IVAPM Case Report

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This case report is a short summary of a cat undergoing a right hindlimb amputation and body wall resection for a feline injection site sarcoma over the right flank. Unique features of case management included the use of multiple locoregional nerve blocks, allowing for good analgesic control and a speedy recovery period.

Cubbie, a 14 year old, 6.9kg, MC, DMH was presented to UF Surgical Oncology service for evaluation of a golf ball sized mass over the right flank that was first noted 1 month prior to presentation. An incisional biopsy was preformed by his primary veterinarian and was consistent with a soft tissue sarcoma, so he was referred to UF for further evaluation.

On physical exam, the patient was bright alert and responsive. There was a 6x6x4 cm subcutaneous, firm, firmly attached mass over the right flank. A CT scan revealed a locally extensive, partially mineralized mass, right abdominal body wall. Due to the suspicion of the mass being an injection site sarcoma, wide surgical excision was planned and to include and a right hindlimb amputation.

Anesthesia Protocol: Premed: Methadone 2.8mg IM, Alfaxalone 14mg IM – achieved profound sedation; Induction: Alfaxalone 8mg IV, midazolam 1.4 mg IV, Cefazolin 150mg IV, Cerenia 7 mg IV

Regional blocks performed pre-operatively included: Bupivicaine/dexmedetomidine combination for a transversus abdominus plane block, a lateral pre-iliac block, and a parasacral approach to sciatic block. Intraoperatively, the patient was maintained on fentanyl 0.2 mcg/kg/min and Sevoflurane at 1.5%.

Surgery: Margins of 5cm and 2 fascial planes were incised. The right hindlimb was amputated with preservation of the semimembranosus and semitendinosus muscles, and the mass was removed en bloc. The remaining muscles were used as a musculocutaneous flap. Routine closure. Recovery from anesthesia was smooth.

Post-operatively, the patient was maintained on fentanyl CRI, IV fluids, cold compresses to the surgical site, and then transitioned to buprenorphine OTM and robenacoxib the following morning. Pain was assessed every 4 hours using the Colorado State University Acute Pain Scale and found to be 0 at each assessment. The patient was discharged from the hospital 1 day post-operatively. Two weeks post-op the patient was evaluated, and found to be doing very well post-operatively.

This case demonstrates a combination of unique locoregional blocks. The transversus abdominis plane block is performed within the fascial plane that overlies the transversus abdominis, thus providing sensory blockade to the abdominal wall and improving patient analgesia in the peri-operative period for those patients with abdominal incisions. The lateral pre-iliac approach enables the femoral nerve to be blocked with the limb to be operated in a neutral position and without other changes in recumbency to block the sciatic nerve. Lastly, the modified parasacral approach is an effective alternative approach to the sciatic nerve, providing analgesia for the surgical limb without affecting the opposite limb, such as with an epidural. These blocks were accomplished using a nerve stimulator and ultrasound guidance. With the analgesia provided by these local blocks, the patient was maintained on minimal gas inhalant and allowed for a quick recovery and discharge after surgery.