Hybrid Treatment for Hallux Rigidus

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I have no financial conflicts to disclose
GOALS

• Describe:
  • clinical evolution,
  • pain,
  • mobility,
  • complications,
  in the patients with hallux rigidus grade II and III treated by hybrid technique
Surgical Technique

- **Arthroscopy (1rst stage)**
  - Supine position
  - Dorsomedial and dorsolateral portals
  - No fluid pump
  - No mechanical distraction
  - 2.7 mm arthroscope
Surgical Technique

- Minimal Invasive (2º stage)
  - Dorsal closing wedge osteotomy of the MTT
  - Dorsal closing wedge osteotomy of the proximal phalange
  - 2.0mm burrs
  - fluoroscopy control
Materials and Methods

- Prospective study
- 14 feet between 2013 to 2016 treated
- hybrid technique
- diagnostic of hallux rigidus grade II and III.
- Follow-up 12 months
Analysis of the result

- 14 feet
- 12 months follow-up
- 10 females, 4 males
- 6 rights, 8 left
- Age mean 48 years
- Surgical time mean 50min.
Analysis of the results

MTP MOBILITY

<table>
<thead>
<tr>
<th></th>
<th>DORSAL</th>
<th>PLANTAR</th>
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</thead>
<tbody>
<tr>
<td>PREOP</td>
<td>16.07</td>
<td>11.78</td>
</tr>
<tr>
<td>3 MONTHS</td>
<td>24.28</td>
<td>19.28</td>
</tr>
<tr>
<td>6 MONTHS</td>
<td>24.64</td>
<td>19.68</td>
</tr>
<tr>
<td>12 MONTHS</td>
<td>24.23</td>
<td>19.63</td>
</tr>
</tbody>
</table>

DR. MANUEL GEA GONZALEZ
Analysis of the results

- VAS pain
- Personal Satisfaction (Linkert) 50% very satisfied 50% satisfied
- Complications:
  - 1 edema for 3 months

![Visual Analogue Scale of Pain](image)

<table>
<thead>
<tr>
<th></th>
<th>preop</th>
<th>3 months</th>
<th>6 months</th>
<th>12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serie1</td>
<td>8.21</td>
<td>3.64</td>
<td>2.21</td>
<td>1.53</td>
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</tbody>
</table>
Post-op

• Bandage forefoot for 3 weeks. Change every week

• Post-op shoe 3 weeks

• Early rehabilitation

1 week post-op
pre and post-op 3 months clinical and x rays
Conclusions

- Hybrid technique (arthroscopy + MIS dorsal wedge osteotomies) provides adequate pain control and increases mobility in patients with Hallux Rigidus grades II and III.

- Reduced the postoperative swelling and pain.

- Few complications

- We need to follow more patients and compare results with open, only MIS, and only arthroscopy techniques.
References