

## P10

### Goniometrics XR values comparative study of the diabetic patients feet with and without neuropathy

Lázaro Martínez JL, García Morales E, Aragón Sánchez FJ, Quintana Marrero Y.

Diabetic Foot Unit. University Foot Clinic. Universidad Complutense Madrid. Madrid (Spain).

**Aim:** There is now some controversy about the association between diabetic neuropathy, limited joint mobility and the presence of deformities in the diabetic patient.

**Objective:** To determine the goniometric XR characteristics of the feet of diabetic patients with and without neuropathy.

**Materials and Methods:** A comparative study which includes 94 diabetes patients. 55 non-neuropathic and 39 with diabetic neuropathy, which studied mobility joint of the foot, presence of deformities and goniometric parameters in XR.

**Results:** Both patients groups showed a decrease in joint mobility and similar distribution of foot deformities. Goniometric values were similar in neuropathic and non-neuropathic patients except in Internal Costa Bartani angle and Calcaneus-inclination angle. Following show the goniometric comparative data: Intermetatarsal I-II angle ( $10,6^{\circ} \pm 3,2^{\circ}$  vs  $9,7 \pm 2,8^{\circ}$   $p=0,179$ ), Meschan angle ( $139,5^{\circ} \pm 18,7$  vs.  $142,6 \pm 7,4^{\circ}$   $p = 0,351$ ), HAV angle ( $21,5^{\circ} \pm 13,5^{\circ}$  vs  $19,8^{\circ} \pm 7,7^{\circ}$   $p = 0,510$ ), Talus-Inclination angle ( $29,4^{\circ} \pm 5,5^{\circ}$  vs.  $30,6^{\circ} \pm 6,4^{\circ}$ ,  $p =0,311$ ), Calcaneus-inclination angle ( $25,7^{\circ} \pm 8,6^{\circ}$  vs.  $21,6^{\circ} \pm 9,6^{\circ}$ ,  $p =0,034$ ), First Metatarsal-Inclination angle ( $21,3^{\circ} \pm 5,3^{\circ}$  vs.  $19,6^{\circ} \pm 4,9^{\circ}$ ,  $p =0,112$ ), Internal Costa Bartani angle ( $130,8^{\circ} \pm 13,6^{\circ}$  vs.  $138^{\circ} \pm 14,9^{\circ}$ ,  $p =0,016$ ).

**Conclusion:** Goniometric comparative data showed that neuropathy's patients developing a decreased of internal longitudinal high arch that could be the beginning of Charcot complication. This find will be investigation in a high sample study.