

## 1. An update of pain medicine research in the last ten years that might influence our practice.

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This speaker will provide an update of the pain medicine research in the last ten years that might influence our practice. The purpose is to create a convenient and well-organized review session of key articles published recently that address important topics in chronic pain management and facilitate their review by the practicing anesthesiologist or pain medicine specialist. The speaker will discuss the summary, strengths, weaknesses, and relevance of each article and how they will influence our clinical practice. The speaker will provide the learner with a succinct summary of the articles on CDC guidelines on opioid use, vertebroplasty, efficacy of epidural steroid vs saline, interlaminar, transforaminal, and caudal epidural steroid, Ziconotide, and placebo effect of spinal cord stimulation. Opportunities for evidence-based pain management will be suggested.

Manchikanti, Laxmaiah et al. "Comparison of the efficacy of saline, local anesthetics, and steroids in epidural and facet joint injections for the management of spinal pain: A systematic review of randomized controlled trials." *Surgical neurology international* vol. 6, Suppl 4 S194-235. 7 May. 2015, doi:10.4103/2152-7806.156598

Banik RK. Therapeutic benefits of placebo surgery and challenges in neuromodulation research. *Pain*. 2020 Aug;161(8):1937-1939. doi: 10.1097/j.pain.0000000000001910. PMID: 32701852.

Firanesu C E, de Vries J, Lodder P, Venmans A, Schoemaker M C, Smeets A J et al. Vertebroplasty versus sham procedure for painful acute osteoporotic vertebral compression fractures (VERTOS IV): randomised sham controlled clinical trial *BMJ* 2018; 361 :k1551 doi:10.1136/bmj.k1551

Dowell D, Haegerich TM, Chou R. CDC Guideline for Prescribing Opioids for Chronic Pain - United States, 2016. *MMWR Recomm Rep*. 2016 Mar 18;65(1):1-49. doi: 10.15585/mmwr.rr6501e1. Erratum in: *MMWR Recomm Rep*. 2016;65(11):295. PMID: 26987082.

Chang-Chien GC, Knezevic NN, McCormick Z, Chu SK, Trescot AM, Candido KD. Transforaminal versus interlaminar approaches to epidural steroid injections: a systematic review of comparative studies for lumbosacral radicular pain. *Pain Physician*. 2014 Jul-Aug;17(4):E509-24. PMID: 25054401.

Banik RK, Engle MP. Ziconotide for Management of Cancer Pain Refractory to Pharmacotherapy: An Update. *Pain Med*. 2020 Dec 25;21(12):3253-3259. doi: 10.1093/pm/pnaa251. PMID: 32940675.

## 2. Workshop for 'Global online pain fellowship' enrollees (require onsite ultrasound machine, gel, and dummy patient)

Live ultrasound scanning for suprascapular nerve block, genicular nerve block, stellate ganglion block, brachial plexus block, Erector spinae/paravertebral block