|  |
| --- |
| **Characteristics of the included studies** |
| **Author year of publication** | **Setting** | **Number of participants** | **Female (%)** | **Range of age or mean (SD) in years** | **Duration of complaints, mean (SD) in weeks or months** | **Inclusion Criteria** | **Interventions** | **Outcomes** | **Follow-up** |
| Al Bluwi 2011 | Hospital | 198 | ? | I1: 45.2 (5.1)I2: 41.3 (2.6)I3: 43.8 (3.5) | I1: 12.33 (7.4)\*I2: 11.1 (7.6)\*I3: 13.2 (3.7)\**\* months* | Clinical diagnosis of PF, No other diagnosis after radiological and electrodiagnostic tests | I1: NSAID’s\* + EZ step (n=117)I2: NSAID’s\* + physiotherapy (n=32)I3: NSAID’s\* + physiotherapy + local steroid injection (n=48)*\*NSAID’s given for 4-6 weeks* | Pain: VAS/10, SFMPQ/100 | 8 weeks16 weeks24 weeks |
| Baldassin 2009 | Hospital | 142 | Total: 75I1: 77.8I2: 72.9 | I1: 47.5 (11.5)I2: 47.2 (12.4) | I1: 15.7 (21.6)\*I2: 20.1 (29.2)\**\*months* | Age >18,Clinical diagnosis of PF, no complicated PF | I1: prefabricated foot orthosis (n=72)\*I2: customized foot orthosis (n=70)\**\*95% EVA**Not all patient that were allocated were analyzed* | Pain:FFI subscale/100,VAS with Palpation/100Function: FFI total/100 | 4 weeks 8 weeks |
| Caselli 1997 | Foot clinic | 40  | 65 | 43 (range 28-59) | ? | 18-80 years of age,Medial plantar calcaneal heel pain | I1: PPT insole containing magnetic foil (n=19)I2: PPT insole (n=15) | Function:FFI/100 | 4 weeks |
| Dimou 2004 | Chiropractic clinic | 20 | 35 | I1: 44.1 (range 27-59)I2: 40.6 (range 23-59) | 21.82 (24.14)\**\*months* | 18-60 years of age, symptoms > 7 weeks, “first step pain” | I1: chiropractic manipulation twice a week for 4 weeks + stretching exercises (n=10)I2: customized orthotics (n=10) | Pain: NRS/10, First step pain form/10, Pain during leisure, work and sport/ 10 Pressure pain threshold algometry/10 | 15 days29 days9 weeks |
| El Salem 2011 | Physical therapy clinic | 30 | 23 | I1: 52,9 (4.542)I2: 52,8 (4,003) | ? | 40-60 years of age, complaints > 4weeks, non-athletes, clinical diagnosis of unilateral PF | I1: Low dye taping (n=15)I2: Medial Arch Support (Powerstep insoles) (n=15)*+ ultrasound therapy + stretching in both groups* | Pain: VAS/10 Function: MFPDQ /51 | 3 weeks |
| Kavros 2005 | Mayo clinic (orthopedic surgery) | 50 | 82 | 25-63 | 4-8 weeks | Pain over the plantar medial tubercle, classic morning start up pain, unilateral  | I1: Airheel cast (n=25)I2: Prefabricated foot insert (n=25) | Pain: FFI subscore/100 | 12 weeks |
| Kriss 2003 | ? | 76 | 61 | 59.33 | 7.56\* (range 0-65)*\*months* | Unilateral heel pain, central of medially located, no inflammation disease, no anti-inflammatory medication 6 weeks prior to inclusion | I1: soft anti pronatory pad (n=26)I2: local steroid injection (n=22)I3: combination of the above (n=28) | Pain: VAS/100 | 1, 2, 3, 4, 8, 12, 16, 20 and 24 weeks  |
| Landorf 2006 | University podiatry clinic | 135 | I1: 67I2: 57I3: 74 | I1: 48.5 (9.6)I2: 47.3 (11.6)I3: 49.2 (12) | I1: 12 (range 1-240)\*I2: 11 (range 2-360)\*I3: 12 (range 2-360)\**\*months* | Minimum 4 weeks complaints, no orthopedic or medical conditions | I1: sham orthosis (n=45)I2: prefabricated orthosis (n=44)I3: custom made orthosis (n=46) | Pain: FHSQ subscale/100Function: FHSQ /100 | 3 months 12 months |
| Martin 2001 | Podiatry clinic | 255 | 65I1: 72I2: 76I3: 81 | 21-70 I1: 47 (13)I2: 48 (11)I3: 47 (11) | 20\*I1: 20\*I2: 16\*I3: 24\**\*weeks* | Plantar heel tenderness, first-step pain, no trauma in the 3 months prior | I1: custom made orthosis (n=85)I2: OTC arch supports (n=85)I3: tension night splints (n=85)*Not all patient that were allocated were analyzed* | Pain: VAS pain during day/10,VAS pain morning/10,First step pain/10 | 2 weeks6 weeks12 weeks |
| Oliveria 2015 | Outpatient clinic (Rheumatology) | 74 | I1: 81I2: 97 | I1: 48 (10.1)I2: 53 (10.8)weeks | I1: 48 (143.7)I2: 48 (171.1) | Clinical diagnosis of PF, VAS 3-8, age > 18 | I1: custom total contact insoles (n=37)I2: flat (sham) insole (n=37) | Pain:VAS walking/ 10,VAS rest/10Function:FFI/ 100, FHSQ/100 ,6 min walk testImprovement:(Likert/5) | 45 days90 days 180 days |
| Pfeffer 1999 | Centres for orthopaedic treatment | 236 | 68 | I1: 49.5 (30-75)I2: 44 (27-69)I3: 48 (26-76)I4: 47 (25-81)I5: 48.5 (23-69) | ? | Age >16, maximal tenderness over medial tuberosity, no previous treatment | I1: silicone insert (heel cup) (n=51)I2: rubber insert (heel cup) (n=50)I3: felt insert (n=47)I4: stretching only (n=46)I5: custom orthosis (n=42) | Pain:FFI subscale/ 100Self-reported recovery: Likert/10 | 8 weeks |
| Rome 2004 | Podiatry services, GP’s and physiotherapists | 48 | 60 | 59.9 (13.5)I1: 58.3 (12.6)I2: 61.2 (14.4) | I1: 21.6 (40.5)\*I2: 12.4 (19.6)\**\*months* | Unilateral heel pain for at least 2 months, first step pain, impact on activity level, good general health | I1: accommodative orthosis (n=22)I2: functional orthosis (full length) (n=26)All patients received stretching exercises*Not all patient that were allocated were analyzed* | Pain:FHSQ subscale/100Function: FHSQ/ 100 | 4 weeks8 weeks |
| Roos 2006 | Primary care | 43 | 79 | 46 (range 22-63) | 4.2\* (1-240\*)*\*months* | Age 20-60, high activity level before complaints, duration > 4 weeks | I1: foot orthosis custom made(n=13)I2: foot orthosis + night splint (n=15)I3: night splint (n=15)*Not all patient that were allocated were analyzed* | Pain:FAOS pain subscale/ 100Function: FAOS ADL and sports subscale/ 100 | 6 weeks 12 weeks26 weeks 52 weeks |
| Sharma 2010 | University medical center | 17 | 92.3 | I1: 40.3 (7)I2: 44.2 (11.3) | I1: 9.2 (7.7)\*I2: 12.2 (6.4)\**\*months* | Age 25-65, heel pain, duration > 4 weeks | I1: static stretching (n=9)I2: SAS ankle brace (n=8)Both groups received an over the counter basic foot orthosis  | Pain: FFI subscale/10Function: AOFAS /100  | 4 weeks8 weeks12 weeks |
| Turlik 1999 | College of podiatric treatment | 60 | I1: 77I2: 56 | I1: 46I2: 44 | I1: 13\*I2: 12\**\*months* | Clinical diagnosis of PF | I1: OTC heel pads (n=34)I2: custom functional foot orthotic devices (n=26)*Not all patient that were allocated were analyzed* | Pain: morning pain/ 10, pain for rest of life/ 10 | 3 months |
| Vicenzino 2015 | University Medical center  | 150 | I1: 76I2: 65I3: 63 | I1: 50 (12)I2: 52 (11)I3: 50 (13) | I1: 22\*I2: 24\*I3: 24\**\*weeks* | Age > 18, insidious onset non-traumatic heel pain, duration > 4 weeks, pain score > 3/10, English speaking | I1: Flat flip flop (n=50)I2: Contoured sandal (n=49)I3: Prefabricated orthosis (n=51) | Pain: NRS/10Function: LEFS/80, FAAM /100Self-reported improvement : GROC/15 | 4 weeks8 weeks12 weeks |
| Walther 2013 | ? | 30 | 70 | I1: 51.6 (12.5)I2: 53.8 (13.2)I3: 53.9 (14.9) | I1: 8.6 (4.9)\*I2: 10.7 (7.5)\*I3: 9.7 (4.5)\* *\*weeks* | Diagnosis of PF (clinical + MRI) | I1: non supportive orthosis(n=10)I2: soft supportive foam orthosis (n=10)I3: rigid self-supporting plastic orthosis (n=10) | Pain: VAS max/100, VAS average/100Function:walking distance | 1 week2 weeks3 weeks |
| Winemiller 2003 | Mayo clinic | 101 | 79 | I1: 42.0 (9.5)I2: 40.4 (8.9) | I1: 85 (86) \*I2: 120 (170)\**\*months* | Age > 18, pain at least 30 days, VAS > 3, maximal tenderness medial, first step pain | I1: magnetic insole (n=44)I2: sham magnetic insole (n=57)*Not all patient that were allocated were analyzed* | Pain: Morning pain VAS/10Improvement:Likert/ 5 | 4 weeks8 weeks |
| Wrobel 2015 | Foot and ankle centers | 77 | 63 | 49.6 (12.07) (23-75) | 5.2 (3.23)\* (0.25-14\*) *\*months* | Pain at the plantar fascial attachment, first step pain, ambulatory, age 18-75, duration < 1 year | I1: custom made foot orthosis (n=26)I2: prefabricated foot orthosis (n=25)I3: sham orthosis (n=26)*Not all patient that were allocated were analyzed* | Pain: FFI subscale/100,Morning pain/ 100, Evening pain/ 100Function: FFI-R/ 100 | 1 month3 months |
| Yucel 2013 | Outpatient clinic of rehabilitation and physical medicine department | 44 | 80 | 46.4 (8.7) | I1: 6.8 (3.6)\*I2: 7.8 (4.1)\*\*months | Age 18-65, clinical diagnosis of PF, > 3 months, VAS first step pain >4 | I1: ultrasound guided steroid injection (n=22)I2: full length silicone insole (n=22)*Not all patient that were allocated were analyzed* | Pain: VAS/ 10,HTI/ 4, FAOS subscale/ 100 Function: FAOS subscale/ 100 | 1 month |

OTC = Over the counter

I1= Intervention 1

I2= Intervention 2

I3= Intervention 3

I4= Intervention 4

I5= Intervention 5

VAS= Visual analogue Scale

SFMPQ= the Short Form McGill Pain Questionnaire

FFI= Foot Function Index

NRS= Numeric Rating Scale

MFPDQ= Manchester Foot Pain and Disability Questionnaire

FHSQ= Foot Health Status Questionnaire

FOAS= Foot and Ankle Outcome Score

AOFAS= the American Orthopedic Foot and Ankle Score

LEFS= Lower Extremity Functional Scale

FAAM= Foot and Ankle Disability Measure

GROC= Global Rating Of Change scale

FFI-R= Foot Function Index Revised

HTI= Heel Tenderness Index