

Online supplementary appendix 4. Foot orthoses used in each trial

Trial	Intervention	Brand	Shell characteristics	Top cover	Casting method	Modifications
Abd El Salam (2011)[37]	Firm prefabricated foot orthosis	Powerstep® Original Full Length (Stable Step, LLC, West Chester, USA)	Polypropylene support shell with EVA base. ^a	Variable Cushioning Technology® foam with a polyester fabric top.	NA	None reported.
Baldassin (2009)[38]	Customised foot orthosis	NA	Three plates of EVA (differing densities). ^a	None reported.	Participants sat with their foot held in subtalar joint neutral while the EVA was heat moulded to their foot.	A low-density foam was added to the heel.
	Soft prefabricated foot orthosis	NA	Two plates of EVA (differing densities). ^a	None reported.	The EVA was heat moulded based on a single positive foot model taken from a healthy foot.	A low-density foam was added to the heel.
Caselli (1997)[39]	Soft prefabricated foot orthosis	PPT® Molded Insole (Langer Biomechanics, Ronkonkoma, New York, USA)	3 mm Plastazote full length base. ^a	3 mm PPT® Ultralux	NA	Nikken magnetic foil placed in the heel.
Dimou (2004)[40]	Customised foot orthosis	NA	High-density EVA ^a	Low-density EVA ^a	Casts were taken with feet placed in subtalar and midtarsal joint neutral.	None reported.
Kavros (2005)[41]	Firm prefabricated foot orthosis	1 st Step® orthosis (Wrymarck® Inc., St Louis, USA)	Semi-rigid vinylplex	Shock absorbing Poron® ^a	NA	None reported.
Landorf (2006)[26]	Customised foot orthosis	NA	Semi-rigid polypropylene	None reported.	Plaster casts taken with the foot placed in subtalar joint neutral.	Firm foam heel post.

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	Firm prefabricated foot orthosis	¾ length Formthotic® (Footscience International, Christchurch, New Zealand)	Firm-density polyethylene foam ^a	None reported.	NA	None reported.
	Sham foot orthosis	-	6 mm soft EVA (120 kg/m ³) with plantar heel ground to minimum thickness	None reported.	NA	None reported.
Lynch (1998)[42]	Customised foot orthosis	-	NR	None reported.	Plaster impressions taken with the foot in subtalar joint neutral.	None reported.
Malkoc (2014)[43]	Soft prefabricated foot orthosis	NR	Silicone	None reported.	NA	None reported.
Martin (2001)[44]	Customised foot orthosis	-	5 mm Polydur plastic with 4 degrees of intrinsic forefoot posting.	No top cover.	Participants lay supine and were placed in subtalar joint neutral and mid-tarsal joint fully pronated, before the plantar surface was scanned with a laser beam and transmitted to a computer.	A 4 degree extrinsic rearfoot post made from non-compressible cork was added.
	Firm prefabricated foot orthosis	Foot Soldiers (Professional Footcare International, Valencia, California, USA)	Rigid plastic ^a	None reported.	NA	None reported.
Oliveira (2015)[25]	Customised foot orthosis	-	5 mm thick EVA total contact insole (Shore A durometer 35, 0.160 g/cm ²).	None reported.	Participants were supine and a plaster cast was taken of the plantar surface of the foot.	None reported.
	Sham foot orthosis	-	Flat EVA ^a	None reported.	NA	None reported.

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Pfeffer (1999)[45]	Customised foot orthosis	-	4-6 mm polypropylene determined by patient weight. ^a	None reported.	A negative cast was taken with the participant in subtalar joint neutral.	None reported.
Rome (2004)[46]	Firm prefabricated foot orthosis	Talarmade (Talarmade Ltd., Chesterfield, Derbyshire, UK)	EVA (Shore-A durometer 70)	EVA (Shore-A 25 durometer)	NA	4 degree medial rearfoot EVA post.
	Soft prefabricated foot orthosis	Talarmade orthotic (Talarmade Ltd., Chesterfield, Derbyshire, UK)	EVA (Shore-A durometer 20)	None reported.	NA	Polyurethane heel pad.
Roos (2006)[47]	Customised foot orthosis	NA	EVA (Shore-A durometer 55) ^a	None reported.	A plaster cast was taken with the patient lying prone. The foot was placed in subtalar and midtarsal joint neutral.	None reported.
Turlik (1999)[48]	Customised foot orthosis	NA	Polypropylene (thickness of 3 mm if < 47 kg, 4 mm if < 48-80 kg, 5 mm if >80 kg). Forefoot balanced to 0.	None reported.	A plaster cast was taken with the patient lying supine. The foot was placed in subtalar and midtarsal joint pronated.	A 4 degree rearfoot post with 4 degrees of motion. A 4 mm heel lift was added for men and an 8 mm lift for women.
Vicenzino (2015)[49]	Firm prefabricated foot orthosis	Vionic Active Orthaheel (Vionic Group LLC, San Rafael, California, USA)	A rigid polyethylene base with a 4 degree rearfoot wedge.	EVA	NA	None reported.
Walther (2013)[50]	Firm prefabricated foot orthosis	NR	Rigid self-supporting plastic. ^a	Foam ^a	NA	Central plantar heel recess with polyurethane padding.
	Soft prefabricated foot orthosis	NR	EVA ^a	None reported.	NA	A layered recessed polyurethane 'cushion zone'.
	Sham foot orthosis	NR	Polyethylene ^a	None reported.	NA	Cushion under the heel and forefoot made of polyurethane.

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Winemiller (2003)[51]	Soft prefabricated foot orthosis	Spenco Active Comfort Magnetic Insole (Spenco Medical Corp., Waco, Texas, USA)	NR	None reported.	NA	Magnetic foil embedded in proximal arch.
Wrobel (2015)[27]	Customised foot orthosis	NA	Material NR. Forefoot balanced to rearfoot apart from the following exceptions, (i) valgus rearfoot received a flat rearfoot post, (ii) rearfoot varus of greater than 6 degrees was posted to a maximum of 6 degrees varus, (iii) medium arch fill was used for patients who could not dorsiflex past 0 degrees and for those who were 30% over ideal body weight. Minimum arch fill was used for all other prescriptions.	3 mm neoprene	Neutral suspension casts.	Additional modifications were made depending on body stature, foot type, first ray function and ankle function.
	Firm prefabricated foot orthosis	Orthoheel Workforce (Vionic Group LLC, San Rafael, California, USA)	EVA (Shore-C durometer 45) triplanar orthoses with a 4 degree intrinsic rearfoot post.	Brushed nylon covered with a 3 mm neoprene top-cover.	NA	None reported.
	Sham foot orthosis	NA	3 mm EVA (Shore-A durometer 35)	3 mm neoprene	NA	Heated and moulded to participants feet.
Yucel (2013)[52]	Soft prefabricated foot orthosis	NR	Silicone ^a	None reported.	NA	None reported.

Abbreviations: NR, not reported; EVA, ethyl vinyl acetate; PPT, Professional Protective Technology; USA, United States of America; UK, United Kingdom; NA, not applicable.

^a Unable to obtain further information regarding material.