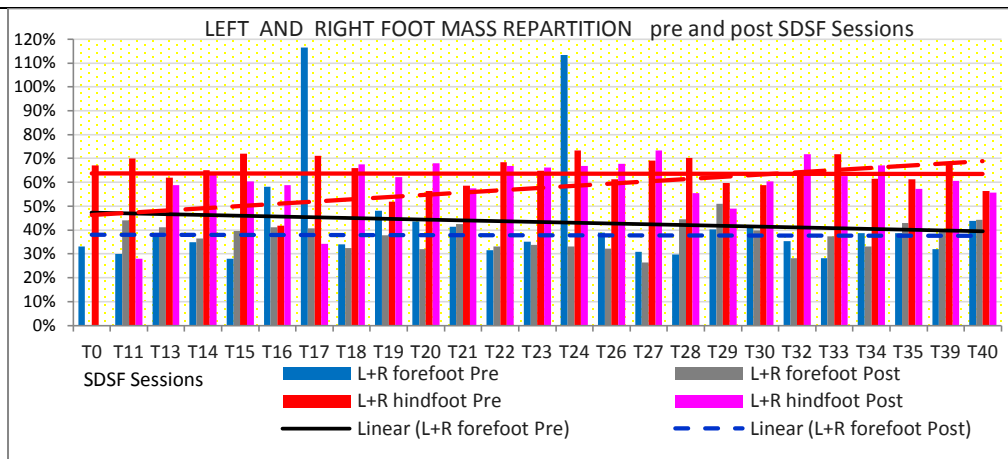


# SDSF Spatial Dynamic Stimulation of Fascia induces balance recovery in Duchenne muscular dystrophy? Case report 'adult female carrier'

Marilene Marfin-Martin, MSc, P.T, Certified Advanced Rolfer; Luis Fernando Grossklaus, M.D., Sissy V. Fontes, Ph.D, P.T; Acary S.B. Oliveira, PhD. MD.

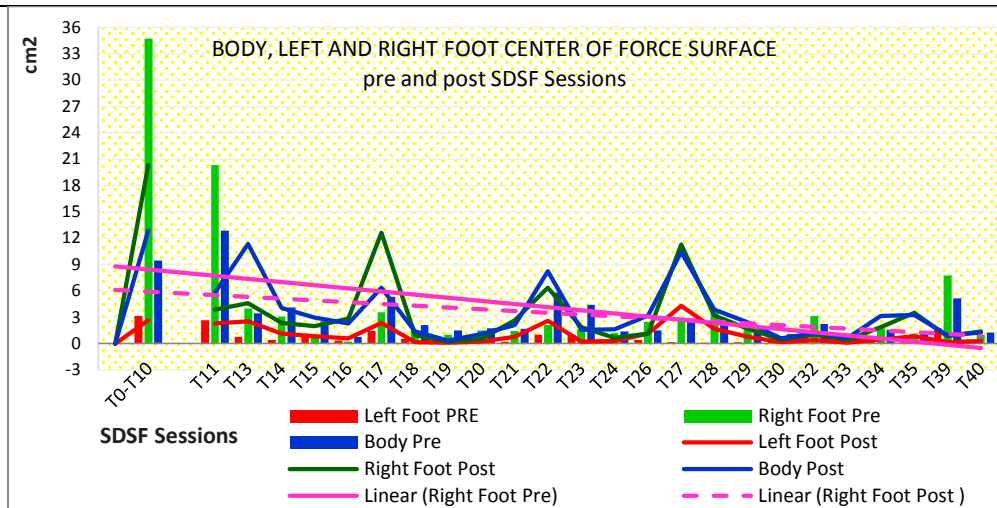
Setor de Investigação de Doenças Neuromusculares, UNIFESP Universidade Federal de São Paulo, Rua Estado de Israel, 899, CEP São Paulo, SP, Brasil, tel: +55 11 5571 3324 e-mail: [marfin-martin@hotmail.com](mailto:marfin-martin@hotmail.com)

**BACKGROUND** Duchenne Muscular Dystrophy (DMD) is X-linked disease by deletion, duplication or point mutations in dystrophin gene [1]. Symptomatic female carrier is rare. We described a woman, 64, myopathic gait with walking stick, retractions popliteal and aquilian tendons, Gowers (+) in a chair, impossible to stand up of the floor; diabetes type 2, global chronic pain and depression. Treatment: From 02/11/2014 to 03/03/2015; 40 weekly sessions of SDSF Spatial Dynamic Stimulation of Fascia, manual biotensegrity therapy, which amplifies the compressive-expansive rhythmic movements of the fascia with non-invasive stimuli, leading back to the state of fascial readiness. **METHODS:** Baropodometry and Stabilometry [2]: Bipodal static posture, loose arms, barefoot, open eyes, 26°C. Time: 20 seconds. Platform: Footwork 3.7.5.0 series 0189072F1400002E. **RESULT:**



## Baropodometry

The foot plantar pressure (kpa), support base (cm) and the surface of plantar feet (cm<sup>2</sup>) increase and decrease rhythmically both in pre- and post-sessions. Trend lines show stabilization.



## Estabilometry

At T0 the right foot surface was 4 times larger than the body; At T11 was 58% higher. From T13 on: body exceeds feet. Left foot is more stable. The post-sessions increases seem to prevent dysfunctional imbalances at the centers of force.

**CONCLUSION:** Patient with Gowers (-) on chair, raises soil (+), reduced pain and imbalance complaints; uses walking stick in open spaces, floating sensations after evaluations that increases. The data suggest SDSF sessions produce increased space in the body; it follows self-reorganization balancing expansion-compression, enhancing comfort and functionality. More studies are needed.

**REFERENCES:** [1] Ou Z, Li S, Li Q, Chen X, Liu W, Sun X. Duchenne muscular dystrophy in a female patient with a karyotype of 46,X,i(X)(q10). *Tohoku J Exp Med.* 2010 Oct;222(2):149-53.  
 [2] BRUNER E., RIPANI M et al. Preliminary shape analysis of the outline of baropodometric foot: patterns of covariation, allometry, sex and age differences, and loading variations *J SPORTS MED PHYS FITNESS* 2009;49:246-54

