APPENDIX to Sacroiliac Joint Injections Policy

Prior Authorization Requirements

Clinical Evidence is required to determine **medical necessity**.

Within five days before the actual date of service, the Provider MUST confirm with Blue Shield of California / Blue Shield of California Life & Health Insurance Company (Blue Shield) that the member's health plan coverage is still in effect. Blue Shield reserves the right to revoke an authorization prior to services being rendered based on cancellation of the member's eligibility. Final determination of benefits will be made after review of the claim for limitations or exclusions.

Questions regarding the applicability of this policy should also be directed to the Prior Authorization Department. Please call 1-800-541-6652 or visit the Provider Portal www.blueshieldca.com/provider.

Evidence Basis for the Policy

Rationale

Similar to other structures in the spine, it is assumed that the sacroiliac joint may be a source of low back pain. In fact, prior to 1928, the sacroiliac joint was thought to be the most common cause of sciatica. In 1928, the role of the intervertebral disc was elucidated, and from that point forward, the sacroiliac joint received less research attention. Research into sacroiliac joint pain has been thwarted by any criterion standard to measure its prevalence and against which various clinical examinations can be validated. For example, sacroiliac joint pain is typically without any consistent, demonstrable radiographic or laboratory features and most commonly exists in the setting of morphologically normal joints. Clinical tests for sacroiliac joint pain may include various movement tests, palpation to detect tenderness, and pain descriptions by the patient. Further confounding study of the sacroiliac joint is that multiple structures, such as posterior facet joints and lumbar discs, may refer pain to the area surrounding the sacroiliac joint. Because of inconsistent information obtained from history and physical examination, some have proposed the use of image-guided anesthetic injection into the sacroiliac joint for the diagnosis of sacroiliac joint pain.

Diagnosis

The use of diagnostic blocks to evaluate sacroiliac joint pain builds on the experience of use of diagnostic blocks in other joints to evaluate pain. Blinded studies with placebo controls (although difficult to conduct when dealing with invasive procedures) are ideally required for scientific validation of sacroiliac joint blocks (SJB), particularly when dealing with pain relief well-known to respond to placebo controls. In the typical evaluation of a diagnostic test, the results of

sacroiliac diagnostic block would then be compared to a gold standard. However, there is no current gold standard for sacroiliac joint injection (SJI). In 1996, Dreyfuss and colleagues positioned SJI as the gold standard, against which other diagnostic tests and physical exam could be measured. Finally, one would like to know how the results of a diagnostic test would be used in the management of the patient and whether the subsequent treatment plan resulted in beneficial health outcomes.

Much of the literature regarding SJB(s) involves small case series. Schwarzer and colleagues in 1995 reported on a case series of 43 patients with unexplained low back pain below L5-S1. These 43 patients were chosen opportunistically from a larger group of patients referred for discography or zygapophyseal joint blocks. Thus all patients underwent multiple procedures. A total of 13 of the 43 patients (30%) reported relief of their pain with SJB(s). There were no blinded controls, although the authors felt that the use of pain blocks at the zygapophyseal joints functioned as internal controls. Maigne and colleagues (1996) reported on a series of 54 patients with low back pain who received double SJB(s). The first block used lidocaine, a short-acting anesthetic. If the patient reported pain relief, a second, confirmatory block was performed 1 week later using a long-acting anesthetic. If similar relief was obtained with the second block, it was concluded that the sacroiliac joint was the source of the pain. A total of 18% of patients met these criteria. Similar to the Schwarzer et al. study, this study was designed primarily to demonstrate that sacroiliac pain exists and to assess its prevalence. No studies were identified that described how the results of sacroiliac joint arthrography might be used in the management of the patient.

In 2007, the American Society of Interventional Pain Physicians (ASIPP) published a systematic review and Practice Guidelines, including sacroiliac joint interventions (Boswell et al. 2007; Hansen et al. 2007). Evidence was determined to be moderate (level III, non-randomized comparative trials) for the accuracy of sacroiliac joint diagnostic injections for the diagnosis of sacroiliac joint pain. The authors report that “even though short-term relief from sacroiliac joint injection is considered as a gold standard for the diagnosis of sacroiliac joint pain, there was no blinded comparison of the test or reference standard in evaluation of these investigations.” The evidence for intra-articular SJI(s) for short- and long-term relief was found to be limited (level IV, case series).

In 2009, ASIPP based their updated guideline on a systematic review of sacroiliac injections (Rupert et al., 2009; Manchikanti et al., 2009). This systematic review included 13 studies utilizing fluoroscopically guided controlled diagnostic blocks (i.e., placebo-controlled or comparative local anesthetic) in patients with chronic low back and/or lower extremity pain for greater than 3 months duration. Five studies, considered level II-2 evidence (well-designed cohort or case-control studies), were reviewed on the topic of diagnosis of sacroiliac joint pain using a double-block paradigm (comparative controlled local anesthetic blocks). The false-positive rate for use of a single, uncontrolled, SJI was 20% to 54%. With a double-block paradigm, the prevalence of sacroiliac joint pain was estimated to range between 10% and 38% in patients with a high likelihood of sacroiliac joint pain. Interpretation of these results is limited by the lack of a “gold” standard for reference comparison. ASIPP concluded that SJB(s) appear to be the evaluation of choice to provide appropriate diagnosis, due to the inability to make the diagnosis of sacroiliac joint-mediated pain with noninvasive tests (Manchikanti et al., 2009). For

therapeutic intra-articular sacroiliac joint interventions, 4 randomized trials were excluded from review due to a lack of a valid diagnosis prior to therapeutic interventions. None of the 14 observational reports met the inclusion criteria, due to lack of controlled diagnostic blocks to establish diagnosis, evaluating only patients with spondyloarthropathy, or not following patients for 6 months. Limitations were noted as a paucity of literature evaluating the role of both diagnostic and therapeutic interventions and widespread methodologic flaws.

The 2009 practice guidelines from the American Pain Society (APS) were based on a systematic review that was commissioned by the APS and conducted at the Oregon Evidence-Based Practice Center (Chou et al., 2009a; Chou et al., 2009b). The systematic review concluded that no reliable evidence existed to evaluate validity or utility of diagnostic SJB as a diagnostic procedure for low back pain with or without radiculopathy, with a resulting guideline recommendation of insufficient evidence. Data on sacroiliac joint steroid injection was limited to 1 small controlled trial, resulting in a recommendation of insufficient evidence for therapeutic injection of this joint. In 2010, Manchikanti and colleagues published critical reviews of the APS guidelines for interventional techniques, including sacroiliac injections. Evidence for diagnostic sacroiliac injections was considered to be fair to poor, and no additional literature was identified since the 2009 systematic review by Rupert and colleagues.

Treatment

In 2012, Hansen et al. published an updated systematic review of sacroiliac joint interventions. The primary outcome was short-term (<6 months) or long-term (>6 months) pain relief. Evidence was classified as good, fair, or limited/poor based on the quality of evidence. A total of 11 studies (6 randomized and 5 non-randomized) met inclusion criteria. Review found that evidence for intra-articular steroid injections is limited/poor, as is the evidence for peri-articular injections (local anesthetic and steroid or botulinum toxin). For radiofrequency neurotomy, the evidence for cooled radiofrequency was found to be fair (2 randomized controlled trials [RCT]), while evidence for conventional radiofrequency or pulsed radiofrequency was limited/poor.

Therapeutic Sacroiliac Injections

The available literature on therapeutic sacroiliac injections is limited, consisting of one small RCT that compared steroid injections with prolotherapy, and case series (Hansen et al., 2012). There are no RCTs that compare therapeutic sacroiliac injections with placebo to determine the efficacy above placebo.

In 2010, Kim and colleagues reported a randomized, double-blind, controlled trial of intra-articular prolotherapy compared with steroid injection for sacroiliac joint pain. The study included 48 patients with sacroiliac joint pain, confirmed by 50% or greater improvement in response to a single local anesthetic block, who had failed medical treatment. Intra-articular dextrose water prolotherapy or steroid injections were administered under fluoroscopic guidance on a biweekly schedule, with a maximum of 3 injections. Injections were stopped when pain relief was 90% or greater, which required a mean of 2.7 prolotherapy injections and 1.5 steroid injections. Pain (numerical rating scale) and disability scores (Oswestry Disability Index, ODI) were assessed at baseline, 2 weeks, and monthly after completion of treatment. At 2-week follow-up, pain and disability scores were significantly improved in both groups, with no significant difference between the groups. Pain on the numerical rating scale improved from 6.3

to 1.4 in the prolotherapy group and from 6.7 to 1.9 in the steroid group. At 6 months after treatment, 63.6% of patients in the prolotherapy group remained improved from baseline (>50%), compared with 27.2% in the steroid group. At 15-month follow-up, the cumulative incidence of sustained pain relief was 58.7% in the prolotherapy group compared with 10.2% in the steroid group. The median duration of survival (recurrence of severe sacroiliac joint pain) was 3 months for the steroid group. Results from this small trial are insufficient to permit conclusions regarding the effect of this procedure on health outcomes. Comparisons to placebo, ideally using sham injections, are needed to determine the degree of benefit over placebo.

Results from this small trial are insufficient to permit conclusions regarding the effect of this procedure on health outcomes. Comparisons to placebo, ideally using sham injections, are needed to determine the degree of benefit over placebo.

In 2007, Weksler et al. reported results of diagnostic/therapeutic blocks in a series of patients who were referred for low back pain and disc herniation without claudication or neurologic abnormalities. Fifty patients who had at least 3 positive pain provocation tests for sacroiliac joint dysfunction received sacroiliac injection of bupivacaine and betamethasone. Pain, assessed by visual analogue scores (VAS), improved from 7.8 to 1.3 at 30 minutes after the injection. At a 12-week follow-up, 46 patients (92%) reported VAS scores of 3 or less. Four patients required hospitalization for an unanticipated motor block.

Questions also remain about intra-articular versus peri-articular sources of sacroiliac pain. For example, one prospective comparison in 2007 by Murakami and colleagues found that peri-articular lidocaine injections (25 of 25 patients) were more effective than intra-articular injection (9 of 25 patients).

In response to requests by Blue Cross Blue Shield Association, input was received from 4 physician specialty societies (6 responses) and 3 academic medical centers (5 responses) in 2010. Clinical input was mixed. There was general agreement that the evidence for SJI(s) is limited, although a majority of reviewers considered sacroiliac injections to be the best available approach for diagnosis and treatment in defined situations.

Summary

There is limited prospective or controlled evidence for sacroiliac joint arthrography or injection therapy. It should be noted that, in general, the literature regarding injection therapy on other joints in the back is of poor quality. Overall, sacroiliac arthrography and injection have not been adequately evaluated. Evidence is insufficient to permit conclusions regarding the effect of this procedure on health outcomes.

Nonetheless, the sacroiliac joint has been validated as a source of pain in 10% to 30% of the chronic back pain population (Hansen, et al., 2007). Professional guidelines have been developed for diagnosis and management of this condition with SJI(s) under imaging guidance. By and large, SJI(s) are considered acceptable medical practice and may be medically necessary for treatment within a specific subset of patients with low back pain who have not responded to standard therapies, or for whom standard therapies are contraindicated.

Practice Guidelines and Position Statements

The ASIPP Interventional Pain Management guidelines were updated in 2009. The guidelines for diagnostic and therapeutic SJI(s) were based on the systematic review by Manchikanti et al. (2010) and Rupert et al. (2009) described earlier. Evidence for SJI(s) was considered to be level II-2 (evidence obtained from at least 1 properly designed small diagnostic accuracy study). The guidelines indicate that SJB(s) appear to be the evaluation of choice to provide appropriate diagnosis, due to the inability to make the diagnosis of sacroiliac joint-mediated pain with non-invasive tests. Evidence was determined to be unavailable to establish efficacy of intra-articular SJI(s) for therapeutic purposes.

Common indications for SJI(s) were listed as follows:

- Somatic or nonradicular low back and lower extremity pain below the level of L5 vertebra
- Duration of pain of at least 3 months
- Average pain levels of >6 on a scale of 0 to 10
- Intermittent or continuous pain causing functional disability
- Failure to respond to more conservative management, including physical therapy modalities with exercises, chiropractic management, and non-steroidal anti-inflammatory agents
- Lack of obvious evidence for disc-related or facet joint pain
- No contraindications with understanding of consent, nature of the procedure, needle placement, or sedation
- No history of allergy to contrast administration, local anesthetics, steroids, Sarapin, or other drugs potentially utilized
- Contraindications or inability to undergo physical therapy, chiropractic management, or inability to tolerate non-steroidal anti-inflammatory drugs
- For therapeutic sacroiliac joint interventions with intra-articular injections or radiofrequency neurotomy, the joint should have been positive utilizing controlled diagnostic blocks

Recommended frequency of interventions was also described.

The 2009 practice guidelines from the APS were based on a systematic review that was commissioned by the APS and conducted at the Oregon Evidence-Based Practice Center (Chou et al., 2009a; Chou et al., 2009b). The APS guideline states that there is insufficient evidence to evaluate validity or utility of diagnostic SJB as a diagnostic procedure for low back pain with or without radiculopathy and that there is insufficient evidence to adequately evaluate benefits of sacroiliac joint steroid injection for nonradicular low back pain.

Benefit Application

Benefit determinations should be based in all cases on the applicable contract language. To the extent there are any conflicts between these guidelines and the contract language, the contract language will control. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

Some state or federal mandates (e.g., Federal Employee Program (FEP)) prohibit Plans from denying Food and Drug Administration (FDA) - approved technologies as investigational. In these instances, plans may have to consider the coverage eligibility of FDA-approved technologies on the basis of medical necessity alone.

This Policy relates only to the services or supplies described herein. Benefits may vary according to benefit design; therefore, contract language should be reviewed before applying the terms of the Policy. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement.

Type	Number	Description
CPT	27096	Injection procedure for sacroiliac joint, anesthetic/steroid, with image guidance (fluoroscopy or CT) including arthrography when performed
HCPC	G0259	Injection procedure for sacroiliac joint; arthrograpy
	G0260	Injection procedure for sacroiliac joint; provision of anesthetic, steroid and/or other therapeutic agent, with or without arthrography
ICD9 Procedure	None	
ICD10 Procedure	N/A	
ICD9 Diagnosis	All Diagnoses	
ICD10 Diagnosis	N/A	
Place of Service	All Places of Service	

Tables

N/A

Definitions

N/A

Index / Cross Reference of Related BSC Medical Policies

The following Medical Policies share diagnoses and/or are equivalent BSC Medical Policies:

- Facet Joint Injections and Facet Joint Nerve Blocks
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- Epidural Steroid Injections
- Regional Sympathetic Blocks

Key / Related Searchable Words

- Sacroiliac nerve block
- Sacroiliac joint injection
- Spinal procedure
- Spine

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Policy History

This section provides a chronological history of the activities, updates and changes that have occurred with this Medical Policy.

Effective Date	Action	Reason
10/15/2007	BCBSA Medical Policy adoption	Medical Policy Committee
4/3/2009	Policy Revision and title changed from Sacroiliac Joint Arthrography and Injection to Sacroiliac Joint Injection	Medical Policy Committee
4/2/2010	Criteria Revised	Medical Policy Committee

Effective Date	Action	Reason
9/13/2010	Coding Updated	Administrative Review
3/5/2012	New Policy Adoption TRIAD Healthcare Inc., Musculoskeletal Health Services Medical Policy	Medical Policy Committee
5/8/2012	Administrative Update	Administrative Review
1/11/2013	Added Note to Position Statement for review clarification purposes	Medical Policy Committee
6/28/2013	Policy revision with position change	Medical Policy Committee

The materials provided to you are guidelines used by this plan to authorize, modify, or deny care for persons with similar illness or conditions. Specific care and treatment may vary depending on individual need and the benefits covered under your contract. These Policies are subject to change as new information becomes available.

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