Retrospective Analysis of Scarf Bunionectomy vs Lapidus Bunionectomy for Hallux Abductovalgus

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INTRODUCTION

The aim of this study is to evaluate and compare outcomes of patients who underwent a Scarf bunionectomy versus a Lapidus bunionectomy procedure. Traditionally, the Scarf bunionectomy , though technically difficult, was favored for its stability and the ability to weightbear immediately post-operatively (4). With the advent of locking plate technology, patients undergoing Lapidus bunionectomies are now able to transition to full weightbearing earlier. Our goal is to evaluate both procedures and their post-operative courses in our patient population.

DISCUSSION

To date, there has been no direct comparison of Scarf bunionectomy versus Lapidus bunionectomy in the literature. Current literature suggests that locking plate technology allows for earlier weightbearing following Lapidus bunionectomy (1,2,3). Scarf bunionectomy remains a technically challenging procedure (4), however in our patient group there were fewer complications (though not statistically significant). While most patients underwent Lapidus bunionectomy with application of locking plate technology, patients undergoing scarf bunionectomy still experienced a quicker transition to full weightbearing and transition to regular shoegear.

METHODOLOGY

A retrospective chart review of patients who underwent either a Scarf bunionectomy or a Lapidus bunionectomy from 9/10/2014 to 9/9/2016 was performed (n=30 for both Lapidus and Scarf groups) and various parameters were reviewed including: time to regular shoegear (Table 1), time to weightbearing (Table 2), fixation used and need for ancillary procedures. Patients included in the study were those who underwent Lapidus bunionectomy with locking plate fixation and patients who underwent Scarf bunionectomy with 2 screw fixation as seen in Image 1. Patients who underwent concomitant procedures such as Weil osteotomies, hammertoe repairs, and Akin osteotomies were not excluded from the study. Complications considered included wound disturbances, painful hardware, and need for revisional surgery or ancillary procedures. Chi-square analysis of the proportion of complications that occurred was performed and the observed p-value did not demonstrate any significant statistical significance between the two groups.

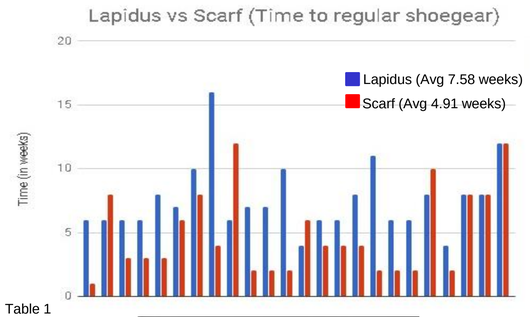

Table 1

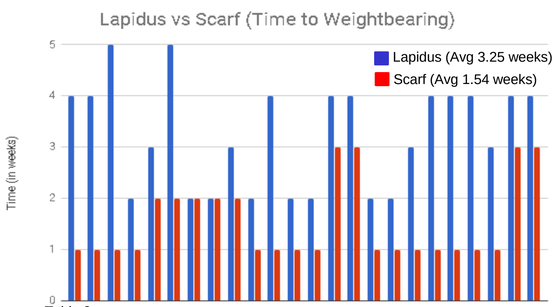

Table 2

Image 1A: Post-operative image of typical Scarf construct utilized at our institution.

Image 1B: Post-operative image of typical Lapidus construct utilized at our institution.

RESULTS

Patients who underwent Lapidus bunionectomy had a longer transition to shoegear (mean 7.58 weeks) with fewer recurrences or need for ancillary procedures. Patients who underwent Scarf bunionectomy experienced a shorter transition to shoegear (2 weeks) and were allowed to fully weightbear sooner (immediately post-op). There were 3 complications in the Scarf group- joint stiffness requiring manipulation under anesthesia, and 2 recurrences. Four complications arose in the Lapidus group: recurrence, injury to the medial dorsal cutaneous nerve, and 2 painful retained orthopedic hardware necessitating removal of locking plate. There was no statistical significance in complication rates between the two groups (p=0.6903).

REFERENCES

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