Metatarsalgia following peri-articular osteotomies of the first metatarsal for hallux rigidus.

A Prospective, Non Randomized, Controlled Study


Foot and Ankle Dept, Instituto Dupuytren, Buenos Aires, Argentina
Our disclosure is in the Final AOFAS Program Book. We have no potential conflicts with this presentation.
Introduction

• Periarticular osteotomies of the first metatarsal have been proposed for treatment of hallux rigidus.

• These procedures carried a significantly risk of complications.
Introduction

• This prospective study seeks to evaluate the development of lateral metatarsalgia after surgery.

• Compare first metatarsal decompression osteotomy and queilectomy as treatments for moderate hallux rigidus.
Materials and Methods

- Forty-three patients, with a mean age of 49 years, underwent queilectomy and phalangeal osteotomy.

- 30 were non-randomized reviewed at an average 99 months postoperatively.
Materials and Methods

• A group of 100 patients, with a mean age of 45 years, underwent first metatarsal decompression osteotomy and phalangeal osteotomy.

• 30 were randomized reviewed at an average 46 months postoperatively.
Materials and Methods

• Subjective evaluation was based on American Orthopaedic Foot and Ankle Surgery scale.
• Radiographic analysis included standing A-P and lateral views.
• Comparisons were made between groups and preoperative and postoperative values using appropriate statistical analysis.
Results

In the queilectomy group, 5 (19%) patients developed transfer metatarsalgia.

In the first metatarsal decompression osteotomy group, 19 patients (63%) developed transfer metatarsalgia.
Conclusions

• Shortening the first metatarsal alters the metatarsal parabola and increases the risk of metatarsalgia.

• Routine use of isolated periarticular osteotomy of the first metatarsal for hallux rigidus should be performed with caution.
References