

This guideline may contain custom content that has been modified from the MCG care guidelines and has not been reviewed or approved by MCG Health.

RMHP Hip Arthroscopy and Labrum Reconstruction

MCG Health
Inpatient and
Surgical Care
27th Edition

ORG_OTG: RMHP-S-57225 (ISC)

[Link to Codes](#)

- [Care Planning - Inpatient Admission and Alternatives](#)
 - [Clinical Indications for Procedure](#)
 - [Alternatives to Procedure](#)
 - [Operative Status Criteria](#)
 - [Preoperative Care Planning](#)
- [Hospitalization](#)
 - [Optimal Recovery Course](#)
 - [Goal Length of Stay](#)
- **- Ambulatory**
 - [Extended Stay](#)
 - [Hospital Care Planning](#)
- [Discharge](#)
 - [Discharge Planning](#)
 - [Discharge Destination](#)
- [Evidence Summary](#)
 - [Hospitalization](#)
 - [Length of Stay](#)
- [Policy History](#)
- [References](#)
- [References](#)
- [Footnotes](#)
- [Codes](#)

Care Planning - Inpatient Admission and Alternatives

[Return to top of RMHP Hip Arthroscopy and Labrum Reconstruction - ISC](#)

Clinical Indications for Procedure

[Return to top of RMHP Hip Arthroscopy and Labrum Reconstruction - ISC](#)

The guidelines below apply to **ALL RMHP plans**.

RMHP considers labrum reconstruction experimental and investigational for the treatment of femoral acetabular impingement (FAI) because there is insufficient evidence regarding the safety or effectiveness of this approach.

Note: Labral reconstruction uses a graft to reconstruct the native labrum. This is distinct from a labral repair, which is to repair the torn tissue by sewing it back together and/ or to its attachment site.

[Expand All / Collapse All]

- Procedure is indicated for **1 or more** of the following(1)(2)(3)(4):
 - Treatment of identified structural hip disorder, as indicated by **ALL** of the following:
 - Positive MRI or other imaging finding, including **1 or more** of the following(5):
 - Loose bodies
 - Labral tears or cysts(6)
 - Femoroacetabular impingement(7)(8)(9)(10)
 - Chondral injury(11)(12)
 - Synovial disease unresponsive to systemic therapy(13)(14)(15)
 - Ligamentum teres tear or rupture(16)
 - Gluteal tendon tear(17)
 - Posttraumatic periacetabular osteophytes
 - Capsular instability(18)
 - Iliopsoas or anterior inferior iliac spine impingement(19)(20)
 - Treatment needed because of **1 or more** of the following:
 - Chronic pain
 - Clinically significant functional impairment
 - Nonoperative therapy has been tried and failed (eg, analgesics, rest, physical therapy, anti-inflammatory agents).
 - Fracture amenable to arthroscopic repair(5)
 - Debridement and lavage of septic hip(21)(22)(23)
 - Snapping hip refractory to nonoperative treatment (eg, physical therapy, activity modification)(24)
- Evaluation of hip, as indicated by **ALL** of the following(25)(26)(27):
 - Presence of signs or symptoms, including **1 or more** of the following:
 - Unexplained pain
 - Functional impairment
 - Joint instability or dislocation
 - Nondiagnostic findings on imaging (eg, CT scan, MRI)
 - Nonoperative therapy has been tried and failed (eg, analgesics, rest, physical therapy, anti-inflammatory agents).

Alternatives to Procedure

[Return to top of RMHP Hip Arthroscopy and Labrum Reconstruction - ISC](#)

- Alternatives include(1)(2)(4)(9)(13):
 - Nonoperative treatment(19)(28)(29):
 - Cessation or modification of activities that precipitate or exacerbate symptoms
 - NSAIDs
 - Analgesics
 - Physical therapy(7)
 - Corticosteroid injection
 - For septic arthritis(21)(23)(30):
 - Open drainage
 - Joint aspiration
 - Radiosynovectomy(31)
 - Open arthrotomy
 - Hip arthroplasty. See [Hip Arthroplasty](#) ^{ISC} guideline.

- Hip resurfacing. See [Hip Resurfacing](#) ^{ISC} guideline.

Operative Status Criteria

[Return to top of RMHP Hip Arthroscopy and Labrum Reconstruction - ISC](#)

- Ambulatory(32)

Preoperative Care Planning

[Return to top of RMHP Hip Arthroscopy and Labrum Reconstruction - ISC](#)

- Preoperative care planning needs may include(1)(11)(33):
 - Routine preoperative evaluation. See [Preoperative Education, Assessment, and Planning](#)
 - [Tool](#) ^{SR}.
 - Diagnostic test scheduling, including(4)(26)(34):
 - MRI(35)
 - MRA or CT arthrography(36)
 - Cultures (eg, septic hip)(30)
 - Diagnostic injection of anesthetic or corticosteroid
 - Electromyography
 - Preoperative discharge planning as appropriate. See [Discharge Planning](#) in this guideline.

Hospitalization

[Return to top of RMHP Hip Arthroscopy and Labrum Reconstruction - ISC](#)

Optimal Recovery Course

[Return to top of RMHP Hip Arthroscopy and Labrum Reconstruction - ISC](#)

Day	Level of Care	Clinical Status	Activity	Routes	Interven
1	<ul style="list-style-type: none"> • OR to recovery room to discharge ^[A] • Social Determinants of Health Assessment • Discharge planning 	<ul style="list-style-type: none"> • Successful uncomplicated arthroscopy • No evidence of neurologic injury post procedure • No evidence of vascular injury post procedure • Pain absent or managed • Discharge plans and education understood 	<ul style="list-style-type: none"> • Ambulatory or acceptable for next level of care ^{[B] [C]} 	<ul style="list-style-type: none"> • IV fluids, medications for procedure • Oral hydration ^[D] • Oral medications or regimen acceptable for next level of care • Oral diet or acceptable for next level of care 	<ul style="list-style-type: none"> •

(1)(9)(32)(39)(40)(41)

Recovery Milestones are indicated in **bold**.

Goal Length of Stay: Ambulatory Extended Stay

[Return to top of RMHP Hip Arthroscopy and Labrum Reconstruction - ISC](#)

[See Extended Stay definition](#)

ISC

Minimal (a few hours to 1 day), Brief (1 to 3 days), Moderate (4 to 7 days), and Prolonged (more than 7 days).

- Inpatient stay may be needed for(1)(42)(43):
 - Failure to achieve discharge status criteria. See [Ambulatory Surgery Discharge and Complications: Common Complications and Conditions](#) ^{ISC}.
 - Patient admitted for joint infection (eg, septic hip)(30)(44)
 - Anticipate debridement, lavage, and drain.
 - Expect brief stay extension.
 - Complications of procedure(45)(46)(47)(48)(49)(50)
 - Complications may include extravasations of fluid, chondrolabral injury, nerve palsy (peroneal, femoral, sciatic, lateral femoral cutaneous, or pudendal nerves), or need for conversion to open procedure.
 - Expect brief stay extension.

See [Common Complications and Conditions](#) ^{ISC} for further information.

Hospital Care Planning

[Return to top of RMHP Hip Arthroscopy and Labrum Reconstruction - ISC](#)

- Hospital evaluation and care needs may include(1)(9)(30)(40)(42)(47):
 - Postoperative bracing
 - Postoperative physical therapy(51)
 - Multimodal analgesia
 - Monitoring patient's status for deterioration and comorbid conditions. See [Inpatient Monitoring and Assessment Tool](#) ^{SR}.

Discharge

[Return to top of RMHP Hip Arthroscopy and Labrum Reconstruction - ISC](#)

Discharge Planning

[Return to top of RMHP Hip Arthroscopy and Labrum Reconstruction - ISC](#)

[Expand All / Collapse All]

- Discharge planning includes ^[E] :
 - Assessment of needs and planning for care, including(54):
 - Develop treatment plan (involving multiple providers as needed).
 - Evaluate and address preadmission functioning as needed.
 - Evaluate and address social determinants of health (eg, housing, food).
 - Evaluate and address patient or caregiver preferences as indicated.
 - Identify skilled services needed at next level of care, with specific attention to(55):
 - Neurovascular status assessment(1)
 - Pain management(56)(57)
 - Wound or dressing management
 - Evaluate and address psychosocial status issues as indicated.

See [Psychosocial Assessment](#) ^{SR} for further information.

- Early identification of anticipated discharge destination; options include(58)(59):

- Home, considerations include:
 - Access to follow-up care
 - Home safety assessment. See [Home Safety Assessment](#) ^{SR} for further information.
 - Self-management ability if appropriate. See [Activities of Daily Living \(ADL\) and Instrumental Activities of Daily Living \(IADL\) Assessment](#) ^{SR} for further information.
 - Caregiver need, ability, and availability
 - Post-acute skilled care or custodial care as indicated. See [Discharge Planning Tool](#) ^{SR} for further information.
- Transition of care plan complete([59](#))
 - Patient, family, and caregiver education complete. See [Hip Arthroscopy: Patient Education for Clinicians](#) ^{SR} for further information.
 - See [Teach Back Tool](#) ^{SR} for further information.
- Medication reconciliation complete
 - Plan communicated to patient, family, caregiver, and all members of care team, including([63](#))([64](#)):
 - Inpatient care and service providers
 - Primary care provider
 - All post-discharge care and service providers
 - Appointments planned or scheduled, which may include([1](#)):
 - Primary care provider
 - Orthopedic surgeon
 - Rehabilitation therapy services([65](#))([66](#))
 - Other
 - Outpatient testing and procedure plans made, which may include:
 - Other
 - Referrals made for assistance or support, which may include:
 - Financial, for follow-up care, medication, and transportation
 - Smoking cessation counseling or treatment([67](#))
 - Other
 - Medical equipment and supplies coordinated (ie, delivered or delivery confirmed), which may include:
 - Ambulation devices (eg, cane, crutches, walker)
 - Wound care supplies([68](#))
 - Other

Discharge Destination

[Return to top of RMHP Hip Arthroscopy and Labrum Reconstruction - ISC](#)

- Post-hospital levels of admission may include:
 - Home.
 - Home healthcare. See [Home Care Indications for Admission Section](#) ^{HC} in Hip Arthroscopy guideline in Home Care.

Evidence Summary

[Return to top of RMHP Hip Arthroscopy and Labrum Reconstruction - ISC](#)

- **Labral Reconstruction for the Treatment of Femoro-Acetabular Impingement Syndrome**

- •The medical literature regarding hip capsular reconstruction shows some benefit in certain patients, but the data is insufficient to evaluate this procedure completely. There are no high quality large studies involving this procedure.
 - ○Boykin and colleagues (2013) stated that FAI has been well characterized as a cause of hip pain and resultant damage to the acetabular labrum. It has become increasingly clear that an intact labrum is essential for normal joint mechanics, hip stability, and preservation of the articular cartilage. Elite athletes with a hypoplastic or irreparable labrum present a difficult clinical challenge. In a case-series study, these researchers assessed clinical outcomes and determined if elite athletes are able to return to a high level of function and sport after labral reconstruction. They performed a retrospective review of a prospectively collected registry identified 21 elite athletes (23 hips) with an average age of 28.0 years (range of 19 to 41 years) who underwent an arthroscopic ilio-tibial band labral reconstruction. Concomitant procedures included femoral and acetabular osteoplasty in all patients and micro-fracture in 9 of 23 hips. Clinical outcomes were assessed with the MHHS, HOS, the SF-12, and patient satisfaction (on a scale from 1 to 10). Return to play was determined, as well as level of return to play, based on sport-specific statistics. Two patients progressed to arthroplasty. There were 2 revisions in this group of patients, both for lysis of capsulo-labral adhesions in which the graft was found to be well integrated at the time of surgery. The rate of return to play was 85.7 percent (18/21), with 81 percent (17/21) returning to a similar level. Subjective follow-up was obtained from 17 of the remaining 19 patients (89 percent), with an average follow-up of 41.4 months (range of 20 to 74 months). The average MHHS improved from 67 to 84 ($p = 0.026$) and the average HOS Sport sub-score from 56 to 77 ($p = 0.009$). The overall median patient satisfaction with outcome was 8.2 (range of 3 to 10). The authors concluded that arthroscopic labral reconstruction using an ipsilateral ilio-tibial band autograft provided good short-term clinical outcomes, high patient satisfaction, and a satisfactory level of return to play in a select group of elite athletes. This was a small ($n = 21$), retrospective study with short-term (average of 41.4 months) results. Level of Evidence = IV.
 - ○In a cohort study, Domb et al (2014) compared the clinical outcomes of arthroscopic labral reconstruction (RECON) with those of arthroscopic segmental labral resection (RESEC) in patients with FAI of the hip. Between April 2010 and March 2011, all prospectively gathered data for patients with FAI who underwent arthroscopic acetabular labral reconstruction or segmental resection with a minimum 2-year follow-up were reviewed. A total of 11 cases in the RECON group were matched to 22 cases in the RESEC group according to the preoperative Non-Arthritic Hip Score (NAHS) and sex. The patient-reported outcome scores (PROs) used included the NAHS, the HOS, and the MHHS. Statistical analyses were performed to compare the change in PROs in both groups. There was no statistically significant difference between groups regarding the pre-operative NAHS ($p = 0.697$), any of the

other pre-operative PROs, or demographic and radiographic data. The mean change in the NAHS was 24.8 ± 16.0 in the RECON group and 12.5 ± 16.0 in the RESEC group. The mean change in the HOS-activities of daily living (HOS-ADL) was 21.7 ± 16.5 in the RECON group and 9.5 ± 15.5 in the RESEC group. Comparison of the amount of change between groups showed greater improvement in the NAHS and HOS-ADL for the RECON group ($p = 0.046$ and 0.045 , respectively). There was no statistically significant difference in the mean changes in the rest of the PROs, although there were trends in all in favor of the RECON group. All PROs in both groups showed a statistically significant improvement at follow-up compared with pre-operative levels. The authors concluded that arthroscopic labral reconstruction is an effective and safe procedure that provided good short-term clinical outcomes in hips with insufficient and non-functional labra in the setting of FAI. Again, this was a small ($n = 11$) study with short-term (minimum of 2 years) results. Level of Evidence = III.

- oIn a systemic review, Ayeni et al (2014) explored and identified the reported indications and outcomes in patients who undergo labral reconstruction of the hip joint. The electronic databases Embase, Medline, and PubMed were searched for all available dates up to July 2013. Further hand search of the reference sections of the included studies was done. Two reviewers searched, screened, and evaluated the included studies for data quality using the Methodological Index for Non-Randomized Studies (MINORS) Scale. Data were also abstracted in duplicate, and agreement and descriptive statistics were presented. There were 5 eligible studies (3 case series, 1 prospective cohort, and 1 retrospective chart review) with a total of 128 patients, and an average 11/16 quality on the MINORS score included in this review. All patients were diagnosed with FAI and underwent labral reconstruction; 94 patients were assessed at follow-up (73.4 percent survivorship) between a reported mean range of 10 and 49 months. There was variability between the studies with regard to the graft types utilized (ilio-tibial band, Gracilis tendon, Ligamentum teres), surgical approaches [open (18.7 percent) versus arthroscopic (81.3 percent)], and the reported outcome measures. Overall, improvement was observed in the PROs and functional scores (MHHS, HOS, UCLA, NASH, and SF-12). The failure rate or conversion to THA rate in all available patients was 20 percent. The most common indication for labrum reconstruction was a young, active patient with minimal arthritis and non-salvageable or deficient labrum. Other indications included instability, pain, and hypotrophic dysfunctional labrum. The authors concluded that based on the current available evidence, hip labrum reconstruction is a new technique that shows short-term improvement in PROs and functional scores post-operatively. The main indication for reconstruction was a deficient labrum due to previous surgical excision or irreparable tears in young patients with no significant arthritis. They stated that long-term follow-up results with higher quality studies are still lacking based on this review.
- oWhite et al (2016) presented minimum 2-year outcomes in patients who underwent a modified technique for

arthroscopic labral reconstruction using ilio-tibial band allograft tissue and a front-to-back fixation. From April 2011 to July 2012, all consecutive arthroscopic labral reconstruction patients were included in this Institutional Review Board-approved, prospective case-series study. Inclusion criteria were arthroscopic ilio-tibial band allograft labral reconstruction performed by a single surgeon, age greater than or equal to 16 years at the time of arthroscopy, and a minimum of 2 years of follow-up. Patients completed subjective questionnaires both pre-operatively and post-operatively, including MHHS, the Lower Extremity Function Score (LEFS), VAS pain scores, and patient satisfaction. A modified front-to-back fixation technique for labral reconstruction was used. A total of 152 hips (142 patients) met the inclusion criteria for this study; 131 hips (86.2 percent) had complete follow-up at a minimum of 2 years, and 21 hips (13.8 percent) were lost to follow-up or had incomplete data during the study period; 70 hips had concomitant procedures performed; 27 microfracture, 30 chondroplasty, 26 psoas release, 5 os acetabuli resection, and 3 Ganz osteotomy. Overall, 18 hips (13.7 percent) required revision procedures at a mean of 17 months (range of 1 to 37) after the labral reconstruction. In the remaining 113 hips, there was significant improvement in all outcome measures from pre-operative to most recent follow-up (p less than 0.0001). The mean MHHS improved by 34 points (p less than 0.0001), and the mean LEFS improved by 27 points (p less than 0.0001). The mean VAS pain score improved by 3 points at rest (p less than 0.0001), 4 points with average pain with daily activities (p less than 0.0001), and 5 points with sport (p less than 0.0001). Patients reported an overall satisfaction of 9 (range of 1 to 10). The authors concluded that arthroscopic ilio-tibial band allograft labral reconstruction of the hip showed promising outcomes at minimum 2-year follow-up. Level of Evidence = IV.

- Khan et al (2016) provided a comprehensive review and summary of the research published in *Arthroscopy: The Journal of Arthroscopic and Related Surgery* and *The American Journal of Sports Medicine (AJSM)* related to hip arthroscopy for FAI. A comprehensive review was conducted in duplicate of *Arthroscopy* and *AJSM* from February 2012 to February 2015 for all articles related to FAI, and a quality assessment was completed for all included studies. Clinical outcomes were dichotomized into short-term (less than 6 months) and mid-term (less than 24 months) outcomes, and values were pooled when possible. These researchers identified 60 studies in *Arthroscopy* and 44 studies in *AJSM*, primarily from North America (78.8 percent), that predominantly assessed clinical outcomes after arthroscopic hip surgery (46.1 percent); 71 percent of *Arthroscopy* studies and 20.5 percent of *AJSM* studies were Level IV evidence. The MHHS was used by 81.5 percent of included studies. Pooled weighted mean MHHS values after arthroscopic surgery for FAI showed improvements at the mid-term from 60.5 points (range of 56.6 to 83.6) to 80.5 points (range of 72.1 to 98.0) out of a possible 100 points. Pooled weighted outcomes for labral repair showed mean MHHS improvements from 63.8 points (range of 62.5 to 69.0) pre-operatively to 86.9 points (range of 85.5 to 89.9) up to 24 months post-operatively. The authors concluded that this comprehensive review of research published in *Arthroscopy* and *AJSM* over the past 3 years identified a number of key findings. Arthroscopic intervention resulted in improvements in functional outcomes at both the short-term and mid-term for patients with symptomatic FAI in the absence of significant existing degenerative changes. They stated that labral repair may result in

improvements over labral debridement. The most commonly used outcome score was the MHHS for objective assessment of surgical success. They stated that there is a need for continued focus on improvement of methodological quality and reporting of research pertaining to FAI.

Hospitalization

[Return to top of RMHP Hip Arthroscopy and Labrum Reconstruction - ISC](#)

A randomized placebo-controlled study of 108 patients (mean age 35 years) undergoing hip arthroscopy found that 3 weeks of postoperative naproxen therapy reduced the rate of heterotopic ossification, a known complication of hip arthroscopy, at a mean follow-up of 322 days and was without significant adverse reactions.(69) (EG 1)

Length of Stay

[Return to top of RMHP Hip Arthroscopy and Labrum Reconstruction - ISC](#)

Analysis of procedure data for a large commercially insured pediatric population shows 98% of hip arthroscopies being performed on an outpatient basis.(32) (EG 3) Analysis of procedure data for a large commercially insured adult population shows 99% of hip arthroscopies being performed on an outpatient basis.(32) (EG 3) Analysis of procedure data for a Medicare-insured population shows 96% of hip arthroscopies being performed on an outpatient basis.(32) (EG 3)

Policy History

[Return to top of RMHP Hip Arthroscopy and Labrum Reconstruction - ISC](#)

History Summary: 1/27/2020 Policy created. 2020 first annual review by relevant committee hierarchy – no changes. 2021 Annual review by committees – no changes. 11/23/2021 upgraded to 25th edition MCG S-572 with carried over RMHP customization for labrum reconstruction. 2022 Annual review – approved by committees with no changes.

2023 Annual review and committee approval with no changes.

References

[Return to top of RMHP Hip Arthroscopy and Labrum Reconstruction - ISC](#)

Boykin RE, Patterson D, Briggs KK, et al. Results of arthroscopic labral reconstruction of the hip in elite athletes. Am J Sports Med. 2013;41(10):2296-2301.

Domb BG, El Bitar YF, Stake CE, et al. Arthroscopic labral reconstruction is superior to segmental resection for irreparable labral tears in the hip: A matched-pair controlled study with minimum 2-year follow-up. Am J Sports Med. 2014;42(1):122-130.

Ayeni OR, Alradwan H, de Sa D, Philippon MJ. The hip labrum reconstruction: indications and outcomes -- a systematic review. Knee Surg Sports Traumatol Arthrosc. 2014;22(4):737-743.

White BJ, Stapleford AB, Hawkes TK, et al. Allograft use in arthroscopic labral reconstruction of the hip with front-to-back Fixation technique: Minimum 2-year follow-up. Arthroscopy. 2016;32(1):26-32.

Khan M, Habib A, de Sa D, et al. Arthroscopy up to date: Hip femoroacetabular impingement. Arthroscopy. 2016;32(1):177-189.

Mei-Dan O, Garabekyan T, McConkey M, Pascual-Garrido C. Arthroscopic anterior capsular reconstruction of the hip for recurrent instability. Arthrosc Tech. 2015;4(6):e711-e715.

References

[Return to top of RMHP Hip Arthroscopy and Labrum Reconstruction - ISC](#)

1. Phillips BB, Mihalko MJ. Arthroscopy of the lower extremity. In: Azar FM, Beaty JH, Canale ST, editors. *Campbell's Operative Orthopaedics*. 13th ed. Philadelphia, PA: Elsevier; 2017:2486-2566. [Context Link [1](#), [2](#), [3](#), [4](#), [5](#), [6](#), [7](#), [8](#)]
2. Bloomfield MR, et al. Hip pain in the young, active patient: surgical strategies. *Instructional Course Lectures* 2014;63:159-176. [Context Link [1](#), [2](#)]
3. Cvetanovich GL, Harris JD, Erickson BJ, Bach BR, Bush-Joseph CA, Nho SJ. Revision hip arthroscopy: a systematic review of diagnoses, operative findings, and outcomes. *Arthroscopy* 2015;31(7):1382-1390. DOI: 10.1016/j.arthro.2014.12.027. [Context Link [1](#)]
4. Gomez-Hoyos J, Martin RL, Martin HD. Current concepts review: evaluation and management of posterior hip pain. *Journal of the American Academy of Orthopedic Surgeons* 2018;26(17):597-609. DOI: 10.5435/JAAOS-D-15-00629. [Context Link [1](#), [2](#), [3](#)]
5. Begly JP, Robins B, Youm T. Arthroscopic treatment of traumatic hip dislocation. *Journal of the American Academy of Orthopedic Surgeons* 2016;24(5):309-317. DOI: 10.5435/JAAOS-D-15-00088. [Context Link [1](#), [2](#)]
6. Trivedi NN, et al. Indications and outcomes of arthroscopic labral reconstruction of the hip: a systematic review. *Arthroscopy* 2019;35(7):2175-2186. DOI: 10.1016/j.arthro.2019.02.031. [Context Link [1](#)]
7. Griffin DR, et al. Hip arthroscopy versus best conservative care for the treatment of femoroacetabular impingement syndrome (UK FASHIoN): a multicentre randomised controlled trial. *Lancet* 2018;391(10136):2225-2235. DOI: 10.1016/S0140-6736(18)31202-9. [Context Link [1](#), [2](#)]
8. Litrenta J, et al. Hip arthroscopy successfully treats femoroacetabular impingement in adolescent athletes. *Journal of Pediatric Orthopedics* 2020;40(3):e156-e160. DOI: 10.1097/BPO.0000000000001411. [Context Link [1](#)]
9. Lynch TS, et al. Best practice guidelines for hip arthroscopy in femoroacetabular impingement: results of a Delphi Process. *Journal of the American Academy of Orthopedic Surgeons* 2020;28(2):81-89. DOI: 10.5435/JAAOS-D-18-00041. [Context Link [1](#), [2](#), [3](#), [4](#)]
10. Palmer AJR, et al. Arthroscopic hip surgery compared with physiotherapy and activity modification for the treatment of symptomatic femoroacetabular impingement: multicentre randomised controlled trial. *British Medical Journal* 2019;364:l185. DOI: 10.1136/bmj.l185. [Context Link [1](#)]
11. El Bitar YF, Lindner D, Jackson TJ, Domb BG. Joint-preserving surgical options for management of chondral injuries of the hip. *Journal of the American Academy of Orthopedic Surgeons* 2014;22(1):46-56. DOI: 10.5435/JAAOS-22-01-46. [Context Link [1](#), [2](#)]
12. MacDonald AE, et al. Indications and outcomes for microfracture as an adjunct to hip arthroscopy for treatment of chondral defects in patients with femoroacetabular impingement: a systematic review. *Arthroscopy* 2016;32(1):190-200.e2. DOI: 10.1016/j.arthro.2015.06.041. [Context Link [1](#)]
13. Rodriguez-Merchan EC. Aspects of current management: orthopaedic surgery in haemophilia. *Haemophilia* 2012;18(1):8-16. DOI: 10.1111/j.1365-2516.2011.02544.x. [Context Link [1](#), [2](#)]
14. de Sa D, et al. Arthroscopic surgery for synovial chondromatosis of the hip: a systematic review of rates and predisposing factors for recurrence. *Arthroscopy* 2014;30(11):1499-1504.e2. DOI: 10.1016/j.arthro.2014.05.033. [Context Link [1](#)]
15. Noailles T, et al. Giant cell tumor of tendon sheath: Open surgery or arthroscopic synovectomy? A systematic review of the literature. *Orthopaedics & Traumatology, Surgery & Research: OTSR* 2017;103(5):809-814. DOI: 10.1016/j.otsr.2017.03.016. [Context Link [1](#)]
16. de SA D, Phillips M, Philippon MJ, Letkemann S, Simunovic N, Ayeni OR. Ligamentum teres injuries of the hip: a systematic review examining surgical indications, treatment options, and outcomes. *Arthroscopy* 2014;30(12):1634-1641. DOI: 10.1016/j.arthro.2014.06.007. [Context Link [1](#)]

17. Ebert JR, Bucher TA, Ball SV, Janes GC. A review of surgical repair methods and patient outcomes for gluteal tendon tears. *Hip International : The Journal of Clinical and Experimental Research on Hip Pathology and Therapy* 2015;25(1):15-23. DOI: 10.5301/hipint.5000183. [Context Link [1](#)]
18. Safran MR. Microinstability of the hip-gaining acceptance. *Journal of the American Academy of Orthopedic Surgeons* 2019;27(1):12-22. DOI: 10.5435/JAAOS-D-17-00664. [Context Link [1](#)]
19. Aprato A, Jayasekera N, Bajwa A, Villar RN. Peri-articular diseases of the hip: emerging frontiers in arthroscopic and endoscopic treatments. *Journal of Orthopaedics and Traumatology* 2014;15(1):1-11. DOI: 10.1007/s10195-013-0253-z. [Context Link [1](#), [2](#)]
20. Anderson CN. Iliopsoas: pathology, diagnosis, and treatment. *Clinics in Sports Medicine* 2016;35(3):419-433. DOI: 10.1016/j.csm.2016.02.009. [Context Link [1](#)]
21. Hunter JG, Gross JM, Dahl JD, Amsdell SL, Gorczyca JT. Risk factors for failure of a single surgical debridement in adults with acute septic arthritis. *Journal of Bone and Joint Surgery. American Volume* 2015;97(7):558-564. DOI: 10.2106/JBJS.N.00593. [Context Link [1](#), [2](#)]
22. Thompson RM, Gourineni P. Arthroscopic treatment of septic arthritis in very young children. *Journal of Pediatric Orthopedics* 2017;37(1):e53-e57. DOI: 10.1097/BPO.0000000000000659. [Context Link [1](#)]
23. Harada K, McConnell I, DeRycke EC, Holleck JL, Gupta S. Native joint septic arthritis: comparison of outcomes with medical and surgical management. *Southern Medical Journal* 2019;112(4):238-243. DOI: 10.14423/SMJ.0000000000000958. [Context Link [1](#), [2](#)]
24. Yen YM, Lewis CL, Kim YJ. Understanding and treating the snapping hip. *Sports Medicine and Arthroscopy Review* 2015;23(4):194-199. DOI: 10.1097/JSA.0000000000000095. [Context Link [1](#)]
25. Provencher MT, Navaie M, Solomon DJ, Smith JC, Romeo AA, Cole BJ. Joint chondrolysis. *Journal of Bone and Joint Surgery. American Volume* 2011;93(21):2033-2044. DOI: 10.2106/JBJS.J.01931. [Context Link [1](#)]
26. Frank RM, Walker G, Hellman MD, McComick FM, Nho SJ. Evaluation of hip pain in young adults. *Physician and Sportsmedicine* 2014;42(2):38-47. DOI: 10.3810/psm.2014.05.2056. [Context Link [1](#), [2](#)]
27. Gil JA, Wawrzynski J, Waryasz GR. Orthopedic manifestations of ochronosis: pathophysiology, presentation, diagnosis, and management. *American Journal of Medicine* 2016;129(5):536 e1-e6. DOI: 10.1016/j.amjmed.2016.01.010. [Context Link [1](#)]
28. Makhni EC, et al. A critical review: management and surgical options for articular defects in the hip. *Clinics in Sports Medicine* 2017;36(3):573-586. DOI: 10.1016/j.csm.2017.02.010. [Context Link [1](#)]
29. Kolasinski SL, et al. 2019 American College of Rheumatology/Arthritis Foundation guideline for the management of osteoarthritis of the hand, hip, and knee. *Arthritis Care & Research* 2020;72(2):149-162. DOI: 10.1002/acr.24131. (Reaffirmed 2020 May) [Context Link [1](#)]
30. Aim F, Delambre J, Bauer T, Hardy P. Efficacy of arthroscopic treatment for resolving infection in septic arthritis of native joints. *Orthopaedics & Traumatology, Surgery & Research : OTSR* 2015;101(1):61-64. DOI: 10.1016/j.otrsr.2014.11.010. [Context Link [1](#), [2](#), [3](#), [4](#)]
31. Knut L. Radiosynovectomy in the therapeutic management of arthritis. *World Journal of Nuclear Medicine* 2015 Jan-Apr;14(1):10-15. DOI: 10.4103/1450-1147.150509. [Context Link [1](#)]
32. Proprietary health insurance data sources (2018-2019); and Medicare 5% Standard Analytical File (2017-2018). [Context Link [1](#), [2](#), [3](#), [4](#), [5](#)]
33. Yu HC, Al-Shehri M, Johnston KD, Endersby R, Baghirzada L. Anesthesia for hip arthroscopy: a narrative review. *Canadian Journal of Anaesthesia* 2016;63(11):1277-1290. DOI: 10.1007/s12630-016-0718-7. [Context Link [1](#)]

34. Carstensen SE, McCrum EC, Pierce JL, Gwathmey FW. Magnetic resonance imaging (MRI) and hip arthroscopy correlations. *Sports Medicine and Arthroscopy Review* 2017;25(4):199-209. DOI: 10.1097/JSA.000000000000166. [Context Link [1](#)]
35. Samim M, Youm T, Burke C, Meislin R, Vigdorichik J, Gyftopoulos S. Hip arthroscopy-MRI correlation and differences for hip anatomy and pathology: What radiologists need to know. *Clinical Imaging* 2018;52:315-327. DOI: 10.1016/j.clinimag.2018.09.005. [Context Link [1](#)]
36. Crim J. Imaging evaluation of the hip after arthroscopic surgery for femoroacetabular impingement. *Skeletal Radiology* 2017;46(10):1315-1326. DOI: 10.1007/s00256-017-2665-y. [Context Link [1](#)]
37. See Citation Popup for Content [Context Link [1](#)]
38. Steelman VM, Chae S, Duff J, Anderson MJ, Zaidi A. Warming of irrigation fluids for prevention of perioperative hypothermia during arthroscopy: a systematic review and meta-analysis. *Arthroscopy* 2018;34(3):930-942.e2. DOI: 10.1016/j.arthro.2017.09.024. [Context Link [1](#)]
39. Gupta A, et al. Best practices during hip arthroscopy: aggregate recommendations of high-volume surgeons. *Arthroscopy* 2015;31(9):1722-1727. DOI: 10.1016/j.arthro.2015.03.023. [Context Link [1](#), [2](#)]
40. Steinhaus ME, Rosneck J, Ahmad CS, Lynch TS. Outcomes after peripheral nerve block in hip arthroscopy. *American Journal of Orthopedics (Belle Mead, N.J.)* 2018;47(6):Online. DOI: 10.12788/ajo.2018.0049. [Context Link [1](#)]
41. Allen MM, Rosenfeld SB. Treatment for post-slipped capital femoral epiphysis deformity. *Orthopedic Clinics of North America* 2020;51(1):37-53. DOI: 10.1016/j.ocl.2019.08.008. [Context Link [1](#), [2](#)]
42. Premier hospital database, 01/01/2017-12/31/2019. Premier, Inc. [Context Link [1](#)]
43. Sharff KA, Richards EP, Townes JM. Clinical management of septic arthritis. *Current Rheumatology Reports* 2013;15(6):332. DOI: 10.1007/s11926-013-0332-4. [Context Link [1](#)]
44. Gupta A, Redmond JM, Hammarstedt JE, Schwindel L, Domb BG. Safety measures in hip arthroscopy and their efficacy in minimizing complications: a systematic review of the evidence. *Arthroscopy* 2014;30(10):1342-1348. DOI: 10.1016/j.arthro.2014.04.103. [Context Link [1](#)]
45. Harris JD, et al. Complications and reoperations during and after hip arthroscopy: a systematic review of 92 studies and more than 6,000 patients. *Arthroscopy* 2013;29(3):589-595. DOI: 10.1016/j.arthro.2012.11.003. [Context Link [1](#)]
46. Bedi A, Ross JR, Kelly BT, Larson CM. Avoiding complications and treating failures of arthroscopic femoroacetabular impingement correction. *Instructional Course Lectures* 2015;64:297-306. [Context Link [1](#), [2](#)]
47. Burrus MT, Cowan JB, Bedi A. Avoiding failure in hip arthroscopy: complications, pearls, and pitfalls. *Clinics in Sports Medicine* 2016;35(3):487-501. DOI: 10.1016/j.csm.2016.02.011. [Context Link [1](#)]
48. Weber AE, Harris JD, Nho SJ. Complications in hip arthroscopy: a systematic review and strategies for prevention. *Sports Medicine and Arthroscopy Review* 2015;23(4):187-193. DOI: 10.1097/JSA.000000000000084. [Context Link [1](#)]
49. Brand JC, Rossi MJ, Lubowitz JH. Hip arthroscopy complications are rare, but there is room for improvement. *Arthroscopy* 2019;35(5):1297-1299. DOI: 10.1016/j.arthro.2019.03.009. [Context Link [1](#)]
50. Casp A, Gwathmey FW. Hip arthroscopy: common problems and solutions. *Clinics in Sports Medicine* 2018;37(2):245-263. DOI: 10.1016/j.csm.2017.12.005. [Context Link [1](#)]
51. Mayer RS, Noles A, Vinh D. Determination of postacute hospitalization level of care. *Medical Clinics of North America* 2020;104(2):345-357. DOI: 10.1016/j.mcna.2019.10.011. [Context Link [1](#)]
52. Musculoskeletal care modalities. In: Hinkle JL, Cheever KH, editors. *Brunner & Suddarth's Textbook of Medical-Surgical Nursing*. 14th ed. Philadelphia, PA: Wolters Kluwer; 2018:1131-1159. [Context Link [1](#)]

53. Gohal C, et al. Health-related quality of life after hip arthroscopy for femoroacetabular impingement: a systematic review and meta-analysis. *Sports Health* 2019;11(3):209-217. DOI: 10.1177/1941738119838799. [Context Link [1](#)]
54. Memon M, et al. Athletes experience a high rate of return to sport following hip arthroscopy. *Knee Surgery, Sports Traumatology, Arthroscopy* 2019;27(10):3066-3104. DOI: 10.1007/s00167-018-4929-z. [Context Link [1](#)]
55. Roles, functions, and preparation of case management team members. In: Powell SK, Tahan H, editors. *Case Management a Practical Guide for Education and Practice*. 4th ed. Philadelphia, PA: Wolters Kluwer, Lippincott, Williams & Wilkins; 2019:35-60. [Context Link [1](#)]
56. Saleeby J. Communication and collaboration. In: Perry AG, Potter PA, Ostendorf WR, editors. *Nursing Interventions and Clinical Skills*. 7th ed. Elsevier; 2020:9-21. [Context Link [1](#), [2](#)]
57. National Patient Safety Goals. 2020 National Patient Safety Goals [Internet] Joint Commission on Accreditation of Healthcare Organizations. Accessed at: https://www.jointcommission.org/standards_information/npsgs.aspx. Updated 2019 [accessed 2020 Sep 17] [Context Link [1](#)]
58. Adverse drug reactions and medication errors. In: Burchum JR, Rosenthal LD, editors. *Lehne's Pharmacology for Nursing Care*. 10th ed. St. Louis, MO: Elsevier; 2019:63-73. [Context Link [1](#)]
59. Ostendorf WR. Preparation for safe medication administration. In: Perry AG, Potter PA, Ostendorf WR, editors. *Nursing Interventions and Clinical Skills*. 7th ed. Elsevier; 2020:551-567. [Context Link [1](#)]
60. Transitional planning: understanding levels and transitions of care. In: Powell SK, Tahan H, editors. *Case Management a Practical Guide for Education and Practice*. 4th ed. Philadelphia, PA: Wolters Kluwer, Lippincott, Williams & Wilkins; 2019:156-211. [Context Link [1](#)]
61. Case management standards and professional organizations. In: Powell SK, Tahan H, editors. *Case Management a Practical Guide for Education and Practice*. 4th ed. Philadelphia, PA: Wolters Kluwer, Lippincott, Williams & Wilkins; 2019:314-354. [Context Link [1](#)]
62. Nho SJ, Krishnamoorthy VP, Lansdown D, Ukwuani G. Femoroacetabular impingement in athletes. In: Miller MD, Thompson SR, editors. *DeLee, Drez, and Miller's Orthopaedic Sports Medicine*. 5th ed. Philadelphia, PA: Elsevier; 2020:957-970.e3. [Context Link [1](#)]
63. O'Connor M, Minkara AA, Westermann RW, Rosneck J, Lynch TS. Return to play after hip arthroscopy: a systematic review and meta-analysis. *American Journal of Sports Medicine* 2018;46(11):2780-2788. DOI: 10.1177/0363546518759731. [Context Link [1](#)]
64. Ratliff CR. Inflammation and healing. In: Harding MM, Kwong J, Roberts D, Hagler D, Reinisch C, editors. *Lewis's Medical-Surgical Nursing: Assessment and Management of Clinical Problems*. 11th ed. St. Louis, MO: Mosby; 2019:156-174. [Context Link [1](#)]
65. Wound Care Products. NICE Key Therapeutic Topic KTT14 [Internet] National Institute for Health and Care Excellence. 2019 Sep Accessed at: <https://www.nice.org.uk/guidance>. [accessed 2020 Sep 21] [Context Link [1](#)]
66. Beckmann JT, Wylie JD, Potter MQ, Maak TG, Greene TH, Aoki SK. Effect of naproxen prophylaxis on heterotopic ossification following hip arthroscopy: a double-blind randomized placebo-controlled trial. *Journal of Bone and Joint Surgery. American Volume* 2015;97(24):2032-2037. DOI: 10.2106/JBJS.N.01156. [Context Link [1](#)]

Footnotes

[Return to top of RMHP Hip Arthroscopy and Labrum Reconstruction - ISC](#)

[A] See [Ambulatory Surgery Discharge and Complications: Common Complications and Conditions](#) ^{ISC} for further information. [A in Context Link [1](#)]

[B] Patient may require partial-weight-bearing with crutches postoperatively.([37](#)) [B in Context Link [1](#)]

[C] Patient is ambulatory or near baseline activity for age and development. [C in Context Link [1](#)]

[D] Some patients may have their hydration needs met via alternative means (eg, percutaneous endoscopic gastrostomy tube). [D in Context Link [1](#)]

[E] Warming of irrigation fluids can reduce the risk of hypothermia and postoperative shivering.([38](#)) [E in Context Link [1](#)]

[F] Discharge instructions should be given in the patient's and caregiver's native language using trained language interpreters whenever possible.([52](#)) [F in Context Link [1](#)]

Codes

[Return to top of RMHP Hip Arthroscopy and Labrum Reconstruction - ISC](#)

CPT® : 29860, 29861, 29862, 29863, 29914, 29915, 29916

ICD-10 Procedure: 0M5L4ZZ, 0M5M4ZZ, 0M9L4ZX, 0M9M4ZX, 0MBL4ZX, 0MBL4ZZ, 0MBM4ZX, 0MBM4ZZ, 0MRL07Z, 0MRL0JZ, 0MRL0KZ, 0MRL47Z, 0MRL4JZ, 0MRL4KZ, 0MRM07Z, 0MRM0JZ, 0MRM0KZ, 0MRM47Z, 0MRM4JZ, 0MRM4KZ, 0MTL4ZZ, 0MTM4ZZ, 0S594ZZ, 0S5B4ZZ, 0S994ZX, 0S9B4ZX, 0SB94ZX, 0SB94ZZ, 0SBB4ZX, 0SBB4ZZ, 0SC94ZZ, 0SCB4ZZ, 0SJ94ZZ, 0SJB4ZZ, 0SN94ZZ, 0SNB4ZZ, 0SQ94ZZ, 0SQB4ZZ

ICD-10 Diagnosis: A01.04, A18.02, A39.83, A54.42, M00.051, M00.052, M00.059, M00.151, M00.152, M00.159, M00.251, M00.252, M00.259, M00.851, M00.852, M00.859, M12.551, M12.552, M12.559, M16.0, M16.10, M16.11, M16.12, M16.2, M16.30, M16.31, M16.32, M16.4, M16.50, M16.51, M16.52, M16.6, M16.7, M16.9, M24.051, M24.052, M24.059, M24.151, M24.152, M24.159, M24.851, M24.852, M24.859, M25.051, M25.052, M25.059, M25.151, M25.152, M25.159, M25.251, M25.252, M25.259, M25.351, M25.352, M25.359, M25.451, M25.452, M25.459, M25.551, M25.552, M25.559, M25.651, M25.652, M25.659, M25.851, M25.852, M25.859, M87.051, M87.052, M87.059, M87.151, M87.152, M87.159, M87.251, M87.252, M87.256, M87.350, M87.351, M87.352, M87.353, M87.851, M87.852, M87.859, M90.551, M90.552, M90.559, S73.101A, S73.102A, S73.109A, S73.111A, S73.112A, S73.119A, S73.121A, S73.122A, S73.129A, S73.191A, S73.192A, S73.199A, S76.011A, S76.012A, S76.019A

CPT copyright 2022 American Medical Association. All rights reserved.

MCG Health

Inpatient and Surgical Care 27th Edition