Hip Arthroplasty (Partial, Total, or Revision) - Single Service

Clinical Guidelines for Medical Necessity Review

Version: 3
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Important Notices

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Guideline Information:

Specialty Area: Diseases & Disorders of the Musculoskeletal System (M00-M99)
Service Name: Total Hip Arthroplasty

Literature review current through: 7/18/2024
Document last updated: 7/18/2024
Type: [**X**] Adult (18+ yo) | [**X**] Pediatric (0-17yo)

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Medical Necessity Criteria

Service: Hip Arthroplasty (Partial, Total, or Revision)

General Guidelines

- **Units, Frequency, & Duration:** None.
- **Criteria for Subsequent Requests:** None.
- **Recommended Clinical Approach:** Surgical intervention is appropriate in patients with persistent and disabling symptoms despite conservative and non-surgical management. Partial hip replacement may be indicated when only the femoral head of the damaged hip joint is replaced. Total hip arthroplasty is the procedure of choice when indicated, replacing the ball and socket sections of the hip joint as well as any damaged part of the femur. Arthroscopic debridement is not recommended.[1-2] Neuraxial anesthesia is appropriate to decrease postoperative pain and opioid use.[2] General anesthesia is also acceptable. If a patient has had a joint arthroplasty and presents with pain that may be due to infection, recurrent hip dislocation, aseptic loosening, wear, mechanical failure of prosthesis, or fracture, then revision surgery may be indicated.
- **Exclusions:** See non-indications.

Medical Necessity Criteria

Indications

➔ **Hip arthroplasty** is considered appropriate if **ANY** of the following is **TRUE**:

- ◆ The procedure is a **partial hip arthroplasty (hip hemiarthroplasty),** and **ANY** of the following is **TRUE**[3]:
  - Acute fracture of the femoral head or neck untreatable with reduction and internal fixation[4]; **OR**
  - Fracture dislocation of the hip untreatable with reduction and internal fixation; **OR**
  - Avascular necrosis of the femoral head; **OR**
  - Non-union fracture of the femoral neck; **OR**

- Degenerative arthritis of the femoral head only in which the acetabulum does not need replacement; **OR**
- Certain high sub-capital and femoral neck fractures in the elderly; **OR**

◆ The procedure is a **total hip arthroplasty** and **ANY** of the following is **TRUE**:
- The patient has hip osteoarthritis and **ALL** of the following:
  - Failure of conservative management for greater than 3 months, including **ALL** of the following:
    - ◆ Oral steroids, anti-inflammatory medications, or analgesics; **AND**
    - ◆ Ambulatory assist device; **AND**
    - ◆ Physical therapy; **AND**
    - ◆ **ANY** of the following:
      - Corticosteroid injection if medically appropriate; **OR**
      - Corticosteroid injection is contraindicated; **AND**
  - The patient's symptoms have limited their activities of daily living (ADLs)[5]; **AND**
  - Radiograph shows **ANY** of the following evidence of osteoarthritis of the hip[6]:
    - ◆ Joint space narrowing (less than 50%) and marginal osteophytes or subchondral sclerosis; **OR**
    - ◆ Collapsed femoral head and marginal osteophytes or subchondral sclerosis; **OR**
    - ◆ Joint space narrowing (greater than 50%); **OR**
    - ◆ Complete joint space loss; **OR**
- Malignancy of joint involving bones or soft tissues of the pelvis or proximal femur; **OR**
- Avascular necrosis of the femoral head; **OR**
- Femoral neck fractures with underlying hip degenerative joint disease; **OR**
- Non-union or malunion fracture of the femoral neck; **OR**

◆ The procedure is a **revision of prior arthroplasty** and **ALL** of the following are **TRUE**:
- The patient has significant hip pain; **AND**
- The patient has **ANY** of the following findings[7-8]:

- Infection; **OR**
- Instability; **OR**
- Loosening of the prosthesis; **OR**
- Failure of the prosthesis; **OR**
- Periprosthetic fracture; **OR**
- Recurrent or irreducible hip dislocation; **OR**
- Tissue or systemic reaction to metal implant; **OR**
- Leg-length inequality (clinically significant leg-length inequality not amenable to conservative management).

Non-Indications

➔ **Hip arthroplasty (partial, total, or revision)** is not considered appropriate if **ANY** of the following are **TRUE**[9]:

- Skeletal immaturity[10]; **OR**
- Active infection; **OR**
- Quadriplegia; **OR**
- Rapidly progressive neurological disease except in the clinical situation of a concomitant displaced femoral neck fracture; **OR**
- Absence or relative insufficiency of abductor musculature; **OR**
- Neurotrophic arthritis.

Level of Care Criteria

Inpatient or Outpatient

Procedure Codes (CPT/HCPCS)

CPT/HCPCS Code	Code Description/Definition
26990	Drainage of abscess or blood accumulation in pelvis or hip joint
26991	Incision of infected fluid filled sac (bursa) of pelvis or hip joint
27030	Incision of hip joint with drainage
27125	Hemiarthroplasty, hip, partial (eg, femoral stem prosthesis, bipolar arthroplasty)
27130	Replacement of thigh bone and hip joint prosthesis
27132	Conversion of previous replacement of thigh bone and

	hip joint prosthesis
27134	Revision of thigh bone and hip joint prosthesis
27137	Revision of hip joint prosthesis
27138	Revision of femoral component of total hip arthroplasty; Revision of femoral component of total hip arthroplasty with allograft
27236	Open treatment of femoral fracture, proximal end, neck, internal fixation or prosthetic replacement
27250	Treatment of hip dislocation
27299	Unlisted procedure, pelvis or hip joint

Medical Evidence

Kirkley et al. (2008) conducted a single-center, randomized, controlled trial of arthroscopic surgery for knee osteoarthritis. Patients were assigned randomly to either an arthroscopic procedure (lavage and debridement) with the addition of optimized medical and physical treatment or medical and physical treatment alone. It was concluded that there was no additional benefit when compared to optimized physical and medical therapy.[1]

In a 2016 systematic review, Johnson et al. evaluated the evidence related to patient outcomes in spinal or epidural anesthesia vs. general anesthesia use for total hip or knee arthroplasties. The conclusion was that neuraxial anesthesia appeared to be equally effective when compared with general anesthesia, without increased morbidity. They found limited evidence that neuraxial anesthesia produced better outcomes perioperatively.[2]

Liu et al. (2015) conducted a retrospective study of 402 patients with a first revision surgery. It was concluded that patients with infection and osteoarthritis had higher odds of revision from infection and loosening than those patients with osteonecrosis. Asian patients were found to have a higher incidence of osteonecrosis than Caucasian populations.[7]

The American Academy of Orthopaedic Surgeons (AAOS) published two related guidelines:

- *Management of Hip Fractures in Older Adults* (2021) recommends hip fracture surgery within 24 hours for best outcomes and recommends arthroplasty over fixation unstable femoral neck fractures.[4]
- *Management of Osteoarthritis of the Hip* (2017) supports the use of risk assessment tools, and careful patient screening (weight, age, smoking status) to improve surgical outcomes.[9]

References

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Clinical Guideline Revision History/Information

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