

PODartis® Research:

Clinical Study on Shoes for Protected Physical Activity for the rheumatic/diabetic foot – ACTIVITY shoes with WellWalk® philosophy

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AIM OF THE STUDY	Compare ACTIVITY® shoe with WellWalk® technology vs normal shoes
STUDY	10 patients with deficit affecting the tibiotarsic-foot complex have been subjected to gait analysis and baropodo- metric analysis with sensor insoles (Pedar - NOVEL system)
RESULTS	ACTIVITY [®] shoe showed an improvement of the time-space parameters of the gait, with a significant improvement of speed. In kinematic, the movement of the tibiotarsic-foot-complex is more natural. The baropodometric analysis showed a significant reduction of pressure peaks inforefoot and even re-distri bution of plantar pressures.
CONCLUSIONS	The ACTIVITY® shoes showed more natural gait parameters , and an improvement of kinematic, kinetic and ba- ropodometric data with respect to normal shoes. For this reason, the ACTIVITY® shoes are particularly recom- mended for rheumatic and diabetic people, people with limited joint mobility and people in post-surgery rehabilitation.

kPa 300.00 220.00 150.00 100.00 60.00 40.00 15.00 15.00



Normal Shoe High pressure peaks



ACTIVITY® Shoe Significant reduction of pressure peaks on the forefoot and good re-distribution of plantar pressures



ACTIVITY[®] Shoe + custom made insole Higher reduction and better re-

Higher reduction and better redistribution of plantar pressures and widening of support surface



Patient 1

Female, age 70, affected by arthritis to the tibiotarsic joint and to the knee that has been treated with hyaluronic acid. Bilateral hallux valgus with subsequent hammer toes. With Podartis ACTIVITY[®] shoes and standard protective insoles, a **decrease of pressure peaks** on the forefoot and a **better distribution of forces and pressures** on the whole plantar area were obtained.





Patient 2

Male, age 57, affected by diabetes type 2 in primary prevention. No former ulcerations were recorded. At the level of the right Achilles tendon the patients shows a calcification due to a complete lesion which had been previously treated with suture. This weakened the muscular structure of the foot. With Podartis ACTIVITY[®] shoes and standard protective insoles, a **decrease of pressure peaks** on the forefoot was obtained, with respect to the patient's standard shoe.



PATIENT'S SHOES (*)



ACTIVITY SHOES (*)



Patient 3

Female, age 45, 2 months before underwent a corrective surgery to the Hallux valgus with SERI ostheotomy. The foot is still aching and swollen on the first toe and the patient is not able to wear standard shoes. The plantar pressures recorded with Podartis ACTIVITY[®] show a **ideal distribution of pressure peaks**, with the best results obtained on the forefoot in correspondence of the area subjected to surgery. The patient also experienced **higher comfort** with respect to the standard shoes.



Patient 4

Female, age 74, affected by bilateral hallux valgus. The patient didn't undergo surgery and this led to a hyperload of metatarsal heads and subsequent callus, with metatarsalgy on 2° and 3° metatarsal heads. With Podartis ACTIVITY® shoes and custom made insoles, **a significant decrease of pressure peaks and consequent re-distribution of the plantar pressures on the whole foot.**









ACTIVITY SHOES + INSOLE (*)

*) with standard fussbet



(*) with standard fussbet