Arthroplasty Today 8 (2021) 110-113

Contents lists available at ScienceDirect

Arthroplasty Today

journal homepage: http://www.arthroplastytoday.org/

White Paper

Making Sense of Hip Preservation Procedural Coding—Getting Paid for Your Work!

Stephen T. Duncan, MD, Brian T. Muffly, MD^{*}, Anthony J. Zacharias, MD, Cale A. Jacobs, PhD, Austin V. Stone, MD, PhD

Department of Orthopaedic Surgery & Sports Medicine, University of Kentucky, UK HealthCare, Lexington, KY, USA

ARTICLE INFO

Article history: Received 18 October 2020 Received in revised form 12 January 2021 Accepted 26 January 2021 Available online 8 March 2021

Keywords: Procedural coding Hip preservation CPT Hip arthroscopy Greater trochanteric pain syndrome

Introduction

As arthroplasty surgeons, primary total hip and knee replacements are the most common procedures that we perform. However, hip preservation and peri-trochanteric procedures are becoming more common among those surgeons taking part II of the American Board of Orthopaedic Surgery (ABOS) [1]. However, this represents a small portion of the procedural volume for those sitting for the adult reconstruction portion of the boards. In part, understanding the reimbursement for these procedures remains a challenge for many surgeons who are considering expanding this portion of their practice. The real question that remains in the minds of many adult reconstruction surgeons is whether the time (clinic and surgery), equipment investments, and added work for insurance approval make it worth the effort from a financial standpoint or is it best left in the hands of our sports medicine specialists?

Recommendations

The short answer is "maybe." Understanding the procedural codes and the payor mix can help determine if this is a financially

E-mail address: btmuffly@gmail.com

ABSTRACT

Hip preservation and peri-trochanteric procedures are becoming more commonplace for the arthroplasty surgeon. Understanding the reimbursement for these procedures remains a challenge for those looking to expand this portion of their practice. In order to financially maximize the surgeon's efforts, we present recommendations for hip preservation procedural coding.

© 2021 The Authors. Published by Elsevier Inc. on behalf of The American Association of Hip and Knee Surgeons. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/ licenses/by-nc-nd/4.0/).

> sound decision for your practice. The first part to consider is how your reimbursement scheme is currently run. For some, the reimbursement is based on a relative value unit (RVU) model (Table 1), while others will be based on collections. Working with your hospital administrators and insurance contracting agent will help you to negotiate your contracts to ensure that you are reimbursed for your time and effort. In addition, understanding your payor mix can help improve the bottom line. With Medicare reimbursements being less than the private payor, the patient population for these procedures is often of the private payor mix. Thus, there can be improved reimbursement for these procedures given the better payor mix alone.

ARTHROPLASTY TODAY

() AAHKS

Besides understanding the payor mix, the surgeon needs to understand the challenges with getting the surgery approved. Failure to obtain prior authorization for the procedural codes can result in the insurance company failing to pay for those services. As a result, proper documentation is required to get approval for the surgery, and more importantly, obtaining approval for all the procedural codes is paramount. With some of the procedural codes being an unlisted open or arthroscopic code for the hip and pelvis, work between the coder and the surgeon is needed such that similar procedural codes can be attached to these unlisted codes as a basis for submission to the insurance company. Through these efforts, preapproval can be obtained and ensure reimbursement to both the hospital and the surgeon for their efforts.

https://doi.org/10.1016/j.artd.2021.01.015



^{*} Corresponding author. 740 S. Limestone, K403, Lexington, KY 40536, USA. Tel.: 859-218-3044.

^{2352-3441/© 2021} The Authors. Published by Elsevier Inc. on behalf of The American Association of Hip and Knee Surgeons. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Table	1
-------	---

Applicable CPT codes and relative value units (RVUs) for a given hip preservation procedure.

Procedure	Applicable CPT codes	RVU
Open trochanteric bursectomy	27062	5.75
Open trochanteric bursectomy with IT band lengthening	27062, 27025	18.64
Open repair of gluteus medius or minimus	27299 (referencing 23412)	11.93
Open mobilization and repair for retracted gluteus medius or minimus	27299 (referencing 23420)	13.54
Open gluteus maximus transfer	27299 (referencing 23420)	13.54
Arthroscopic IT band lengthening	29999, 27025	12.89
Arthroscopic repair of gluteus medius or minimus	29999 (referencing 29827)	15.59
Arthroscopic repair of gluteus medius or minimus (with biologic implant)	29999 (referencing 29827, 15777)	19.24
Femoral osteochondroplasty with labral debridement	29914, 29915	29.67
Femoral osteochondroplasty with labral repair	29914, 29916	29.67
Periacetabular osteotomy (PAO)	27299 (4 osteotomies; referencing 27146)	75.68
Total knee arthroplasty	27447	20.72
Total hip arthroplasty	27130	20.72

CPT, Current Procedural Terminology.

Total knee and hip arthroplasty are included for reference purposes.

To outline this process of the common codes used in hip preservation for an arthroplasty surgeon, we will go through these codes from our own experience in an attempt to help with the coding conundrum and provide a groundwork for proper coding and reimbursement (Tables 2, Fig. 1). The routine hip arthroscopy with labral repair (Current Procedural Terminology [CPT] 29916) or debridement (CPT 29915) and femoral osteochondroplasty (CPT 29914) equates into an RVU equivalent of 29.67.

In addition to management of the labrum, hip preservation procedures continue to increase, and there are expanded indications to address the offending pathologies. Besides the labral procedures, lately the peri-trochanteric space has become an unappreciated area of interest. With Greater Trochanteric Pain Syndrome causing pain and symptoms and the culprit being either the iliotibial (IT) band or the abductor musculature, surgical solutions exist for those patients that fail nonoperative management [2,3]. Again, challenges remain in obtaining insurance approval and reimbursement for these alternative procedures. For the isolated open or arthroscopic trochanteric bursectomy with IT band lengthening, these are often unlisted procedures. For open trochanteric bursectomy, there is a CPT code, 27062. For the IT band lengthening, surgeons should use CPT 27025. The IT band lengthening is a modified Ober-Yount fasciotomy, which involves making both a longitudinal and transverse incisions in the IT band at the level of the greater trochanter. As the modified Ober-Yount procedure only involves a transverse incision, a 22 modifier is appended to account for the additional longitudinal portion. Working with your coder to ensure that the 22 modifier gets approval before and after the procedure is important. The surgeon must document the additional work required in the operative note and provide an addendum for this work to get reimbursed. If a repair of the gluteus medius or minimus is performed in conjunction with these procedures, then CPT 27299 is used. This is an unlisted code for the pelvis and hip. Similar codes in the shoulder for rotator cuff repair are then used for reference where CPT 23412 can be used for partial to full-thickness tears. If allograft is required or significant mobilization due to tendon retraction is required for the repair, CPT 23420 (open rotator cuff repair) can be used. If the abductor muscles have significant fatty atrophy, transfer of the anterior portion of the gluteus maximus to the greater trochanter can be performed [4]. Coding of this is again the unlisted CPT code 27299 with using the similar CPT 23420 from the shoulder for comparison billing. For arthroscopic treatment of the peritrochanteric space (eg, recalcitrant trochanteric bursitis, external snapping iliotibial band, and gluteus medius and minimus tears), the unlisted arthroscopic CPT 29999 needs to be used, crossreferencing the aforementioned open codes for the trochanteric bursectomy and IT band lengthening. The CPT code 29827 involving arthroscopic rotator cuff repair can be used as a reference code for the gluteus medius or minimus repair. If a biologic implant is used to help reinforce the repair, then code 15777 is added as well. Again, with the unlisted codes, preapproval is paramount to ensure proper reimbursement. Without preapproval, we do not proceed with the surgery to avoid leaving the patient with a large bill and failure for the hospital system and the surgeon to get reimbursement for the procedure. Currently, these procedural codes do not get reduced by 50% for the second code listed, and they are not bundled together as many of the shoulder procedural codes are accustomed to in 2020.

Often, arthroplasty surgeons will treat patients with acetabular dysplasia. While some patients with very mild dysplasia without

Table 2	2
---------	---

Cumulative CPT codes related to hip preservation procedure	Cumulative CPT	f codes related	to hip	preservation	procedure
--	----------------	-----------------	--------	--------------	-----------

СРТ	Description
15777	Implantation of biologic implant (eg, acellular dermal matrix) for soft tissue reinforcement (ie, breast, trunk)
	(list separately in addition to code for primary procedure)
23412	Repair of ruptured musculotendinous cuff (eg, rotator cuff) open; chronic
23420	Reconstruction of complete shoulder (rotator) cuff avulsion, chronic (includes acromioplasty)
27025	Fasciotomy, hip or thigh, any type
27062	Excision; trochanteric bursa or calcification
27146	Osteotomy, iliac, acetabular or innominate bone;
27299	Unlisted procedure, pelvis or hip joint
29827	Arthroscopy, shoulder, surgical; with rotator cuff repair
29914	Arthroscopy, hip, surgical; with femoroplasty (ie, treatment of cam lesion)
29915	Arthroscopy, hip, surgical; with acetabuloplasty (ie, treatment of pincer lesion)
29916	Arthroscopy, hip, surgical; with labral repair
29999	Unlisted procedure, arthroscopy

CPT, Current Procedural Terminology.

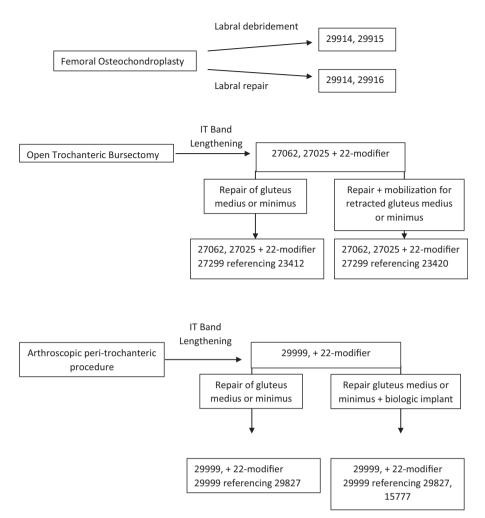


Figure 1. Hip preservation procedural coding flowsheet.

instability could be treated for labral pathology, adjuvant procedures such as periacetabular osteotomy (PAO) are required [5,6]. With refinements in the surgical technique and improvements in patient selection, the mid- to long-term results demonstrate excellent survivorship free of conversion to total hip arthroplasty [7-9]. Despite the excellent results, there is a lag behind CPT coding for this procedure. As such, the unlisted CPT code 27299 for pelvis and hip needs to be used. PAO consists of a superior pubic ramus osteotomy, an ischial osteotomy, an iliac osteotomy, and then a posterior column osteotomy [10]. CPT 27146 (osteotomy, iliac, acetabular, or innominate bone) is used as a reference code. Proper documentation requires that each of the aforementioned osteotomies be listed separately and CPT 27299 is reported, but the RVU units associated with 27146 are then multiplied by 4 given the number of osteotomies to be associated with the CPT 27299. There is a Healthcare Common Procedure Coding System "S" code for PAO (S2115); however, Medicare does not recognize these level codes because they are not published in the CPT manual.

Future direction/Long-term focus

As indications for hip preservation procedures involving both the central and peri-trochanteric space continue to grow, the current reimbursement system creates a challenge for the surgeon and health-care system attempting to get appropriate level of payment for these services. Financially discouraging physicians from attempting to perform these procedures creates an access of care problem for patients. This warrants further review and potential need for adding additional CPT codes to make it easier for surgeons and billing services to allow for accurate billing and reimbursement so that we can solve this problem. To that end, with appropriate CPT codes, large databases such as PearlDriver or National Surgical Quality Improvement Program can track patient outcomes and help drive further decision-making in patient care. Further studies can then be performed to observe trends in patient care and surgical decision-making to help with outcomes-based related research.

Conflict of interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this article.

References

- Colvin AC, Harrast J, Harner C. Trends in hip arthroscopy. J Bone Joint Surg Am 2012;94(4):e23.
- [2] Lall AC, Schwarzman GR, Battaglia MR, et al. Greater trochanteric pain syndrome: an intraoperative endoscopic classification system with pearls to surgical techniques and rehabilitation protocols. Arthrosc Tech 2019;8(8): e889.
- [3] Chandrasekaran S, Lodhia P, Gui C, et al. Outcomes of open versus endoscopic repair of abductor muscle tears of the hip: a systematic review. Arthroscopy 2015;31(10):2057.

- [4] Whiteside LA. Surgical technique: gluteus maximus and tensor fascia lata transfer for primary deficiency of the abductors of the hip. Clin Orthop Relat Res 2014;472(2):645.
- [5] Kirsch JM, Khan M, Bedi A. Does hip arthroscopy have a role in the treatment of developmental hip dysplasia? J Arthroplasty 2017;32(95):528. [6] Haynes JA, et al. Trends of hip arthroscopy in the setting of acetabular
- dysplasia. J Hip Preserv Surg 2018;5(3):267. [7] Larsen JB, Mechlenburg I, Jakobsen SS, et al. 14-year hip survivorship after
- periacetabular osteotomy: a follow-up study on 1,385 hips. Acta Orthop 2020:1.
- [8] Wells J, Millis M, Kim YJ, et al. Survivorship of the Bernese periacetabular osteotomy: what Factors are associated with long-term failure? Clin Orthop Relat Res 2017;475(2):396.
- [9] Wells J, Schoenecker P, Duncan S, et al. Intermediate-term hip survivorship [9] Weis J, Schoenecker P, Duitan S, et al. Interineutate-term in Survivorship and patient-reported outcomes of periacetabular osteotomy: the Washington University experience. J Bone Joint Surg Am 2018;100(3):218.
 [10] Clohisy JC, Barrett SE, Gordon JE, et al. Periacetabular osteotomy in the treatment of severe acetabular dysplasia. Surgical technique. J Bone Joint Surg
- Am 2006;88(Suppl 1 Pt 1):65.