ORTHOTICS LIMITED

Table of References Found for Dynamic Lycra® Orthoses Literature Review In Hierarchy of Evidence (BMJ 2001)

	Hierarchy of Evidence	Title	Area of Body	Study Type	N=	Notes	Year
Blair et al (Blair et al. 1995)	2+	A study of a dynamic proximal stability splint in the management of children with cerebral palsy	Suit	Descriptive study, Cross over trial and recipient trial	24	8 matched pairs criticism for ?impartiality due to video scoring with / without the garments	1995
Edwards,K (Edwards and Cramp 2004)	2+	Using Motion Analysis to Investigate whether Wearing Dynamic Lycra® Garments Changes Posture and Movement in Children with Cerebral Palsy	Suits	Group study	5	Gait analysis Changes in posture and gait, improved proximal stability increase in cadence	2004
Gracies,J (Gracies 1997)	2+	Lycra® Garments Designed for Patients with Upper Limb Spasticity: mechanical effects in Normal Subjects	Glove	Double blind	10	Health subjects used to investigate the stretch to pronator muscles by garment. T-Test Donning technique important. Long lasting Angular displacement	1997

Gracies,J (Gracies et al. 2000)	2+	Short – term Effects of Dynamic Lycra® Splints on Upper Limb in Hemiplegic Patients	Gloves	Cross over design 18 – 85 years of age. Hemi, CVA. Sound incl / excl criteria	16	Questionaire on comfort, circumference of arm, resting posture, spasticity at shoulder, ROM using goniometer, Elbow proprioception Good research section on CNS involvement	2000
Matthews,M (Matthews et al. 2007)	2+	Apilot study of multiple single case reports to investigate the effects of dynamic Lycra® orthoses on gait in children with diplegic cerebral palsy	Leggings	Repeated measures design 3-14years of age	8	10m metre walking test Physiological cost index, patient specific functional score, patient questionnaire, daily diary	2007
Morrin.J (Morrin et al. 1981) *	2+	Control of hand oedema by use of lycra® paressure garments	Glove	Retrospective report - review	95	Oedema control	1981
Brownlee (Brownlee 2000)	2-	Edinburgh Dynamic Lycra® splinting trial – assessment of hand function	10 suit 10 gloves	Pre-experimental design with a ore / post test. 8 week duration	20	Measured hand function – cognition restricted use ? Dual qual/quant, questionnaires. Difficulties in identifying measurement tool	Oral presentation 2000 Published2002
Castro et al (Castro and Cliquet 1997) *	2-	A low cost instumented glove for monitoring forces during object manipulation	Glove	Group experimental design	30	Carrier for force sensing resistors. Pressure measurment Of interest to glove research	1997
Nicholson,J (Nicholson et al. 2001)	2-	Assessment of Upper Limb function and movement in children with cerebral palsy wearing lycra® garments	suit	Journal publication	12 (5)	Questionaire, PEDI, Motion analysis Functional skills, No botox, Wilkoxen test	2001
Rennie.D (Rennie et al. 2000)	2-	An evaluation of lycra® garments in the lower limb using 3-Dgait analysis and functional assessment (PEDI)	Whole body suits	Group study Gait lab	8	PEDI ? not appropriate tool Issues of toiletting Gait analysis No reports of breathing difficulties Reduced carer assistance	2000

Rand.D (Rand and Nicol 1993) *	3	An instrumented glove for monitoring MCP joint motion	Glove	Experimental	4	Goniometric measurement Of interest to glove research	1993
Attard et al (Attard and Rithalia 2004)	3	Review of the use of Lycra® pressure orthoses for children with cerebral palsy – including examples of two case studies	Glove Suit	Single case study	2	Review of current literature 2003 Discussion of possible causes of effect	2004
Barbarioli (Barbarioli 2001)	3	A Lycra® glove working splint for rheumatoid arthritis:a case study	Glove	Case study	1	Descriptive study of rheumatoid function	2001
Bridges,S (Bridges et al. 2004)	3	An evaluation of the immediate effects of elasticated compression on joint proprioception	Socks	Repeated measure design Pilot study as part of MSc degreee	6	GMFM, PCI & 10m walking test, socks improved function and gait performance	2004
Brownlee.et al (Brownlee and McLeman 2002)	3	Edinburgh Dynamic Lycra® Splinting Trial-assessment of hand function	Glove/Suit	Pre-experimental design Questionaire	20	Article of main 3work	2002
Corn, K (Corn et al. 2003)	3	Impact of Second Skin Lycra® Splinting on the Quality of Upper Limb Movement in Children	Upper Limb	Group of Single Case Studies	4	Comparison of two patient groups of long /short term users	2003
Edmondson.J (Edmondson 1999)	3	How effective are Lycra® suits in the management of children with CP	Total body	Group of single case	15	Untried measurement score. Good references	1999
Gibbs.S (Gibbs et al. 2002)	3	Dynamic Lycra® Splinting in a child with Cerebral Palsy: an objective assessment of gait.	suit	Single case presentation	1	Smoothing of pelvic movement, reduced adduction, significant increase in temporal distance parameters	2002
Hylton.N (Hylton 1996)	3	The use of compression stabilizing type bracing as an adjunct to therapy	Shorts	Single Case	4	Discussion paper prior to full paper	1996
Hylton.N (Hylton 1997)	3	The development and use of SPIO Lycra® compression bracing in children with neuromotor deficits	Suit	Single Case	1	Observational Discussion	1997

Kennedy.S (Kennedy et al. 2000)	3	The treatment of interphalangeal joint flexion contractures with reinforced lycra® finger sleeves	Finger	Single case study	2	Cosmetic acceptabiliy	1998
Knox.V (Knox 2003)	3	The use of lycra® garments in children with cerebral palsy: a report of a descriptive clinical trial	Suit	Repeated measures Single case group	8	GMFM Quest Good literature review. Non biased report Discussion of Melbourne Test	2003
Matthews,M (Matthews and Crawford 2006)	3	The Use of Dynamic Lycra® Orthoses in the Treatment of Scoliosis	Suit	Single Case Study	1	X-ray evidence New treatment protocol	2005
Oglieve,K (Oglieve et al. 2006)	3	An audit of satisfaction amongst people who are wearing dynamic Lycra® Orthoses for the Management of Upper Limb Movement disorders caused by Neurological disorders.	Gloves	Questionniares of users	15	Subjective improvement in posture, gait, arm awareness, confidence, arm use. Using VAS	2006
Paleg.G (Paleg 1999)	3	Dynamic Trunk Splints and Hypotonia	Trunk	Single Case Benek Suit	1	GMFT/questionaire Limited references/ No dicsussion	2001
Pitt.F (Pitt 2002)	3	The use of lycra socks in peripheral sensory deficit – a case study	Sock	Case Study	1	Proprioceptive feedback	2002
Watson,M (Watson et al. 2007)	3	An evaluation of the effects of a dynamic Lycra® orthosis on arm function in a late stage patient with acquired brain injury	Glove	Case Study	1	Patient specific functional score Write tests, peg test	2007
National Horizon (National Horizon Scanning Centre 2002)	4	Lycra garments for cerebral palsy and movement disorders	Upper limb and Trunk	Review of known knowledge		General Review	2002

*** Papers not directly linked to the Dynamic Lycra Orthoses study as used as carriers for other instruments and to control oedema.**