Hemi Phalangeal Implant
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The HPI stemmed prosthesis, with very thin profile and trapezoid shape, is designed to replace the biomechanics of the 1st proximal phalangeal surface of the MTP joint. It has an anatomically engineered contour manufactured with highly-polished Cobalt Chrome articular surface to minimize friction and optimize range of motion with the metatarsal head.

The rectangular stem base minimizes the chance of rotation, while the partial plasma-sprayed, titanium coating provides the optimum interface for osseointegration where the implant contacts the cortical surface. The stem is off-set dorsally for anatomic alignment in the intermedullary canal. The HPI includes suture holes for tendon attachment at physician’s preference.

SIZING AND ORDERING

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>SIZE</th>
<th>HEAD WIDTH A</th>
<th>HEAD HEIGHT B</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPI-0001</td>
<td>1</td>
<td>16.9</td>
<td>12</td>
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<tr>
<td>HPI-0002</td>
<td>2</td>
<td>19.5</td>
<td>13.8</td>
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<td>HPI-0003</td>
<td>3</td>
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Dimensions are in millimeters.
A curvilinear incision is made over the dorsomedial aspect of the first Metatarsal Phalangeal Joint. Obtain optimal exposure by completely releasing the capsular structures around the base of the proximal phalanx. Resect all hypertrophic bone from the first metatarsal head using a power saw, rongeur, burr or rasp.

1. The base of the proximal phalanx is now resected using a perpendicular cut.
2. Plantar flex the hallux and place the sizer over the base of the proximal phalanx. Select the size that is at least as wide as the profile of the phalanx or slightly larger. The Sizer Instrument is placed against the resected bone with the face centered on the dorsal surface of the resected proximal phalanx. With the appropriate Sizer placed against the cut bone surface, mark the bone using a marking pen or small K-wire by placing it through the Sizer hole.
3. The Sizer Instrument may now be removed, leaving the center mark on the bone to act as a guide for reaming the medullary canal.
4. The Reamer is advanced into the medullary canal until the Reamer hits its stop. The Broach instrument is utilized to square the entrance to the medullary canal. The medullary canal has now been prepared to accept the stem of the Trial Sizer.
5. A Trial Sizer is placed in the medullary canal to finalize the fit and check range of motion of the joint. The appropriate size HPI Implant is now placed in the medullary canal using the Impactor Instrument.
6. The joint capsule is repaired with suture of the surgeon’s choice. The HPI prosthesis should be completely covered. Remaining wound closure is performed in the usual manner. Post-operative management is similar to other joint arthroplasty procedures.

Optional Suture Attachment: Implant suture holes in the Implant allow the surgeon the option of reattaching a violated flexor brevis complex. Reattachment areas on the plantar medial and lateral portion of the Implant are available. Do not insert the Implant until the plantar suture is placed.