

OUTCOMES: PATIENT FALLS

- Review of electronic records over 10 years at patients undergoing total knee arthroplasty at Mayo Rochester (Johnson, Anesth Analg 11/2014)
 - 15,189 patients
 - Fall rate of 15.3 per 1000 patients
 - Odd of falling increased with older age (>70) and postop day 1-3 patients
 - Decreased with revision procedures
 - Most falls were elimination (bathroom) falls
 - Fall education is essential, especially for high risk patients

OUTCOMES: BLOCK COMPLICATIONS

- Retrospective look at 27031 ultrasound guided axillary blocks performed at six French centers from 2009-2012 (Ecoffey, Eur J Anesth, 11/14)
 - Incidence of LAST was 1.5/1000
 - Persistent neurologic deficits were 0.37/10000

OUTCOMES: CANCER RECURRENCE

- Retrospective study looking at 1964 patients undergoing radical prostatectomy under either spinal or general anesthesia (Tseng, RAPM 7/14)
 - No difference in cancer recurrence (biochemical)

ADJUVANTS

ADJUVANTS: ACUPUNCTURE

- 60 patients randomized for total knee arthroplasty to receive real or sham acupuncture for three days (Chen, RAPM 1/2015)
 - Fentanyl consumption, nausea/vomiting, and time to first request were lower in acupuncture group (30%)

ADJUVANTS: INTRAVENOUS LIDOCAINE

- 71 patients undergoing breast cancer surgery randomized to placebo or IV lidocaine at 1.5mg/kg then 2mg/kg/h (Abdullah, RAPM 11/2015)
 - No difference with regard to opioid consumption, pain score, PONV or fatigue
 - IV lidocaine may not be beneficial across all types of surgery
- 47 patients undergoing laparoscopic nephrectomy randomized to receive intra/postoperative lidocaine v. placebo (Tausin-Fin, J A Clin Pharm, 7/14)
 - Lidocaine ran at 1.5mg/kg/h for 24 hours
 - Significant reduction in morphine consumption (8 v. 25mg), pain scores, and hyperalgesia out to post op day 4
 - Time to first flatus (29 v. 48 hours) and 6 minute walk test better in lidocaine group

ADJUVANTS: PERINEURAL DRUGS

- 150 patients undergoing arthroscopic rotator cuff repair under interscalene brachial plexus block randomized to buprenorphine, tramadol, or no perineural adjuvant (Alemano, Minerva 11/2014)
 - 150mcg of buprenorphine and 100mg of tramadol
 - Postoperative analgesia longest with buprenorphine > tramadol > no adjuvant
- 64 patients undergoing upper extremity surgeries received supraclavicular brachial plexus blocks with 20mL of 0.75% Ropivacaine with 30mcg of clonidine or placebo
 - No difference in sensory or motor onset of block
 - Post operative analgesia duration of 956 minutes (clonidine) vs. 736 minutes (placebo)
- Metaanalysis of 29 trials with 1695 participants receiving perineural dexamethasone (Albrecht, Anaesthesia 8/14)
 - Increased duration of short and medium action local anesthetics by a mean of 233 minutes
 - Increased duration of long term local anesthetics by 488 minutes
 - No difference in 4mg and 8mg doses
 - Extreme heterogeneity seen

ADJUVANTS: PERINEURAL DRUGS CONT.

- 39 patients presenting for arthroscopic shoulder surgery received interscalene blocks with perineural dexamethasone or systemic dexamethasone (4mg). (Kawanishi, Loc Reg Anesth 4/14)
 - Sensory block of 18 hours v. 14 hours in perineural group

ADJUVANTS: ESMOLOL

- 60 patients undergoing septorhinoplasty randomized to esmolol v. placebo (Celebi, Braz J Anesth, 9/14)
 - Co-administered with remifentanyl
 - 0.5mg/kg bolus of esmolol followed by 50mcg/kg/min infusion
 - Morphine consumption and time to first analgesia (44 min. v 108 minutes) were less and significant in esmolol group

ADJUVANTS: GABAPENTIN/PREGABALIN

- 212 patients enrolled in a randomized trial to receive perioperative gabapentin vs. placebo when undergoing total knee arthroplasty (Clarke, Br J Anesth 11/2014)
 - 600mg preop and 200mg TID post op
 - Also received celecoxib and femoral/sciatic blocks
 - Gabapentin group used less 24 hour morphine (25% reduction) and had improved range of motion
 - No difference in pain or physical function for up to 6 months
- 60 patients undergoing percutaneous nephrolithotomy receiving preoperative single dose pregabalin vs. placebo (Aydogan, Revista Brasileira De Anesth, 10/14)
 - Postoperative pain scores were significantly lower for the first two hours
 - Postoperative morphine consumption was significantly lower for 24 hours
- 90 patients undergoing gynecological surgery under spinal randomized to receive placebo, 600mg of gabapentin, or 150mg of pregabalin one hour before surgery (Bafna, J An Clin Pharm 7/14)
 - Group C (pregabalin) had longest duration (535min) compared to group A (151 min.) and group B (300min.)

SUMMARY

REFERENCES