Case Report Bilateral Thumb CMC and Left Middle MCP Joint Arthroplasty

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Background

A 69-year-old male building contractor with a history of thumb carpometacarpal (CMC) arthritis previously received steroid injections with limited symptom relief. Concerned about prolonged downtime from traditional surgical options, he sought a second opinion through the BioPro Find A Surgeon locator.

Clinical evaluation confirmed Stage III CMC arthritis in the right hand and Stage IV in the left, along with arthritis in the left middle metacarpophalangeal (MCP) joint. After nearly a year of conservative management, the patient elected to proceed with staged joint replacements.

Case 1: Left Thumb CMC and Middle MCP Joint Replacement

On December 19, 2024, the patient underwent left thumb CMC joint replacement using the BioPro Modular Thumb Implant and left middle MCP joint replacement using the BRM Digitalis Silicone Spacer.

Postoperative Care: A surgical splint was applied intraoperatively and replaced at two weeks with a removable thumb spica and finger splint. A home-based protected progressive range of motion (ROM) program was initiated for four weeks.

Recovery: By six weeks post-op, the patient had resumed light household and construction activities. He reported good function in the left thumb and middle finger.

The patient continues to complain of right CMC joint pain with steroid injection providing minimal relief.

Figure 3: Preoperative Right CMC



Figure 4: Postoperative Left MCP



Figure 5: Postoperative Left CMC



Figure 2: Preoperative Left CMC



Case 2: Right Thumb CMC Joint Replacement

On March 13, 2025—12 weeks after the initial procedure—the patient underwent right thumb CMC joint replacement using the BioPro Modular Thumb Implant.

Postoperative Care: The same protocol was followed. Despite medical advice, the patient engaged in yard work while in the initial splint.

Recovery: At the six-week follow-up, the patient reported minimal pain, full ROM, and continued functional improvement. He noted complete resolution of pain in the previously treated left thumb and middle finger.



Figure 6: Postoperative Right CMC

Discussion

The BioPro Modular Thumb Implant and BRM Digitalis Silicone Spacer enabled a rapid return to function and symptom relief in a high-demand patient. These modern implants offer reliable outcomes and meet rising patient expectations for shorter recovery times and improved quality of life. Continued follow-up is warranted, but early results support the effectiveness of these devices in managing advanced thumb and finger arthritis.



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Disclosure: The surgeon author serves as a paid consultant for BioPro, Inc.

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