

Comparisons of foot orthoses made by podiatrists, pedorthists and orthotists regarding plantar pressure reduction

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INTRODUCTION

Evidence of clinical effectiveness of foot orthosis therapy is needed. This study evaluated the effects of foot orthoses made by ten podiatrists (in Dutch: podotherapeuten), ten pedorthists (in Dutch: orthopedisch schoentechnici) and eleven orthotists (in Dutch: orthopedisch instrumentmakers) on plantar pressure and walking convenience for three patients with metatarsalgia.

AIM

The aim was to assess differences and variability between and within the disciplines. The relationship between the importance of pressure reduction and the effect on peak pressure was also evaluated.

PATIENTS AND METHODS

Each therapist examined all three patients and rated 'importance of pressure reduction' through a visual analogue scale. Overall, 186 orthoses were constructed and evaluated. Plantar pressures were recorded with an insole measuring system while the patient walked on a treadmill. Patients scored walking convenience per orthosis. The effects of the orthoses on peak pressure reduction were calculated.

RESULTS

Within each discipline there was an extensive variation in construction of the orthoses and peak pressure reductions. Pedorthists and orthotists achieved greater maximal peak pressure reductions over the

whole forefoot than podiatrists: 960, 1020 and 750 kPa, respectively ($p < .001$). This was also true for the effect in regions with the highest baseline peak pressures and walking convenience. There was a weak relationship between the 'importance of pressure reduction' and achieved pressure reduction for orthotists.

CONCLUSIONS

The large variation of various aspects of foot orthoses therapy raises questions about a consistent use of concepts for pressures management within the professional groups.

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Programma van VRA Colloquium vrijdag 17 april 2009

TIJD	ONDERWERP
09.00 - 10.00 uur	Ontvangst
10.00 - 10.05 uur	Welkom en opening door ochtendvoorzitter dhr. drs. L.E.G. Roijen, revalidatiearts
10.05 - 12.00 uur	Sessie 1 - Voordrachten (zie bijlage 1)
10.00 - 12.00 uur	Sessie 2 - Workshop (zie bijlage 2), maximaal 60 personen, deelname op volgorde van inschrijving
12.00 - 13.00 uur	Lunch
13.00 - 13.10 uur	Opening en welkom middagprogramma door dhr. V.O.M. Buitendijk, Raad van Bestuur Libra Zorggroep
13.10 - 13.30 uur	Ludiek intermezzo
13.30 - 15.30 uur	Colloquium
15.30 - 16.00 uur	Pauze
16.00 - 18.00 uur	ALV
18.00 uur	Afsluiting met drankje en een hapje

BIJLAGE 1: OCHTENDPROGRAMMA VAN VRA COLLOQUIUM VRIJDAG 17 APRIL 2009 SESSIE 1: VOORDRACHTEN

TIJD	ONDERWERP LEZING
10.00 - 10.05 uur	Welkom en opening door ochtendvoorzitter Dhr. drs. L.E.G. Roijen
10.05 - 10.25 uur	"Intrathecale Baclofen behandeling in Tilburg voor kinderen en volwassenen" Mw. drs. M.J.P.M. Geerts, revalidatiearts Revalidatiecentrum Leijpark Dhr. drs. E.J. Schouten, revalidatiearts Revalidatiecentrum Leijpark
10.25 - 10.45 uur	"Amputatie(s) bij CRPS type 1" Mw. drs. W.M.C.G. Hitters, revalidatiearts Revalidatiecentrum Blixembosch
10.45 - 11.05 uur	"Vroege Intensieve Neurorevalidatie (VIN) op weg naar volwassenheid" Dhr. dr. H.J. Eilander, Ontwikkelings- en neuropsycholoog, onderzoeker Revalidatiecentrum Leijpark
11.05 - 11.15 uur	Pauze
11.15 - 11.35 uur	"Coping stijlen bij hersenletsel patiënten" Mw. drs. G. Wolters, neuropsycholoog - onderzoeker.
11.35 - 11.55 uur	"Revalidatie en sport, samen in bewegen." Subtitel "Ondertekening Samenwerkingsconvenant VRA (Werkgroep VRA Bewegen en Sport) en Gehandicaptensport Nederland" Dhr. drs. P.J.C.M. van Leeuwen, revalidatiearts Revalidatiecentrum Blixembosch Dhr. dr. R. Dekker, voorzitter werkgroep VRA bewegen en sport
11.55 - 12.00 uur	Afsluiting door ochtendvoorzitter Dhr. drs. L.E.G. Roijen