

Abstract Number: 18196

The Lapidus procedure for severe hallux valgus deformity: a comparison of two different methods of fixation

Marcelo Pires Prado¹, Daniel Amodio¹, Danilo Ryuko Nishikawa², Leticia Devito¹, Alberto Abussamra Moreira Mendes¹, Guilherme Honda Saito¹

1. Hospital Israelita Albert Einstein, São Paulo, SP, Brazil.

2. Hospital do Servidor Público Municipal de São Paulo, São Paulo, SP, Brazil.

ABSTRACT

Introduction: Surgical techniques for hallux valgus correction are constantly evolving. However, there is little data in the literature comparing the different techniques and methods of fixation. The aim of this study was to compare two variations of the Lapidus procedure with respect to the rate of complications, radiographic and functional outcomes.

Methods: A retrospective review of 94 consecutive patients treated with a Lapidus fusion for hallux valgus correction between 2006 and 2017 was performed. In the first group, 33 patients underwent modeling arthrodesis between the first metatarsal base and the medial cuneiform, and between the base of the first and second metatarsals. In the second group, 61 patients underwent a fusion between the base of the first metatarsal and the medial cuneiform only.

Results: In group 1, the rate of complications was 18% compared with 13% in group 2; of these, 10,5% required a revision procedure in group 1 versus 7,5% in group 2. The most common complications were nonhealing, partial recurrence of the deformity and loosened screws. In group 1, the first intermetatarsal angle and the hallux valgus angle were improved from an average of 18,3 degrees to 14 degrees and from 29 to 9,7 degrees, respectively. In group 2, the angles were improved from 16,1 to 9,1 degrees and from 31,1 to 9,1 degrees, respectively. The AOFAS score was improved from 44,5 to 94,9 in group 1 and from 35,8 to 91,32 in group 2.

Conclusion: The Lapidus procedure with fusion of only the first metatarsal base and the medial cuneiform is safe, with a low rate of complications. In this modified procedure, the surgeon is required to optimize the congruency between the base of the first metatarsal and the medial cuneiform prior to fixation, which may conceivably explain the good results observed in this group.

Keywords: Lapidus arthrodesis; Hallux valgus/surgery.

