Bone-Block arthrodesis procedure in failures of first metatarsophalangeal joint replacement

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Authors have no conflicts to disclose
STUDY

12 PATIENTS

8 ASEPTIC MOBILIZATIONS

3 MALALIGNMENT

1 SEPTIC MOBILIZATION
TREATMENT

1) IMPLANT REMOVAL

2) BONE REGULARIZATION

3) BONE GAP MEASUREMENT

4) IPSILATERAL HEEL BONE HARVEST

5) BONE GRAFT AND ARTHRODESIS FIXATION WITH DORSAL PLATE
1) PLASTER 4 WEEKS

2) NO WEIGHT BEARING 4 WEEKS

3) FROM 5TH WEEK PROGRESSIVE WEIGHT BEARING ALLOWED WITH FLAT ORTHOPAEDIC POST-OPERATIVE SHOES
# RESULTS

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<th>PRE-OP</th>
<th>POST-OP</th>
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<tbody>
<tr>
<td><strong>FADI</strong></td>
<td>41.8 (24-52.9)</td>
<td>84.6 (62.5-96.2)</td>
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<td>(Foot &amp; Ankle Disability Index)</td>
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<tr>
<td><strong>AOFAS-HMI</strong></td>
<td>50.7 (38-75)</td>
<td>73.8 (60-95)</td>
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<td>(Hallux Metatarsophalangeal Interphalangeal scale)</td>
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<tr>
<td><strong>VAS</strong></td>
<td>8.5 (7-10)</td>
<td>2 (1-4)</td>
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<tr>
<td>(Visual Analogue Scale)</td>
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COMPLICATIONS

2 HARDWARE BREAKAGE \rightarrow RE-SURGERY FOR HARDWARE REMOVAL

3 ASYMPTOMATIC PSEUDOARTHROSI S, AT THE DISTAL END OF THE GRAFT. NONE AT THE PROXIMAL END

1 SURGICAL WOUND DEHISCENCE \rightarrow RESOLVED WITH ANTIBIOTICS AND LOCAL TREATMENT
CONCLUSIONS

RE-ESTABLISH CORRECT METATARSAL FORMULA
(graft +/- shortening central metatarsals)

ARTHRODESIS HEALING
(pseudoarthrosis reported up to 30% in cases with bone graft vs 2% in arthrodesis without graft)

GOOD SALVAGE PROCEDURE in MTP1 joint replacement failures and in cases with poor bone stock