

Stance Control Orthosis (SCO) Clinical Studies

January 2020

Kim J-H, Ji S-G, Jung K-J, Kim J-H. Therapeutic experience on stance control knee-ankle-foot orthosis with electromagnetically controlled knee joint system in poliomyelitis. *Ann Rehabil Med*. 2016;40(2):356-361. doi:10.5535/arm.2016.40.2.356 [download](#)

Zacharias B, Kannenberg A. Clinical benefits of stance control orthosis systems: An analysis of the scientific literature. *JPO*. 2012;24(1):2-7. doi:10.1097/JPO.0b013e3182435db3. [download](#)

Edeer D, Martin CW. E-MAG Active, a newer stance control knee ankle foot orthosis (SCKAFO) in the context of workers' compensation. Richmond, BC: WorksafeBC Evidence-Based Practice Group; December 2010. [download](#)

Davis PC, Bach TM, Pereira DM. The effect of stance control orthoses on gait characteristics and energy expenditure in knee-ankle-foot orthosis users. *Prosth Orthot Int* 2010;34:206–215. [download](#)

Lemaire E, Goudreau L, Yakimovich T, et al. Angular-velocity control approach of stance-control orthoses. *IEEE Trans Neural Syst Rehabil Eng* 2009;17:497–503. [download](#)

Moreno JC, Brunetti F, Rocon E, et al. Immediate effects of a controllable knee ankle foot orthosis for functional compensation of gait in patients with proximal leg weakness. *Med Biol Eng Comput* 2008;46:43–53. [download](#)

Hwang S, Kang S, Cho K, et al. Biomechanical effect of electromechanical knee-ankle-foot-orthosis on knee joint control in patients with poliomyelitis. *Med Biol Eng Comput* 2008;46:541–549. [download](#)

Rasmussen A, Smith K, Damiano D. Biomechanical evaluation of the combination of bilateral stance-control kneeankle-foot orthoses and a reciprocating gait orthosis in an adult with a spinal cord injury. *JPO* 2007;19:42–47. [download](#)

Zissimopoulos A, Fatone S, Gard SA. Biomechanical and energetic effects of a stance-control orthotic knee joint. *JRRD*. 2007;44(4):503-514. [download](#)

Sabelis L, van Schie C, Noppe C, et al. Use and appreciation of stance-control KAFOs in patients with polio residuals. 12th World Congress of the International Society for Prosthetics and Orthotics, Vancouver, Canada, July 29 to August 3, 2007.

Irby SE, Bernhardt KA, Kaufman KR. Gait changes over time in stance control orthosis users. *Prosthet Orthot Int*. 2006;31(4):353-61. [download](#)

Yakimovich T, Lemaire ED, Kofman J. Gait evaluation of a new electromechanical stance control knee ankle foot orthosis. EMBS Annual International Conference, New York City, August 30 to September 3, 2006. [download](#)

Stance Control Orthosis (SCO) Clinical Studies

January 2020

Yakimovich T, Lemaire ED, Kofman J. Preliminary kinematic evaluation of a new stance control knee ankle foot orthosis. Clin Biomec 2006;21:1081–1089. [download](#).

Bernhardt KA, Irby SE, Kaufman KR. Consumer opinions of a stance control knee orthosis. Prosth Orthot Int 2006;30:246–256. [download](#)

Yakimovich T, Kofman J, Lemaire ED. Design, construction and evaluation of an electromechanical stance control knee ankle foot orthosis. Engineering in Medicine and Biology, 27th Annual Conference Shanghai, China, September 1–4, 2005. [download](#)

Irby SE, Bernhardt KA, Kaufman KR. Gait of stance control orthosis users: The dynamic knee brace system. Prosthet Orthot Int. 2005; 29(3)269-282. [download](#)

Hebert JS, Liggins AB. Gait evaluation of an automatic stance-control knee orthosis in a patient with postpoliomyelitis. Arch Phy Med Rehab. 2005;86:1676–1680 [download](#)

McMillan AG, Kendrick K, Michael JW, et al. Preliminary evidence for effectiveness of a stance control orthosis. JPO 2004;16:6–13. [download](#)

Irby SE, Kaufman KR, Mathewson JW, Sutherland DH. Automatic control design for a dynamic knee-brace system. IEEE. 1999;7(2). [download](#)

Irby SE, Kaufman KR, Wirta RW, et al. Optimization and application of a wrap-spring clutch to a dynamic knee ankle foot orthosis. IEEE Trans Rehabil Eng 1999;7:130–134. [download](#)

Suga T, Kameyama O, Ogawa R, et al. Newly designed computer controlled knee-ankle-foot orthosis (intelligent orthosis). Prosth Orthot Int 1998;22:230–239. [download](#)

Kaufman KR, Irby SE, Mathewson JW, Wirta RW, Sutherland DH. Energy efficient knee ankle foot orthosis. JPO. 1996;3(3):79-85. [download](#)

Reimbursement, Ottobock North America
P 800 328 4058 . F 800 962 2549
professionals.ottobockus.com
professionals.ottobock.ca
reimbursement911@ottobock.com