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**THE USE OF WOUND SOAKING CATHETER FOR ANTERIOR LIMB AMPUTATION IN A DOG WITH  
METABOLIC DYSFUNCTION -CASE STUDY**

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**Abstract:** Analgesia remains a dynamic field undergoing continuous evolution. Multimodal approaches tailored to the individual needs of each patient are key in optimizing pain management outcomes. An 8-year-old Golden Retriever weighing 30 kilograms was brought to the clinic due to a necrotic lesion on the right forelimb. Limb amputation was deemed necessary. We explored alternative methods of pain relief apart from systemic opioids. Consequently, we opted to insert a wound soaking catheter during surgery

• **Introduction**

International Association for the study of pain defines pain as “an unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage”. Given the diverse range of painful stimuli and pain receptors, a multimodal analgesia approach is recommended. This allows to reduce the dose of a single drug and thus reduce the incidence of adverse effects.

• **Material and method**

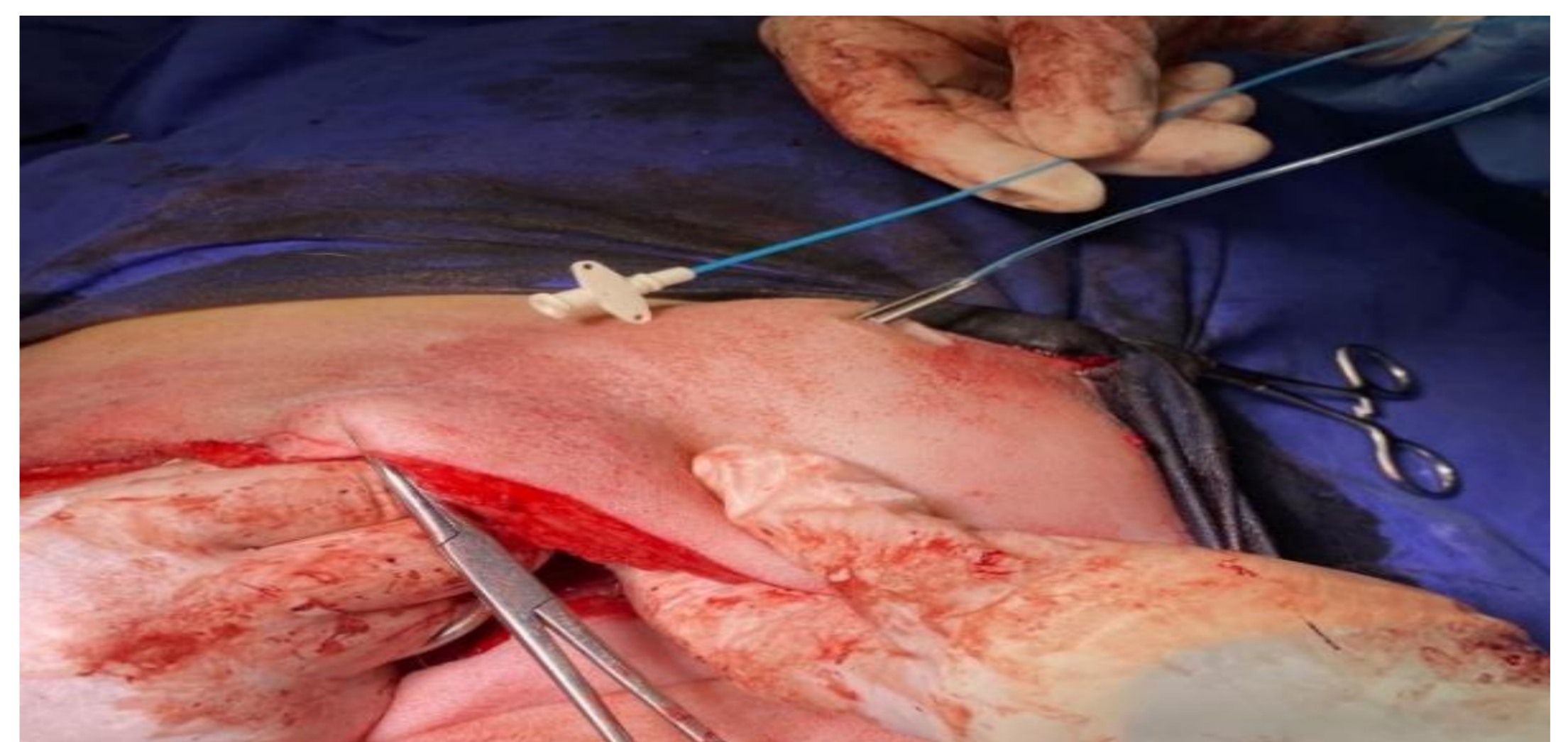
An 8-year-old, female, Golden Retriever weighting 30 kilograms presented to the clinic for a necrotic lesion on the right forelimb. Escharotomy revealed that the underlying necrosis extended through all the soft tissue to the surface of the underlying bone. Forelimb amputation was selected as the appropriate therapeutic approach. The final diagnosis after the blood tests was severe anemia with mild hepatic injury, microfilariosis.

• **Results and discussions**

The forelimb amputation was performed by removing the scapula. The wound soaking catheter was introduced during muscle closure and secured to the skin using Chinese finger trap sutures. Attached to the wound infusion catheter, we utilized an elastomeric pump for infusion. The pump used in this case had a capacity of 100ml and a preset rate of infusion of 2 ml/h. The lidocaine dose used for continuous infusion used was 2 mg/kg/h. After implementing the wound soaking catheter for analgesia, pain assessment was conducted using the Colorado canine acute pain scale every 6 hours for the next 72 hours.

• **Conclusions**

Results demonstrated that employing the wound soaking catheter decreased the need for systemic opioids during the recovery phase, resulting in fewer side effects and no exacerbation of the diagnosed pathologies. Using a multimodal approach, allowed the liver enzymes levels to decrease due to the judicious use of systemic opioids and the use of a unique dose of nonsteroidal anti-inflammatory drugs (NSAIDs).



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