patient information Modular Thumb







The BioPro[®] Modular Thumb Implant is a twopiece implant consisting of a head and a press-fit plasma-sprayed stem.

What is the BioPro Modular Thumb Implant used to treat (Indications)?

The BioPro Modular Thumb Implant is intended to treat a painful, instable thumb, one with limited range of motion, or subluxation of the trapeziometacarpal joint with the following indications:

- Rheumatoid arthritis
- Traumatic arthritis
- Osteoarthritis
- Post fracture deformation or bone loss

Who should not receive the BioPro Modular Thumb 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 Modular Thumb Implant:

- A debilitating general health problem that might pose a significant threat to the life of the patient if subjected to a major surgical procedure
- A previously infected thumb that has not been quiescent for at least six months
- A local or systemic infection (i.e. osteomylitis)
- Insufficient bone stock to support the prosthesis
- Scapho-Trapezium joint arthritis

What are precautions related to the use of the BioPro Modular Thumb 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 Modular Thumb 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 Modular Thumb Implant last?

The BioPro Modular Thumb Implant is intended to be a long-term device. Research has been published on the Modular Thumb Implant at 10 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. An incision will be made over the CMC (thumb) joint.
- 2. A small resection of bone (5mm) will be made off the base of the metacarpal. (Fig 1)



 A burr will be used to create a socket in your trapezium bone. (Fig 2)



- A broach will be used to make a canal for the implant stem. (Fig 3)
- 5. After the socket and canal are created the surgeon will insert a trial implant to assess implant sizing. (Fig 4)
- 6. The final press-fit implant will be inserted, and the joint will be closed with suture. (Fig 5)



What can I expect after surgery?

Patients should follow all post-operative instructions from their surgeon, including recommended thumb 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 thumb and visit their surgeon as soon as possible.



REFERENCES

- Haddad SF, Helm MM, Meath B, et al. Exploring the Incidence, Implications, and Relevance of Metal Allergy to Orthopaedic Surgeons. Journal of the American Academy of Orthopaedic 1.
- Surgeons. Global Research & Reviews. 2019 Apr;3(4):e023. DOI: 10.5435/JAAOSGlobal-D-19-00023. Prichett, James W, and Louis S Habryl. "A promising thumb Basal joint hemiarthroplasty for treatment of trapeziometacarpal osteoarthritis." Clinical orthopaedics and related research vol. 470,10 (2012): 2756-63. doi:10.1007/s11999-012-2367-7 2



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

