

# CASEREVIEW

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## Notice of Independent Review Decision

**DATE OF REVIEW:** JULY 16, 2011

**IRO CASE #:**

### **DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE**

Left wrist fusion with iliac crest bone graft 25810  
Hardware Removal 20680

### **A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION**

This physician is Board Certified Orthopedic Surgeon with over 40 years experience.

### **REVIEW OUTCOME**

Upon independent review the reviewer finds that the previous adverse determination/adverse determinations should be:

- Upheld (Agree)
- Overturned (Disagree)
- Partially Overturned (Agree in part/Disagree in part)

Provide a description of the review outcome that clearly states whether or not medical necessity exists for each of the health care services in dispute.

## **INFORMATION PROVIDED TO THE IRO FOR REVIEW**

**February 7, 2002:** Mr. was examined by Dr., MD who reviewed x-rays from 1/8/02. He noted that the x-rays showed three k-wires in place securing the carpus where he is noted to have displaced scaphoid fracture at the mid-waist. Mr. also had x-rays on 2/7/02. Dr. noted that he has a scaphoid waist fracture with marked displacement of the proximal pole. It appears that the capitate head is still dislocated from the lunate facet in a dorsal fashion. He does have some mottling of the bone consistent with disuse atrophy.

**February 14, 2002:** Mr. was examined by Dr., MD who reviewed an MRI from 2/14/02. He noted that the MRI showed persistent volar dislocation of the lunate, 100% from the capitate head as suspected by the plain x-rays. He planned to proceed with a surgical course for a left wrist fusion with local bone graft and dorsal plating.

**March 6, 2002: Operative report (by, M.D.) Preoperative diagnosis:** Chronic left wrist transscaphoid perilunate, fracture dislocation. **Procedures:** 1. Left wrist proximal row carpectomy. 2. Left wrist fusion using the Synthes fusion plate, distal radius, and allograft. **Postoperative diagnosis:** Chronic left wrist transscaphoid perilunate, fracture dislocation.

**March 18, 2002:** Mr. was examined by Dr., MD who removed his stitches. He also gave Mr. a wrist/forearm brace to be worn on a full-time basis.

**April 8, 2002:** Mr. was examined by Dr., MD who reviewed x-rays that were taken on 4/8/02. He noted that his plate and screws were in good position and that the fusion site was calcifying nicely. He planned for Mr. to begin working on mobilization and strengthening.

**April 29, 2002:** Mr. was examined by Dr., MD who recommended that he begin to use his left wrist and hand normally.

**June 3, 2002:** Mr. was examined by Dr., MD who reviewed x-rays from 6/3/02. He noted that the x-rays showed his plate and screws to be in good position. It appeared that the fusion was solid. He recommended for Mr. to use his left wrist and hand normally without restriction.

**May 17, 2011: X-ray Left wrist 4 views (read by, MD). Impression:** Carpal fusion with fracture of fusion plate. Mr. reported to be working in his garden and his wrist popped 10 (ten) days prior to May 17, 2011:

**May 26, 2011:** Mr. was examined by Dr., MD who reviewed an x-ray from 5/17/11. He noted that the x-ray showed evidence of a fracture plate at the

radiocarpal joint. The most distal metacarpal strip is where it looks he may have a fracture at the mid portion of the screw. There is no sign of osteomyelitis or other screw loosening. He planned to remove the existing plate and screws and redo the fusion with left iliac crest bone graft and a new plate.

**June 2, 2011:** M.D. performed an UR on claimant. Rational for Denial: There is no documentation provided with regard to the failure of the claimant to respond to conservative measures. Also in the office x-rays done on 5/26/11 did not show loosening or infection of the hardware.

**June 14, 2011:** M.D. performed an UR on claimant. Rationale for Denial: Based on the guidelines, the routine removal of hardware implanted for fracture fixation is not recommended, except in the case of broken hardware or persistent pain, after ruling out other causes of pain such as infection and nonunion.

### **PATIENT CLINICAL HISTORY:**

The claimant is a male that smokes one pack a day.

### **ANALYSIS AND EXPLANATION OF THE DECISION INCLUDE CLINICAL BASIS, FINDINGS AND CONCLUSIONS USED TO SUPPORT THE DECISION.**

The previous decisions are upheld. There is no documentation that the hardware has loosened, broken, or if the hardware has become infected. Secondly, the based on the medical records provided the claimant has not received adequate conservative care; therefore per the ODG Guidelines the previous decisions are upheld.

### **Per the ODG:**

Arthrodesis (fusion)

Recommended in severe posttraumatic arthritis of the wrist or thumb or digit after 6 months of conservative therapy. Total wrist arthrodesis is regarded as the most predictable way to relieve the pain of posttraumatic wrist arthritis. Total wrist fusion diminishes pain, but wrist function is sacrificed. Patients may have functional limitations interfering with lifestyle, and total fusion does not always result in complete pain relief. Arthrodesis (fusion) provides a pain-free stable joint with a sacrifice of motion. It may be indicated in young patients in whom heavy loading is likely; in joints with a fixed, painful deformity, instability, or loss of motor; and in the salvage of failed implant arthroplasty. Arthrodesis of the metacarpophalangeal joint of the thumb gives reliable results, with high patient acceptance, but does not result in an entirely normal thumb or hand function. ([Wieloch, 2006](#)) ([Ellis, 1989](#)) ([Lourie, 2001](#)) ([Edmunds, 1994](#)) ([Adey, 2005](#))

([Rauhaniemi, 2005](#)) ([Ghattas, 2005](#)) Postoperative treatment: Plaster splint for 5 days, then early functional treatment. ([Marti, 2006](#))

For average hospital LOS if criteria are met, see [Hospital length of stay](#) (LOS).

Hardware implant removal (fracture fixation)

Not recommend the routine removal of hardware implanted for fracture fixation, except in the case of broken hardware or persistent pain, after ruling out other causes of pain such as infection and nonunion. Not recommended solely to protect against allergy, carcinogenesis, or metal detection. Although hardware removal is commonly done, it should not be considered a routine procedure. The decision to remove hardware has significant economic implications, including the costs of the procedure as well as possible work time lost for postoperative recovery, and implant removal may be challenging and lead to complications, such as neurovascular injury, refracture, or recurrence of deformity. Current literature does not support the routine removal of implants to protect against allergy, carcinogenesis, or metal detection. ([Busam, 2006](#)) Despite advances in metallurgy, fatigue failure of hardware is common when a fracture fails to heal. Revision procedures can be difficult, usually requiring removal of intact or broken hardware. ([Hak, 2008](#)) Following fracture healing, improvement in pain relief and function can be expected after removal of hardware in patients with persistent pain in the region of implanted hardware, after ruling out other causes of pain such as infection and nonunion. ([Minkowitz, 2007](#))

**A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:**

- ACOEM- AMERICAN COLLEGE OF OCCUPATIONAL & ENVIRONMENTAL MEDICINE UM KNOWLEDGEBASE**
- AHCPR- AGENCY FOR HEALTHCARE RESEARCH & QUALITY GUIDELINES**
- DWC- DIVISION OF WORKERS COMPENSATION POLICIES OR GUIDELINES**
- EUROPEAN GUIDELINES FOR MANAGEMENT OF CHRONIC LOW BACK PAIN**
- INTERQUAL CRITERIA**
- MEDICAL JUDGEMENT, CLINICAL EXPERIENCE AND EXPERTISE IN ACCORDANCE WITH ACCEPTED MEDICAL STANDARDS**

- MERCY CENTER CONSENSUS CONFERENCE GUIDELINES
- MILLIMAN CARE GUIDELINES
- ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES
- PRESSLEY REED, THE MEDICAL DISABILITY ADVISOR
- TEXAS GUIDELINES FOR CHIROPRACTIC QUALITY ASSURANCE & PRACTICE PARAMETERS
- TEXAS TACADA GUIDELINES
- TMF SCREENING CRITERIA MANUAL
- PEER REVIEWED NATIONALLY ACCEPTED MEDICAL LITERATURE
  
- OTHER EVIDENCE BASED, SCIENTIFICALLY VALID, OUTCOME FOCUSED GUIDELINES (PROVIDE A DESCRIPTION)