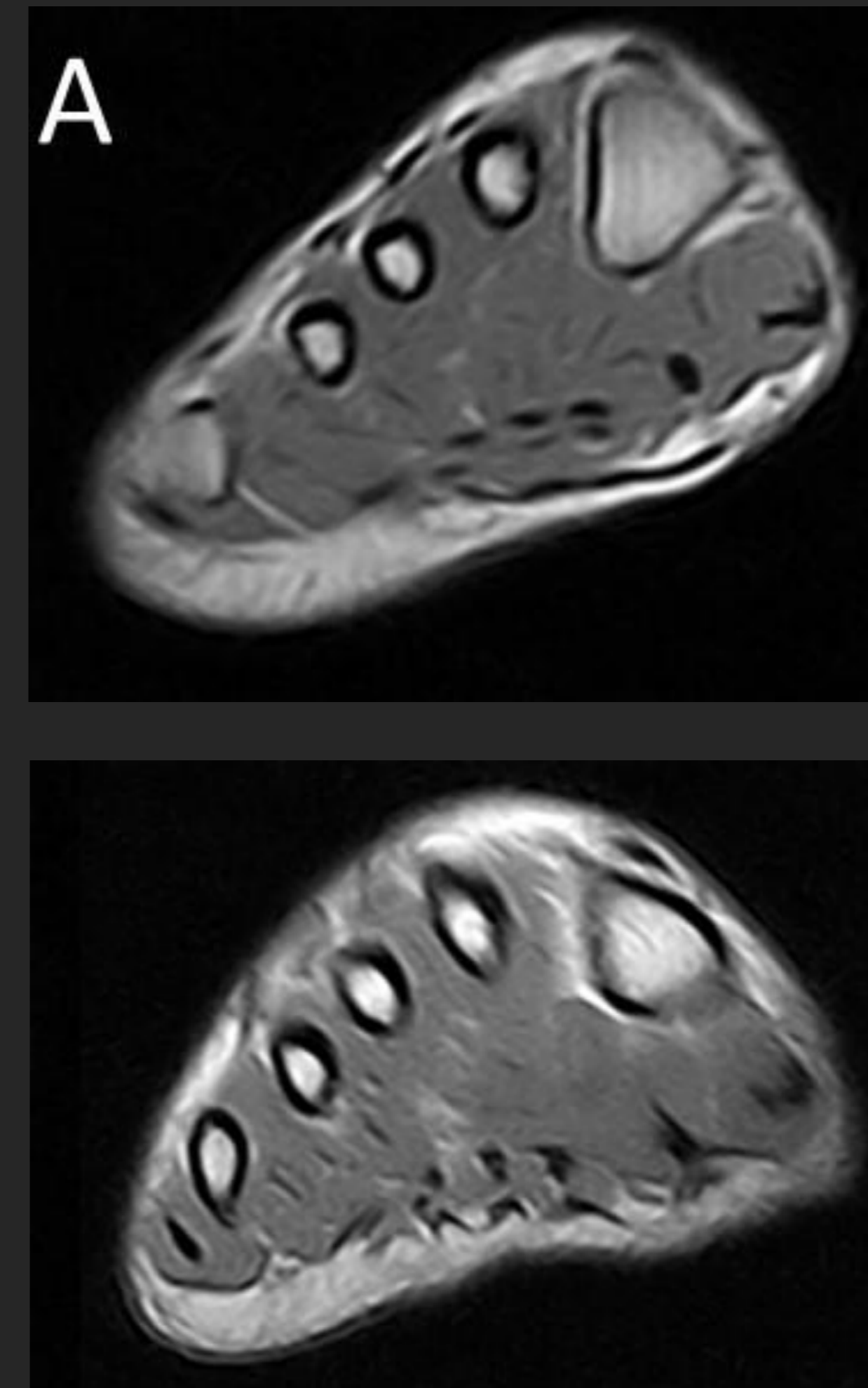
BMC Musculoskeletal Disorders

STUDY PROTOCOL Open Access

Protocol for evaluating the effects of a therapeutic foot exercise program on injury incidence, foot functionality and biomechanics in long-distance runners: a randomized controlled trial

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	S002	S003	S004	S005	Median
Age (years)	29	32	35	29	30.5
Height (m)	1.8	1.8	1.6	1.82	180.0
Body Mass (kg)					
T0	80	74	65	96.5	77.0
T8	78.2	76.2	65	96.5	77.2
Body mass index					
T0	24.69	22.84	25.39	28.98	25.04
T8	24.07	23.46	25.39	28.98	24.73
FPI					
T0	3	3	6	5	4.0
T8	2	3	4	5	3.5
Left Arch Index					
T0	0.238	0.245	0.262	0.262	0.3
T8	0.262	0.293	0.26	0.244	0.3
Right Arch Index					
T0	0.175	0.275	0.242	0.264	0.3
T8	0.195	0.279	0.249	0.263	0.3
Sex	Male	Male	Male	Male	-



Intervention protocol

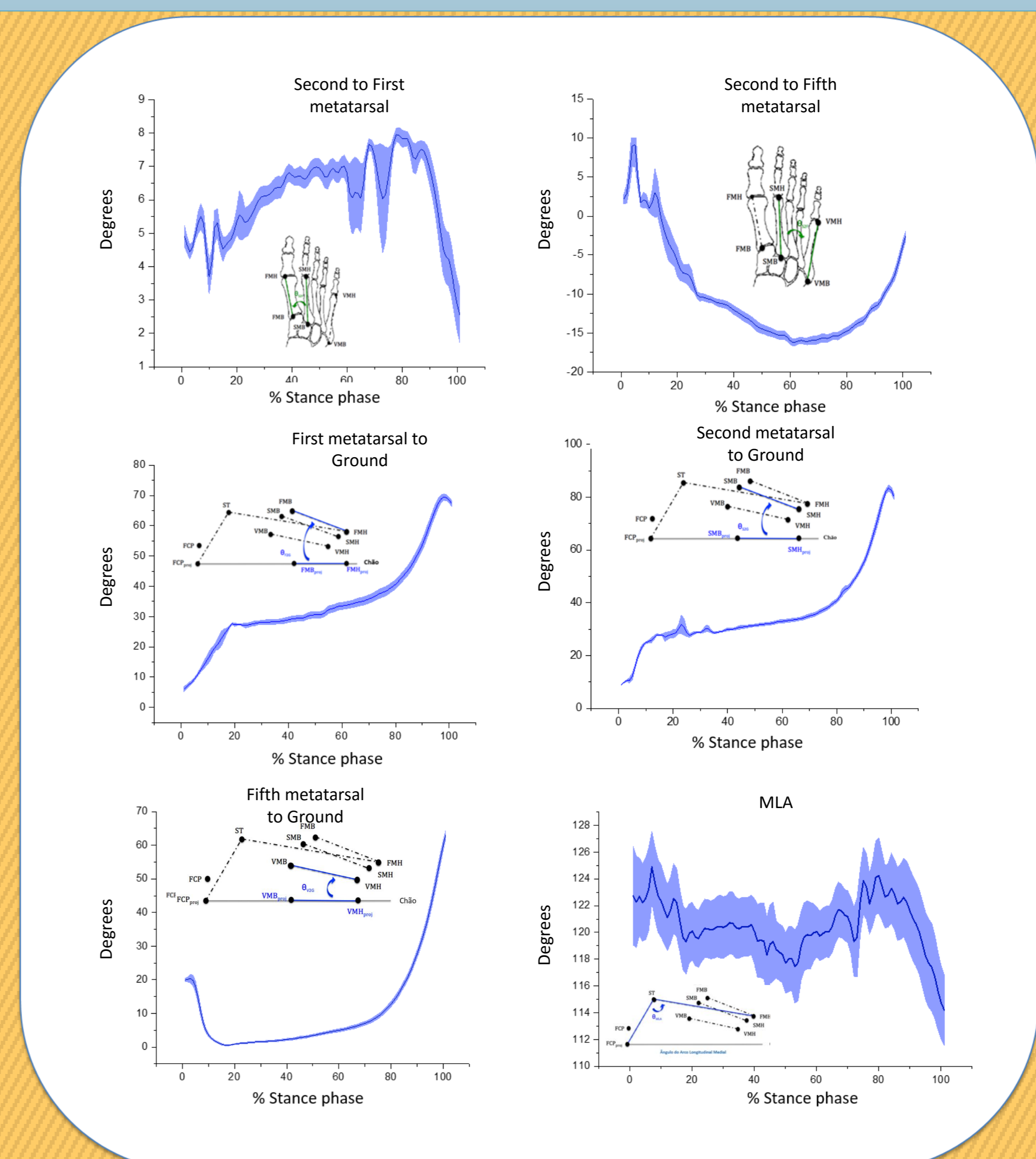


Intervention group



Control group

Kinematics



IN SUMMARY

- The protocol is Feasible;
- The population is interested and accessible;
- Results suggests certain biomechanical alterations on IG despite the short sample;

- Investigate foot dynamic deformation according to Perl et al. (2012);
- Improve the training protocol making it shorter;
- Calculate injury incidence in 12 months and 1000 hours of practice;
- Follow a larger sample (n=111).

