**CPT codes 64451, 64625 Anesthetic or steroid injection and/or radiofrequency ablation, nerves innervating the sacroiliac joint, with image guidance**

**Last reviewed at VbBS in November 2019. Minutes indicate that the staff recommendation was accepted without significant discussion. HERC approved the recommendations without change.**

Codes:

1. CPT **64451** Injection(s), anesthetic agent(s) and/or steroid; nerves innervating the sacroiliac joint, with image guidance (ie, fluoroscopy or computed tomography)
2. CPT **64625** Radiofrequency ablation, nerves innervating the sacroiliac joint, with image guidance (ie, fluoroscopy or computed tomography)

Description: Anesthetic injections or radiofrequency ablation (RFA) are procedures used to treat SI joint pain. The literature is unclear on what nerves precisely innervate the SI joint. Most of the posterior sensory innervation is thought to be transmitted from the S1, S2, and S3 dorsal rami via the lateral branches, as well as through medial branches from the L4 and L5 dorsal rami. Anesthetic injections can help to diagnose the cause of pain, or can be used therapeutically to relieve pain. When temporary anesthetic SI nerve injections are effective, a more long-term destruction of the nerve with RFA can be done.

Similar codes

CPT 64450 (Injection(s), anesthetic agent(s) and/or steroid; other peripheral nerve or branch) is ancillary and governed by the ancillary guideline for nerve blocks. Most other nerve blocks are also ancillary; however, the paravertebral facet joint nerve injections (CPT 64490-64492) are on line 662.

CPT 64640 (Destruction by neurolytic agent; other peripheral nerve or branch) was used for the procedures now broken out into 64624 and 64635. CPT 64640 was on line 662 CONDITIONS FOR WHICH CERTAIN INTERVENTIONS ARE UNPROVEN, HAVE NO CLINICALLY IMPORTANT BENEFIT OR HAVE HARMS THAT OUTWEIGH BENEFITS but was only reviewed for radiofrequency ablation of the knee. See Genicular Nerve issue for recommendations on CPT 64640.

Evidence Review:

1. **Sun 2018**, systematic review and meta-analysis of radiofrequency ablation for chronic SI joint pain
	1. N=7 studies (240 patients)
		1. 2 RCTs (Nilesh 2016, Steven 2008), 79 patients
		2. 1 prospective cohort study (Haktan 2011), 15 patients
		3. 4 retrospective cohort studies (Leonardo 2008, Kok 2013, Andrea 2017, Wolfgang 2017), 177 patients
	2. The overall pooled results demonstrated that pain intensity decreased significantly after cooled radiofrequency procedure compared with that measured before treatment. The mean difference (MD) was 3.81 [95% confidence intervals (95% CIs): 3.29–4.33, P<.001] and 3.78 (95% CIs: 3.31–4.25, P<.001) as measured by the Numerical Rating Scale (NRS) and Visual Analog Scale (VAS), respectively. Disability also relieved significantly after treatment compared with that measured before treatment. The MD was 18.2 (95% CIs: 12.22–24.17, P<.001) as measured by the Oswestry Disability Index (ODI). Seventy-two percent of the patients presented positive results as measured by the Global Perceived Effect (GPE). The OR was 0.01 (95% CIs: 0.00–0.05, P<.001). Only mild complications were observed in the 7 studies, including transienthip pain, soreness, and numbness.
	3. Conclusion: Cooled radiofrequency procedure can significantly relieve pain and disability with no severe complications, and majority of patients are satisfied with this technique. Thus, it is safe and effective to use this procedure in managing patients with chronic SIJ pain. More high-quality and large-scale randomized controlled trials (RCTs) are required to validate our findings.
	4. Limitations: The sample size of the included studies was small and various heterogeneity existed.
2. **King 2015**, systematic review of radiofrequency ablation for sacroiliac pain
	1. N=17 studies
		1. N=2 studies on diagnostic blocks (anesthetic injection)
		2. N=15 studies on RFA
			1. 4 prospective observational, 9 retrospective observational, 2 “explanatory studies”
			2. The studies had widely different criteria for patient selection and a variety of treatment techniques, which differed both in structures targeted and radiofrequency (RF) technologies used
	2. Results for diagnostic anesthetic injections: 2 RCTS of asymptomatic people (N=15, 20) showed what injections could result in SI joint numbness in 40-70% of people
	3. Results for RFA:
		1. 10 studies showed between 32 and 89% of patients had >50% pain relief
		2. 6 studies showed 11-44% of patients with 100% pain relief
	4. Conclusions. The literature on sacral lateral branch interventions is sparse. One study demonstrates the face validity of multisite, multidepth sacral lateral branch blocks for diagnosis of posterior sacroiliac complex pain. Some evidence of moderate quality exists on therapeutic procedures, but it is insufficient to determine the indications and effectiveness of sacral lateral branch thermal radiofrequency

Other payer policies

1. Cigna 2019: RFA of the SI joint is considered experimental

HERC staff summary:

The evidence base for RFA of the SI joint nerves consists mainly of small observational trials, with variation in diagnostic criteria, patient selection, treatment modality and outcomes measured. The efficacy of RFA for SI joint nerves is therefore insufficient. If ablation of the nerves is not covered, then the anesthetic injection for diagnosis does not need to be covered.

Of note, Guideline Note 161 mentions SI joint anesthetic injections but is referring to joint injections, not nerve injections. This should be clarified.

HERC staff recommendations:

1. Recommend HSD place CPT **64451** (Injection(s), anesthetic agent(s) and/or steroid; nerves innervating the sacroiliac joint, with image guidance (ie, fluoroscopy or computed tomography)) on line 662/GN173
	1. Similar to paravertebral facet injections which are on line 662
2. Place CPT **64625** (Radiofrequency ablation, nerves innervating the sacroiliac joint, with image guidance (ie, fluoroscopy or computed tomography)) on line 662 CONDITIONS FOR WHICH CERTAIN INTERVENTIONS ARE UNPROVEN, HAVE NO CLINICALLY IMPORTANT BENEFIT OR HAVE HARMS THAT OUTWEIGH BENEFITS and modify GN173 as shown below
	1. Lack of evidence of effectiveness
3. Modify GN161 as shown below to clarify that SI joint, but not nerve, injections are included in the GN

# GUIDELINE NOTE 173, INTERVENTIONS THAT ARE UNPROVEN, HAVE NO CLINICALLY IMPORTANT BENEFIT OR HAVE HARMS THAT OUTWEIGH BENEFITS FOR CERTAIN CONDITIONS

Line 662

The following Interventions are prioritized on Line 662 CONDITIONS FOR WHICH CERTAIN INTERVENTIONS ARE UNPROVEN, HAVE NO CLINICALLY IMPORTANT BENEFIT OR HAVE HARMS THAT OUTWEIGH BENEFITS:

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| **Procedure Code** | **Intervention Description** | **Rationale** | **Last Review** |
| 64451, 64625 | Anesthetic or steroid injection and/or radiofrequency ablation, nerves innervating the sacroiliac joint, with image guidance | Insufficient evidence of effectiveness | November 2019 |