



## **Cohere Medical Policy - Periacetabular Osteotomy/Surgical Dislocation**

*Clinical Policy for Medical Necessity Review*

**Version: 2**

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Next Annual Review: July 31, 2026

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## Policy Information:

**Specialty Area:** Musculoskeletal Care

**Policy Name:** Cohere Medical Policy - Periacetabular Osteotomy/Surgical Dislocation

**Type:**  Adult (18+ yo) |  Pediatric (0-17 yo)

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# Medical Necessity Criteria

## ***Service: Periacetabular Osteotomy/Surgical Dislocation***

Cohere Health takes an evidence-based approach to reviewing imaging and procedure requests, meaning that sufficient clinical information must be provided at the time of submission to determine medical necessity.

Documentation must include a recent and detailed history, physical examination related to the onset or change in symptoms, relevant lab results, prior imaging, and details of previous treatments. Advanced imaging or procedures should be requested after a clinical evaluation by the treating provider, which may include referral to a specialist.

- When a specific clinical indication is not explicitly addressed in the Cohere Health medical policy, medical necessity will be determined based on established clinical best practices, as supported by evidence-based literature, peer-reviewed sources, professional society guidelines, and state or national recommendations, unless otherwise directed by the health plan.
- Requests submitted without clinical documentation, or those that do not align with the provided clinical information—such as mismatched procedure, laterality, body part, or CPT code—may be denied for lack of medical necessity due to insufficient or inconsistent clinical information.
- When there are multiple diagnostic or therapeutic procedures requested simultaneously or within the past three months, each will be reviewed independently. Clinical documentation must clearly justify all of the following:
  - The medical necessity of each individual request
  - Why prior imaging or procedures were inconclusive, or why additional/follow-up studies are needed
  - How the results will impact patient management or treatment decisions
- Requests involving adjacent or contiguous body parts may be considered not medically necessary if the documentation demonstrates that the patient's primary symptoms can be adequately assessed with a single study or procedure.

## Description

A periacetabular osteotomy (PAO) is an orthopedic procedure to correct developmental hip deformities. During a PAO, the acetabulum is reoriented in the pelvis and then reattached to the nearby bone with screws. Anterior arthrotomy may also be performed during a PAO to evaluate the acetabular labrum to determine the necessity of an osteochondroplasty of the anterolateral femoral head-neck junction.<sup>1</sup>

## Medical Necessity Criteria

### Indications

**Periacetabular osteotomy/surgical dislocation** is considered appropriate if **ALL** of the following are **TRUE**:

- Advanced imaging demonstrates **ANY** of the following:
  - Femoroacetabular impingement (FAI) with evidence of cam impingement, with **ANY** of the following:
    - Alpha angle greater than 50 degrees; **OR**
    - Lateral center edge angle (LCEA) greater than 39 degrees; **OR**
    - Cross-over sign; **OR**
    - Pistol grip deformity; **OR**
  - Developmental dysplasia of the hip (DDH) with evidence of a LCEA less than 15 degrees<sup>2</sup>; **AND**
- The patient has **ANY** of the following<sup>1</sup>:
  - Bony morphology that prevents arthroscopic treatment; **OR**
  - Surgical dislocation of the hip is required to treat intra-articular and bony pathology; **AND**
- The patient has **ANY** of the following clinical symptoms:
  - Pain in hip, groin, buttocks, or thigh<sup>3-5</sup>; **OR**
  - Clicking, locking, catching, or giving way<sup>5</sup>; **OR**
  - Hip instability<sup>3</sup>; **OR**
  - Hip discomfort or pain that worsens with activities (e.g., prolonged sitting, prolonged standing, walking, climbing stairs, or running)<sup>4</sup>; **OR**
  - Stiffness in hip<sup>6</sup>; **OR**
  - Limping<sup>6</sup>; **AND**
- The patient has **ANY** of the following physical examination findings:
  - Positive impingement test; **OR**
  - FADIR test produces hip pain; **OR**
  - FABER test produces hip pain; **OR**

- Limited hip flexion and hip abduction; **OR**
- Limited internal rotation with the hip at 90° of flexion; **AND**
- Failure of conservative management for greater than 3 months, including **ALL** of the following:
  - Anti-inflammatory medications, non-opioid analgesics, or prescription medications (e.g., oral steroids, neuropathic pain medications) if not contraindicated; **AND**
  - Physical therapy or a physician-directed home exercise program; **AND**
  - **ANY** of the following:
    - Corticosteroid injection if medically appropriate<sup>7</sup>; **OR**
    - Documentation that corticosteroid injection is contraindicated.

### Non-Indications

**Periacetabular osteotomy/surgical dislocation** is not considered appropriate if **ANY** of the following is **TRUE**<sup>8</sup>:

- Severe osteoarthritis (Tönnis Grade 2 or 3, see below for the Tönnis Grading Scale of Hip Osteoarthritis); **OR**
- Subluxation resulting in a femoral head within a neo-acetabulum; **OR**
- A mismatch between a smaller acetabular radius and femoral head; **OR**
- Severe restriction in range of motion; **OR**
- Not skeletally mature.<sup>9</sup>

### Definitions

**FADIR (flexion, adduction, and internal rotation) Test:** The test begins with a supine patient. The examiner raises the patient's leg with their hip flexed to 90° and knee flexed to 90°. The examiner then adducts and internally rotates the hip. A positive result occurs when the patient reports groin pain.<sup>10</sup>

**FABER (flexion, abduction, and external rotation) Test:** A test to assess a suspected labral tear. The examination begins with a supine patient. The examiner places the patient in a figure-4 position with their hip flexed and abducted, with the lateral ankle resting on the contralateral thigh proximal to the knee. The examiner then applies a gentle downward force against the knee of the abducted leg. A positive result occurs when the patient reports groin pain on the affected side.<sup>10</sup>

## Tönnis Grading Scale of Hip Osteoarthritis<sup>11</sup>

Grade	Radiographic Features
0	- No signs of osteoarthritis
1	- Slight narrowing of joint space - Slight lipping at the joint margin - Slight sclerosis of the femoral head or acetabulum
2	- Small cysts in the femoral head or acetabulum - Increasing narrowing of joint space - Moderate loss of sphericity of the femoral head
3	- Large cysts - Severe narrowing or obliteration of joint space - Severe deformity of the femoral head - Avascular necrosis

### Level of Care Criteria

Inpatient or Outpatient

### Procedure Codes (CPT/HCPCS)

CPT/HCPCS Code	Code Description
27146	Osteotomy, iliac, acetabular or innominate bone
27299	Unlisted procedure, pelvis or hip joint

## Medical Evidence

Curley et al. (2023) conducted a systematic review to evaluate the return to sports (RTS) for patients with symptomatic hip dysplasia who underwent a periacetabular osteotomy (PAO). Six studies included 341 patients who participated in various sports. Two studies reported a RTS rate of 82% and 80%; rates among competitive athletes were lower (78% and 73%). A study of dancers demonstrated a 63% RTS rate. Additional studies reported rates of RTS for sports. Athletes participating in low, moderate, and high-impact sports reported a significant increase postoperatively.<sup>12</sup>

Tan et al. (2021) performed a systematic review and meta-analysis on PAO for acetabular retroversion. The objectives of the review included identifying indications and possible concomitant procedures, as well as predicted clinical outcomes and potential complications. Seven studies were analyzed that included a total of 225 hips. The rate of complications was 31.6% (low-grade) and 12.0% (high-grade). Overall, 7.1% required additional procedures due to symptoms of impingement or osteoarthritis progression.<sup>4</sup>

Kamath (2016) described Bernese PAO for hip dysplasia. Though technically demanding, the procedure has demonstrated success in mid- and long-term clinical studies over the past 30 years. The literature stated that pelvic osteotomy is a preferred alternative to arthroplasty in young, active patients with correctable structural hip deformities. The authors also noted that the procedure has long-term survivorship with preserved cartilage and physical rehabilitation.<sup>8</sup>

Coobs et al. (2015) reviewed PAO for hip dysplasia in the young adult hip patient. In recent years, obesity has been found to contribute significantly to the risk of major complications with PAO surgery. Obese patients demonstrated a 22.3% risk of major postoperative complications compared with 3.1% of non-obese patients. A systematic review of 13 studies involving 626 hips with 2-5 year follow-ups yielded reliable deformity correction with PAO and significant improvements in hip function.<sup>13</sup>

Zebala et al. (2007) completed a systematic review regarding anterior femoroacetabular impingement (FAI). The usage of the PAO is discussed as a reconstructive option for the management of acetabular dysplasia, and the group stated that severe acetabular retroversion is the main indication for a PAO in the treatment of impingement. The authors cited a study where 26 of 29 patients with symptomatic FAI from acetabular retroversion reported excellent outcomes post-osteotomy. The procedure is generally combined with an anterior arthrotomy and osteochondroplasty as necessary.<sup>1</sup>

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# Policy Revision History/Information

Original Date: May 28, 2024

## Review History

Version 2	07/31/2025	<p>Annual review.</p> <p>Rearranged bullets for improved usability and organization.</p> <p>Updated indication for femoroacetabular impingement (FAI) with evidence of cam impingement with ANY of the following:</p> <ul style="list-style-type: none"> <li>● Alpha angle greater than 50 degrees; OR</li> <li>● Lateral center edge angle (LCEA) greater than 39 degrees; OR</li> <li>● Cross-over sign; OR</li> <li>● Pistol grip deformity; OR</li> </ul> <p>Updated the indication for "developmental dysplasia of the hip (DDH)" to include "with evidence of a LCEA less than 15 degrees."</p> <p>Under the indications for required "clinical symptoms", added "hip" to now read "hip discomfort or pain that worsens with activities (e.g., prolonged sitting, prolonged standing, walking, climbing stairs, or running)." Also, added "in hip" to the indication for "stiffness."</p> <p>Under the indications for required "physical examination findings", deleted "flexed knee gait while walking."</p>
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		<p>Standard failure of conservative management language was updated per the Style Guide. Revised the indication from “oral steroids, anti-inflammatory medications, or analgesics” to “anti-inflammatory medications, non-opioid analgesics, or prescription medications (e.g., oral steroids, neuropathic pain medications) if not contraindicated.” Also added to the indication for “physical therapy” to state “or a physician-directed home exercise program.” Added reference (Foster et al., 2015) for corticosteroid indication.</p> <p>Added non-indication for "not skeletally mature" (Millis et al., 2018).</p> <p>Removed indication for “no evidence of advanced degenerative osteoarthritis (Tönnis Grade 2 to 3)” as it is included in the non-indication section.</p> <p>Literature review - Medical Evidence section updated (Curley et al., 2023; Tan et al., 2021).</p>
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