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**UNIVERSIDADE ESTADUAL PAULISTA “JÚLIO
DE MESQUITA FILHO”
FACULDADE DE MEDICINA**

SUELEN LORENA DA SILVA

**Evaluation of the analgesic effect of an ultrasound-guided
transverse abdominus plane block with 0.25% bupivacaine
in bitches undergoing ovariohysterectomy**

Dissertação apresentada à Faculdade de
Medicina, Universidade Estadual Paulista “Júlio
de Mesquita Filho”, Câmpus de Botucatu, para
obtenção do título de Mestra em Anestesiologia.

Orientador(a): Prof. Dr. Francisco José Teixeira Neto

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Suelen Lorena da Silva

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*“E uma das condições necessárias a pensar certo é não estarmos demasiado certos de
nossas certezas”*

Paulo Freire

RESUMO

SILVA, SL. Avaliação da duração do efeito analgésico do bloqueio local ecoguiado TAP block com bupivacaína 0,25% em cadelas submetidas a ovariectomia. Botucatu, 2023. 33 p. Dissertação (Mestrado) – Faculdade de Medicina de Botucatu, Universidade Estadual Paulista, Campus de Botucatu.

Este estudo objetivou avaliar a eficácia analgésica do bloqueio do músculo transverso abdominal utilizando-se bupivacaína 0,25%. Em um estudo prospectivo, duplo-cego, cadelas anestesiadas com isoflurano receberam aleatoriamente uma infiltração TAP bilateral guiada por ultrassom de dois pontos com soro fisiológico 0,9% (Controle, n = 15) ou bupivacaína a 0,25% (TAPbupi, n = 15) antes da ovariectomia. Os escores de sedação e a forma abreviada da escala composta de dor de medida de Glasgow (CMPS-SF) foram avaliados por 3 observadores por 24 horas após a cirurgia. Analgesia de resgate foi fornecida se o Glasgow CMPS-SF excedesse o limite de acordo com pelo menos 2 avaliadores. A concordância entre os 3 observadores foi classificada como boa para sedação (kappa ponderado: 0,61-0,80) e Glasgow CMPS-SF (correlação intraclassa: 0,61-0,80). Observou-se alta incidência de analgesia de resgate nos grupos Controle (13/15) e TAPbupi (14/15) (p = 0,54). O número de intervenções analgésicas pós-operatórias não diferiu entre os grupos Controle ($2,73 \pm 1,71$) e TAPbupi ($3,53 \pm 1,88$) (p = 0,23). A incidência de comportamentos que podem estar associados à disforia ou dor induzida por opioides não diferiu entre os grupos: choramingar [11/15 (Controle) e 14/15 (TAPbupi), p = 0,14]; ansioso/nervoso/com medo [4/15 (Controle) e 8/15 (TAPbupi), p = 0,13]. A infiltração incompleta do anestésico no plano interfascial foi relatada em um animal do grupo TAPbupi. Concluiu-se que a falha do bloqueio TAP em fornecer analgesia/antinocicepção superior pode ter sido causada por reações disfóricas aos opioides (choramingamento e ansiedade/nervosismo) ou, menos provavelmente, por infiltração incompleta do plano interfascial.

Palavras-chave: Disforia, escala de Glasgow, dor pós-operatória, bloqueio guiado por ultrassom.

ABSTRACT

SILVA, SL. Evaluation of the analgesic effect of an ultrasound-guided transverse abdominus plane block with 0.25% bupivacaine in bitches undergoing ovariohysterectomy. 2023. Botucatu, 2023. 33 p. MSc Thesis – Faculdade de Medicina de Botucatu, Universidade Estadual Paulista, Campus de Botucatu.

This study aimed to evaluate the analgesic efficacy of a *transversus abdominis* plane (TAP) block with 0.25% bupivacaine in dogs undergoing ovariohysterectomy. In a prospective, double blinded study, 30 animals were premedicated with intramuscular dexmedetomidine (3 µg/kg) and morphine (0.5 mg/kg), anesthesia was induced with propofol and maintained with isoflurane. Animals randomly received a four-point ultrasound-guided TAP infiltration with 0.3 mL/kg per site of 0.9% saline (Control, n = 15) or 0.25% bupivacaine (TAP_{bupi}, n = 15). Intravenous fentanyl (5 µg/kg) was administered before surgical incision in both groups. The short form of the Glasgow composite measure pain scale (CMPS-SF) was assessed by 3 observers for 24 hours. Rescue analgesia (methadone 0.2 mg/kg, intravenously) was provided if Glasgow CMPS-SF exceeded the threshold according to at least 2 observers. A high incidence of rescue analgesia was observed in the Control (13/15) and TAP_{bupi} (14/15) groups (p = 0.54). The number postoperative analgesic interventions did not differ between the Control (2.73 ± 1.71) and TAP_{bupi} (3.53 ± 1.88) groups (p = 0.23). Incidence of behaviors associated with opioid-induced dysphoria or pain did not differ between groups: whimpering [11/15 (Control) and 14/15 (TAP_{bupi}), p = 0.14]; anxious/nervous/fearful [4/15 (Control) and 8/15 (TAP_{bupi}), p = 0.13]. Incomplete infiltration of the interfascial plane was reported in one animal of the TAP_{bupi} group. With the liberal use of opioids in the present study, failure of the TAP block to provide superior analgesia may have been biased by the high incidence of dysphoric reactions associated with the use of high cumulative doses of opioids.

Keywords: Dysphoria, Glasgow scale, postoperative pain, ultrasound-guided block,

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LISTA DE ABREVIATURAS E SIGLAS

CMPS- SF Glasgow Composite Measure Pain Scale – Short Form

et al – and others

FE'ISO - end-expired isoflurane concentration

f_R - respiratory rate

H- hora

HR –Heart rate

IM – intramuscular

IV – intravenous

Kg – kilogram

mg – milligram

ml – milliliter

MNT - mechanical nociceptive thresholds (MNT)

PE'CO₂ - end-expired carbon dioxide partial pressure

SAP – systolic arterial pressure

SpO₂- hemoglobin saturation

TAP *block* – *transversus abdominis* plane

TAP_{bup}BUPI_{0,25%} - bupivacaíne group

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5. BIBLIOGRAFIA

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