

Evidence Discussion (CMM 208)

Basivertebral Nerve Ablation (BVN) Procedure

Anatomic Studies show that the source of most cases of back pain is from the endplate via the BVN. The technique for basivertebral nerve ablation is transpedicular. Several risks are inherent with this procedure, including fracture of the pedicle/dural puncture, and the lesion produced during BVN RFA could extend posteriorly into the spinal canal. Charcot spinal arthropathy is also a concern. A greater potential for reduced afferent input to be problematic in patients with spondylolisthesis could lead to accelerated intervertebral disc degeneration, avascular necrosis, or spinal cord injuries. (1,2)

- 1) Fischgrund JS, Rhyne A, Franke J, Sasso R, Kitchel S, Bae H, et al. Intraosseous basivertebral nerve ablation for the treatment of chronic low back pain: 2-year results from a prospective randomized doubleblind sham controlled multicenter study. *Int J Spine Surg.* 2019; 13:110–9.
- 2) Michalik, A., Conger, A., Smuck, M., Maus, T. and McCormick, Z. Intraosseous Basivertebral Nerve Radiofrequency Ablation for the Treatment of Vertebral Body Endplate Low Back Pain: Current Evidence and Future Directions. *Pain Medicine.* 2021; 22(Supplement_1):S24-S30