Background and Aims Peripheral regional anesthesia has been integrated into most multimodal analgesia protocols for total knee arthroplasty which considered among the most painful surgeries with a huge potential for chronicization. The adductor canal block (ACB) has gained popularity. Similarly, the IPACK block has been described to provide analgesia of the posterior knee capsule. This study aimed to evaluate the analgesic efficacy of this block in patients undergoing primary PTG.

Methods 90 patients were randomized to receive either an IPACK, an anterior sciatic block, or a sham block (30 patients in each group + multimodal analgesia and a catheter in the KCA adductor canal). GROUP 1 KCA GROUP 2 KCA+BSA GROUP 3 KCA+IPACK The analgesic blocks were done under echo-guidance preoperatively respecting the safety rules, the dose administered was 20 cc of ropivacaine 0.25% was used. We were to assess posterior knee pain 6 hours after surgery. Other endpoints included quality of recovery after surgery, pain scores, opioid requirements (PCA morphine)(EPI info 7.2 analysis).

Results -groups were matched -A predominance of women (4F/1H). -average age: 68 +/-7 years -the average BMI =31.75 kg/m2 +/- 4. -70% of patients ASA2 ,20% ASA3. -The average duration of the intervention: 89 +/- 19 minutes. -Morphine consumption (PCA) significantly higher in group 1 (16mg) & group 2 (8mg) group 3 (4mg) – The groups were matched . -There was a correlation between the use of the ipack block and postoperative pain

Conclusions In a multimodal analgesic protocol, the addition of IPACK block decreased pain scores and morphine consumption , efficacy ipack in TKA efficacy ipack in TKA
**Background and Aims** Gastrodin (a main bioactive component of herbal plant, Gastrodia elata) has been shown to have beneficial effects in preclinical models of CNS disorders and clinical trial for migraine. Inflammation is a multifaceted protein complex having a core of pattern recognition receptor and has been implicated in the development of neuroinflammatory diseases. Gastrodin has shown to modulate the activation of NLRP3 (NOD-like receptor protein 3) inflammasome. This study investigated the effects of gastrodin on neuropathic pain and the associated changes of activation of NLRP3 inflammasome at spinal level.

**Methods** Intrathecal catheter implantation and spinal nerve ligation (SNL) were used for drug administration and pain model in male Sprague-Dawley rats with approval of Ethical Committee (CNUHACUC-21056). Anti-inflammatory effect of gastrodin or MCC950 (NLRP3 inflammasome inhibitor) was measured by von Frey test. Changes of NLRP3, ASC, caspase-1 and IL-1β and cellular expression were examined in the spinal cord and dorsal root ganglion.

**Results** Intrathecal injection of gastrodin significantly attenuated SNL-induced mechanical allodynia. MCC950 also showed anti-allodynic effect, but only about 50% of the maximum effect of gastrodin. Protein and mRNA levels of NLRP3 components and IL-1β were upregulated in SNL animals compared to sham animals, which was significantly reduced by intrathecal treatment of gastrodin. NLRP3 inflammasome were expressed mostly in the neurons, and its fluorescent intensity was also reduced by intrathecal gastrodin.

**Conclusions** NLRP3 inflammasome was expressed mainly in the neurons at spinal level and greatly increased in SNL. Intrathecal gastrodin has anti-allodynic effect in SNL model partly through suppressing NLRP3 inflammasome and IL-1β.

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**ANTERIOR QUADRATUS LUMBORUM BLOCK FOR ANALGESIA AFTER LIVING DONOR RENAL TRANSPLANTATION: A DOUBLE-BLINDED RANDOMIZED CONTROLLED TRIAL**

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**Application for ESRA Abstract Prizes:** I apply as an Anesthesiologist (Aged 35 years old or less)

**Background and Aims** Analgesic options are limited for post-operative pain after renal transplantation. This study aimed to investigate whether a unilateral anterior quadratus lumborum block would reduce postoperative opioid consumption after living donor renal transplantation in the context of multimodal analgesia.

**Methods** Eighty-eight adult patients undergoing living donor renal transplantation were randomly allocated to receive either unilateral anterior quadratus lumborum block (30ml ropivacaine 0.375%) or sham block (normal saline) on the operated side. All patients received multimodal analgesia including scheduled administration of acetaminophen and a fentanyl intravenous patient-controlled analgesia. Primary outcome was total opioid consumption for the first postoperative 24 hours (oral morphine milligram equivalent [MME]). Secondary outcomes included pain scores, time to first opioid, cutaneous side effects, nausea/vomiting, quality of recovery scores, time to first ambulate, and hospital stays.

**Results** Total opioid consumption in the postoperative 24 hours was not significantly different between the intervention group and control group (median [IQR], 160.5 [78–249.8] vs. 187.5 [93–309] MME; median difference [95% CI], -27 [-78 to 24], P=0.285). There were no differences in secondary outcomes.