Hallux Valgus Patients, Why Are They Happy?

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Introduction/Purpose: AOFAS score and angular changes are used widely to assess hallux valgus surgery. But our previous study showed us that these parameters do not reflect patient subjective satisfaction after surgery, angular changes do not correlate with patient satisfaction, and a subjective satisfaction scale must be used. So can we find a measurable parameter that reflects patient satisfaction? The purpose of the study was to evaluate the effect of percental reduction of first web space length (FWSL) on patient satisfaction, and if it can be used as a measurable parameter for this.

Methods: Fifty feet of thirty-seven patients were included to the study. All patients were operated between 2010 and 2014. Same surgical technique (Lindgren-Turan osteotomy) used for operations. Patients were evaluated by using hallux valgus angle (HVA), 1-2 intermetatarsal angle (IMA), first web space length (FWSL), AOFAS scores. On the final follow-up they were asked to scale their postoperative satisfaction between 1-10; as for 1-2 very unsatisfied, 3-4 unsatisfied, 5-6 neither unsatisfied nor satisfied, 7-8 satisfied, 9-10 very satisfied. The percental changes of HVA, IMA, and FWSL were compared with AOFAS score, and satisfaction scales.

Results: Average age was 45.50±12.23 (22-68) years. Mean follow-up was 41.68±14.46 (24-68) months. 29 of 50 feet were right side, 21 were left. Preoperative HVAs have been changed from 32.52±5.19 to 11.58±4.70 degrees (p=0.001; p<0.01). Preoperative IMAs have been changed from 15.00±3.56 to 5.75±2.45 degrees (p=0.001; p<0.01). Preoperative AOFAS scores have been changed from 75.04±5.54 to 93.14±6.25 points (p=0.001; p<0.01). Preoperative FWSL changed from 14.5 (10-22) mm to 7.5 (5-14) mm (p=0.001; p<0.01). Postoperative satisfaction scale was 8.60±0.67 (7-10) points.

When HVA and IMA percental changes were compared with AOFAS percental changes, they have shown a negative statistical significance according to Spearman’s Correlation Analysis. When AOFAS percental changes have been compared with satisfaction scale, they have shown a positive statistical significance.

When FWSL percental changes were compared with AOFAS percental changes and satisfaction scale it has shown a positive statistical significance for both parameters according to Spearman’s Correlation Analysis.

Conclusion: According to our results; we believe that the changes of FWSL have an influence on patient satisfaction. It is correlated both with AOFAS, and subjective satisfaction scale. It can be used as a measurable parameter to search for patients satisfaction. Angular changes do not have an influence on patients satisfaction. May be FWSL should also be used for surgical indications?