patient information MPJ Hemi





The BioPro MPJ Hemi Implant is a low-profile press-fit implant designed to resurface the proximal phalanx.

What is the BioPro MPJ Hemi Implant used to treat (Indications)?

The BioPro MPJ Hemi Implant is intended to treat arthritic degradation of the metatarsophalangeal joint that has resulted in disabling pain, limited motion and loss of the normal ambulatory function of the forefoot with the following indications:

- Degenerative arthritis
- Rheumatoid arthritis
- Bunion deformity associated with arthritis of the great toe metatarsophalangeal joint

Who should not receive the BioPro MPJ Hemi Implant (Contraindications)?

The age of the patient must be balanced against the severity of the disability and the need for surgery. The following are contraindications of the BioPro MPJ Hemi Implant:

- A general health problem that might pose a significant threat to the life of the patient if subjected to a major surgical procedure.
- An active infection or a previous infection of the lower extremity that has not been quiescent for at least six months.
- A local or systemic infection.
- Significant deficiency in the vascular supply to the extremity.
- Severe structural deficiency of the sub-chondral bone that may result in insufficient support for the prosthesis.
- A condition of the toe which may lend itself to a more conservative procedure.
- Severe compromise of the supporting muscles or ligaments about the toe.

What are precautions related to the use of the MPJ Hemi Implant?

The standard implant is manufactured from Cobalt Chrome, which contains a small percentage of nickel. Studies indicate a small percentage of the population have a nickel sensitivity¹, which may cause inflammation and pain. Patients suspected of a nickel sensitivity should opt for the titanium version of the implant, which contains no nickel.

Any serious incident involving the BioPro MPJ Hemi Implant should be reported to both BioPro at www.bioproimplants.com and the Therapeutic Goods Administration at www.tga.gov.au.

How long will the BioPro MPJ Hemi Implant last?

The BioPro MPJ Hemi is intended to be a long-term device. The implant has been in clinical use since 1952 and research is available on patients +20 years postoperative.² Factors shortening the lifetime of the implant could include trauma, development of arthritis in adjacent joints or any diseases causing degradation in bone quality.



What happens during surgery?

1. A small incision will be made over the MTP (toe) joint and a small resection of bone will be made off the base of the proximal phalanx. (Fig 1)



- 2. The metatarsal head will be remodeled. (Fig 2)
- 3. A sizer will be used to determine implant diameter and a small hole will be placed in the phalanx to trial the implant. (Fig 3)
- 4. After trialing the implant, the trial implant will be removed and a broach will be used to make a canal for the implant stem. (Fig 4)
- 5. The final implant will be inserted and range of motion will be confirmed. (Fig 5)
- 6. The joint will be closed with suture.



What should I expect after surgery?

Patients should follow all post-operative instructions from their surgeon, including recommended toe immobilization, range of motion exercises and physical therapy. This varies from patient to patient and is at the discretion of the surgeon. Abnormal pain, swelling or discomfort on motion could indicate a problem with the implant. If experiencing these symptoms, patients should immobilize the toe and visit their surgeon as soon as possible.



REFERENCES

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 Townley, C. O., & Taranow, W. S. (1994). A Metallic Hemiarthroplasty Resurfacing Prosthesis for the Hallux Metatarsophalangeal Joint. Foot & Ankle International, 15(11), 575–580. https://doi.org/10.1177/107110079401501101



+1-810-982-7777 info@bioproimplants.com 2929 Lapeer Road Port Huron, MI 48060

