Correlation between first TMT joint mobility and degree of deformity in hallux valgus patients: Using weight-bearing CT and 3D analysis system

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Feet with hallux valgus increases deformation from too much weight put on a position of the foot and causes symptoms. Therefore, plain standing X-ray images are used for diagnoses and surgical plan. However, three-dimensional evaluation should offer more accurate pathological information because of three-dimensional deformity of hallux valgus. Therefore, we created a loading device and we have reported that mobility of the first ray in hallux valgus patients are larger than healthy volunteer using weightbearing CTs. We evaluated the mobility of the first TMT joint in 3D and then examined its correlation with degree of deformity using the hallux valgus angle and intermetatarsal angle.