iovet
Instituto de Oncologia Veterinária

vetprecision
oncologia veterinária de precisão

MASTOCITOMA CUTÂNEO CANINO

Prof. Dr. Carlos Eduardo Fonseca Alves

Laboratório VetPrecision

Instituto de Oncologia Veterinária - IOVET

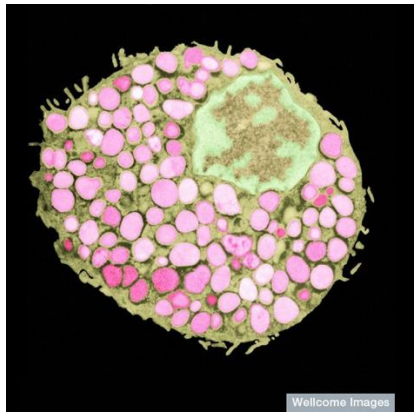
@cadufa
@iovet_sp
@vetprecision

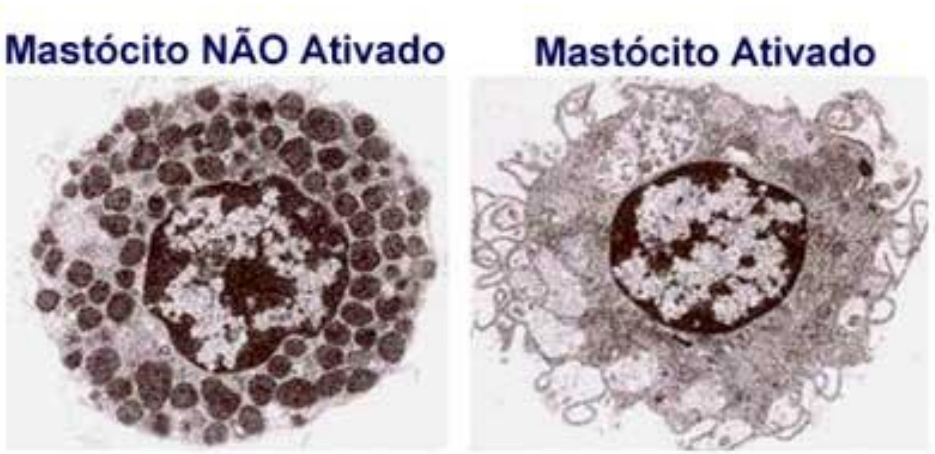
O QUE É O MASTOCITOMA?

- Originados dos mastócitos
- São originados na medula óssea
- Migram para vários órgão até sua maturação (Pulmão e TGI)
- Possuem citoplasma granular
- Grânulos no citoplasma apresentam substância “bioativas”

GRÂNULOS DOS MASTÓCITOS

- Heparina
- Histamina
- TNF-alfa
- Proteases



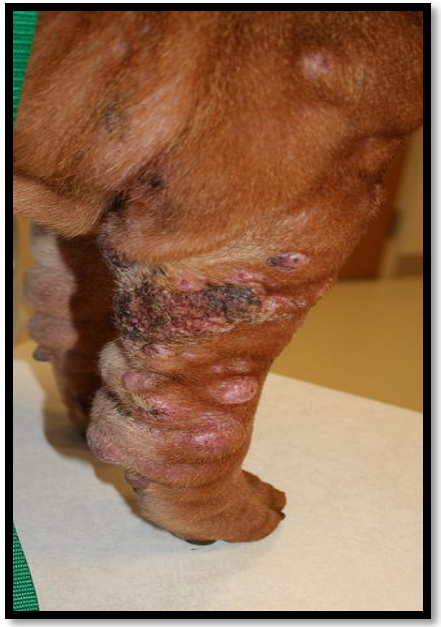


QUAL A FUNÇÃO DOS MASTÓCITOS?

- Diferentes funções de acordo com localização
- Cicatrização de feridas
- Indução de resposta Imune
- Atividade anti-parasitária
- Modulação da resposta a picadas de insetos

ETIOLOGIA

- Inflamação crônica → Dermatopatias
- Mutação do c-KIT
- Raça



Sci Rep. 2020 Jul 28;10(1):12634. doi: 10.1038/s41598-020-69572-0.

Characterization of skin surface and dermal microbiota in dogs with mast cell tumor

Valentina Zamarian [1], Carlotta Catozzi [1], Anna Cuscó [2], Damiano Stefanello [1], Roberta Ferrari [1], Fabrizio Ceciliani [1], Olga Francino [3], Armand Sánchez [3], Valeria Grieco [1], Davide Zani [1], Andrea Talenti [4], Paola Crepaldi [5], Cristina Lecchi [6]

Affiliations + expand

PMID: 32724217 PMCID: PMC7387470 DOI: 10.1038/s41598-020-69572-0

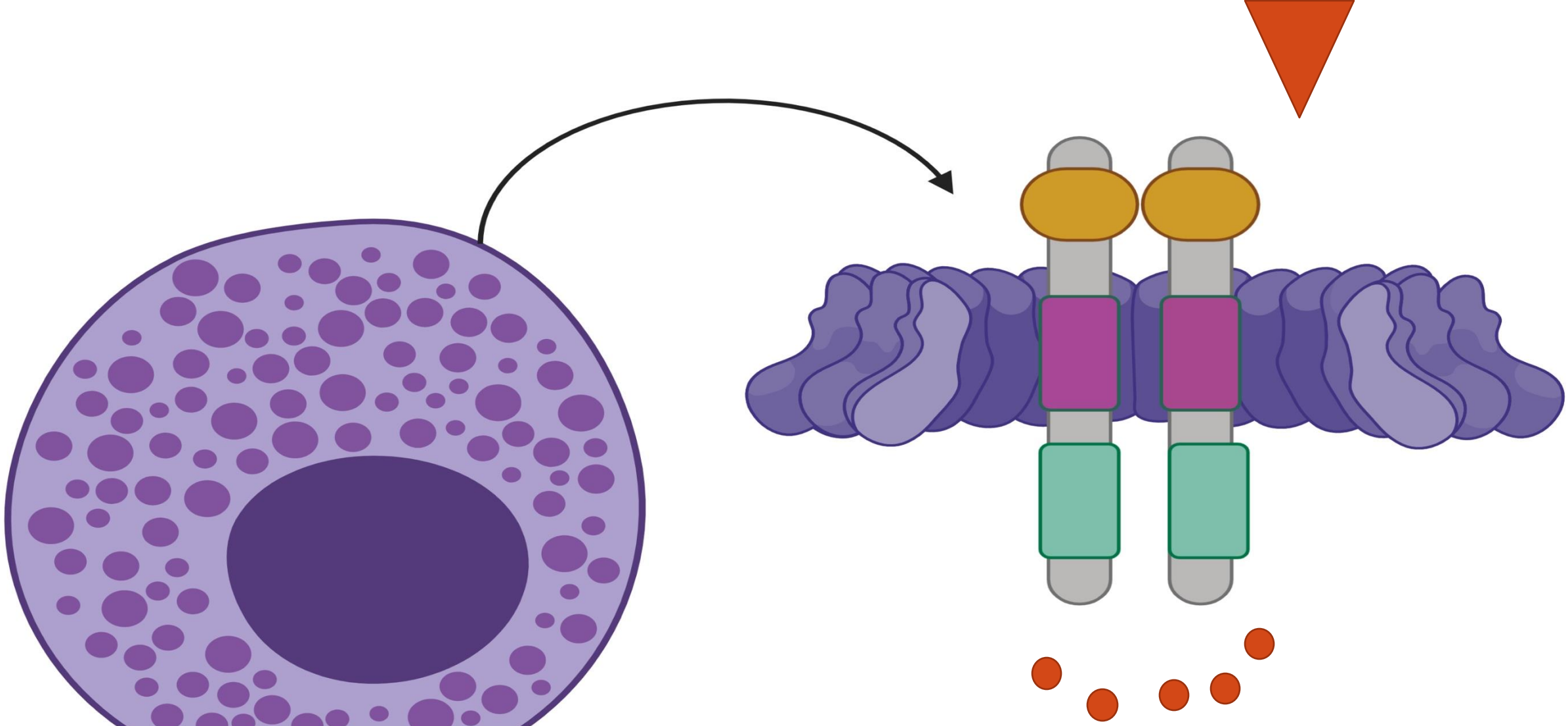
Free PMC article

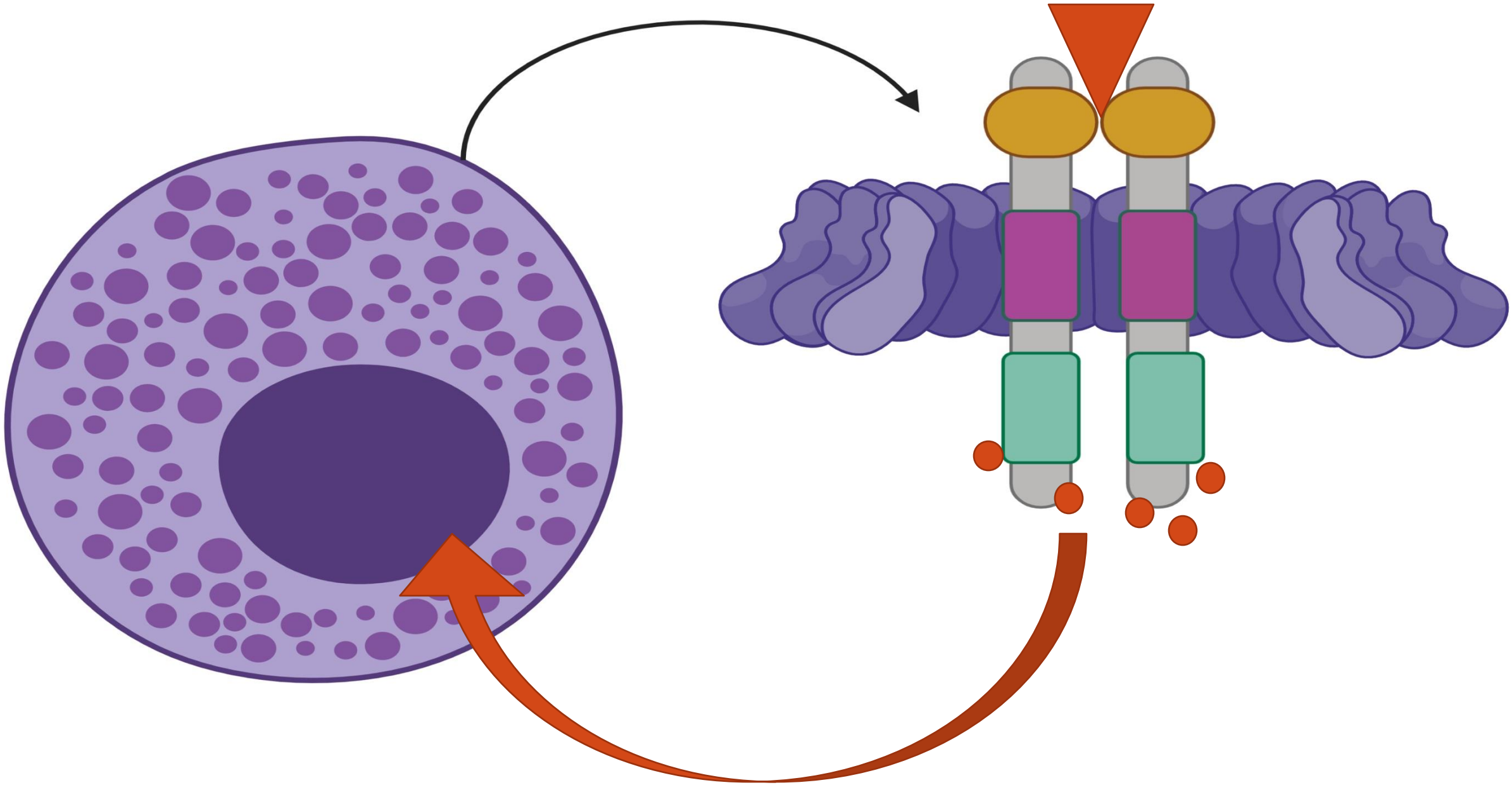
Abstract

The skin microbiota interacts with the host immune response to maintain the homeostasis. Changes in the skin microbiota are linked to the onset and the progression of several diseases, including tumors. We characterized the skin surface and dermal microbiota of 11 dogs affected by spontaneous mast cell tumor (MCT), using skin contralateral sites as intra-animal healthy controls. The microbial profile differed between healthy and tumor skin surfaces and dermis, demonstrating that the change in microbiota composition is related to the presence of MCT. The number of observed taxa between MCT and healthy skin surfaces was detected, showing a decrease in number and heterogeneity of taxa

C-KIT

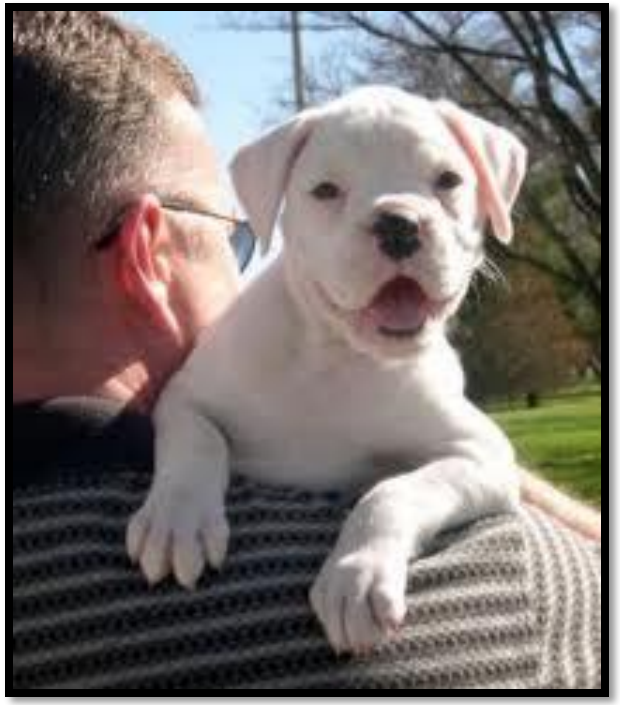
- Proto oncogene
- Mutação no domínio da justamembrana
- Éxon 11

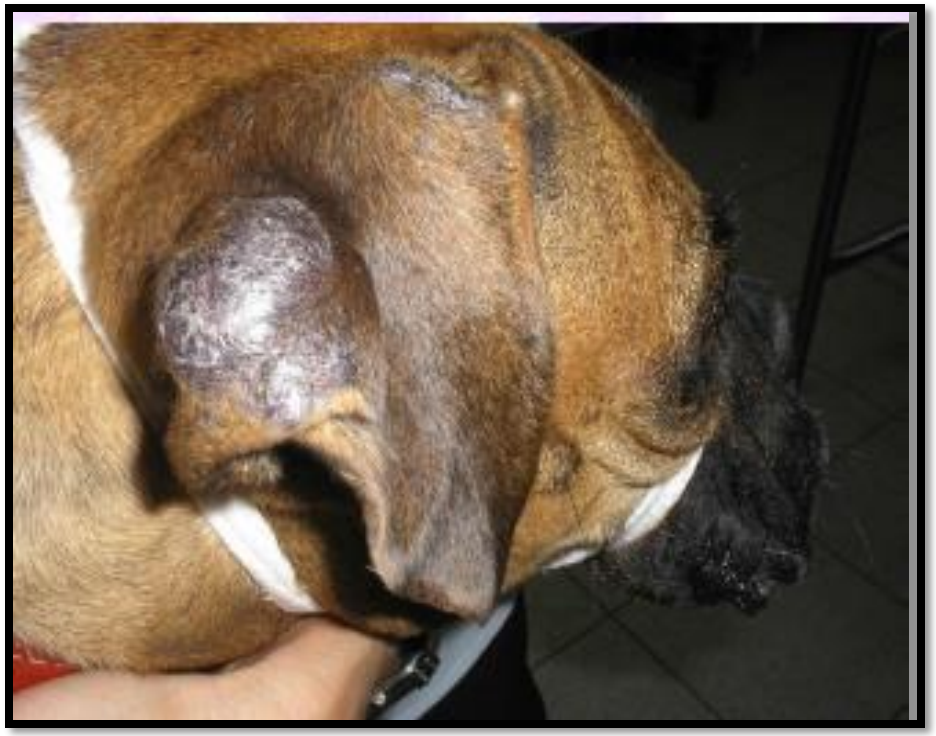




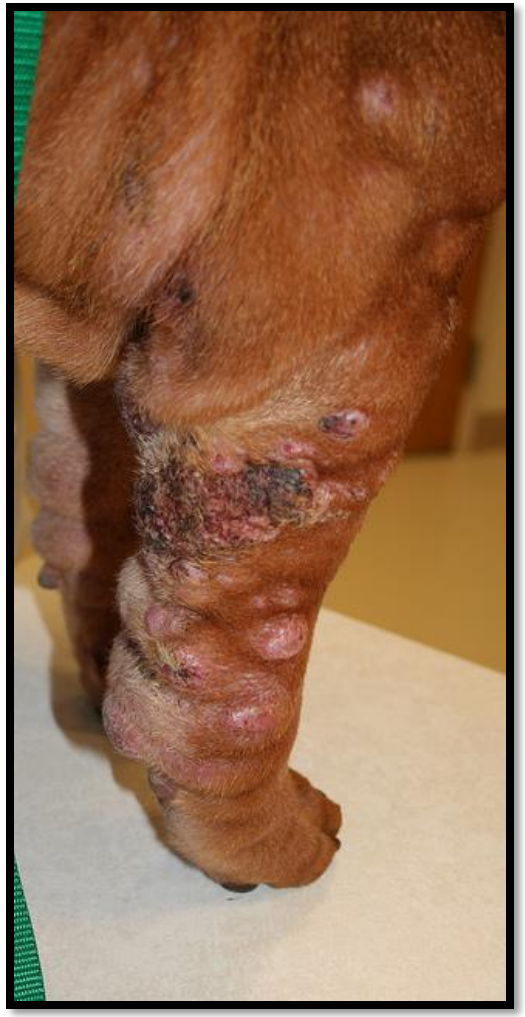
PREDISPOSIÇÃO

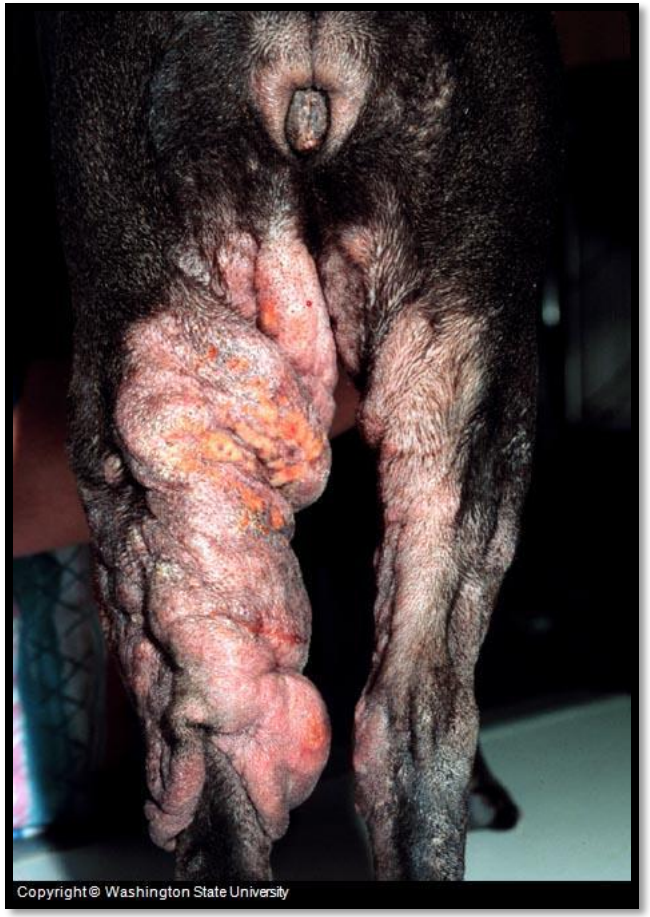
- Boxer
- Boston Terrier
- Labrador retriver
- Beagles
- Schnauzers





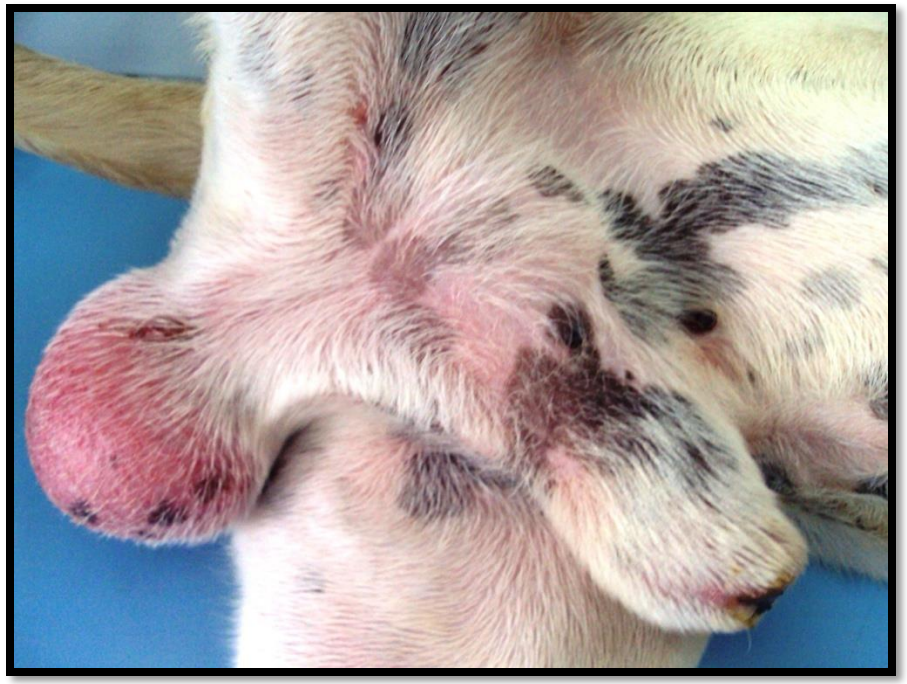
SHARPEI





SINAIS CLÍNICOS

- Sinais Clínicos variáveis
- Aumento de volume
- Inflamação
- Eritema/Hiperemia
- Úlcera
- Fístula

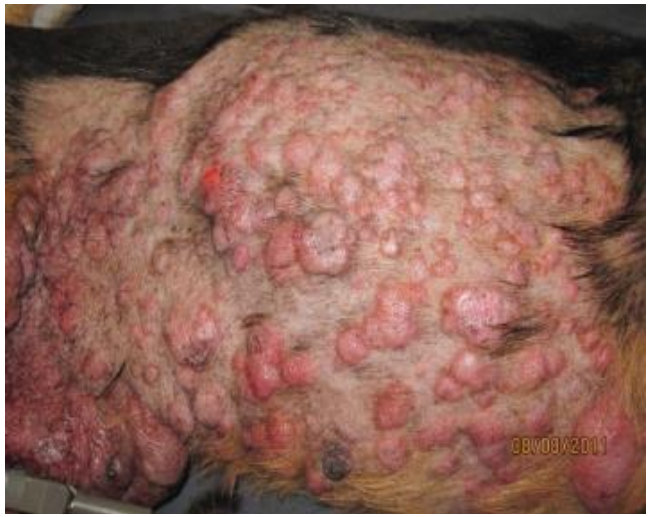


SINAIS CLÍNICOS

- Vômito
- Diarreia
- Apatia
- Hematoquezia/Melena
- Hematêmese

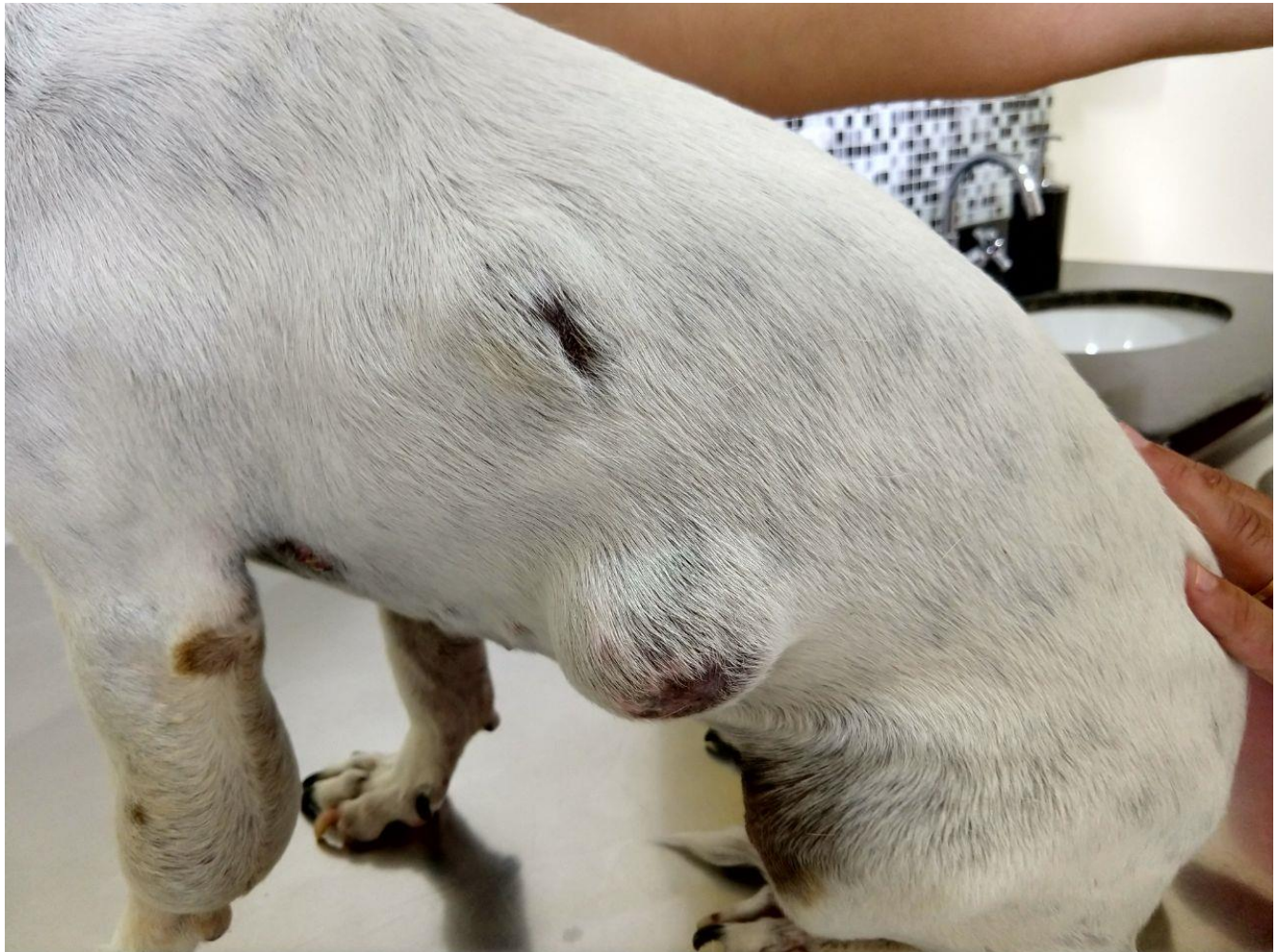
ASPECTO

- Ulceração??
- Inflamação local?
- Edema?
- Nódulo único??

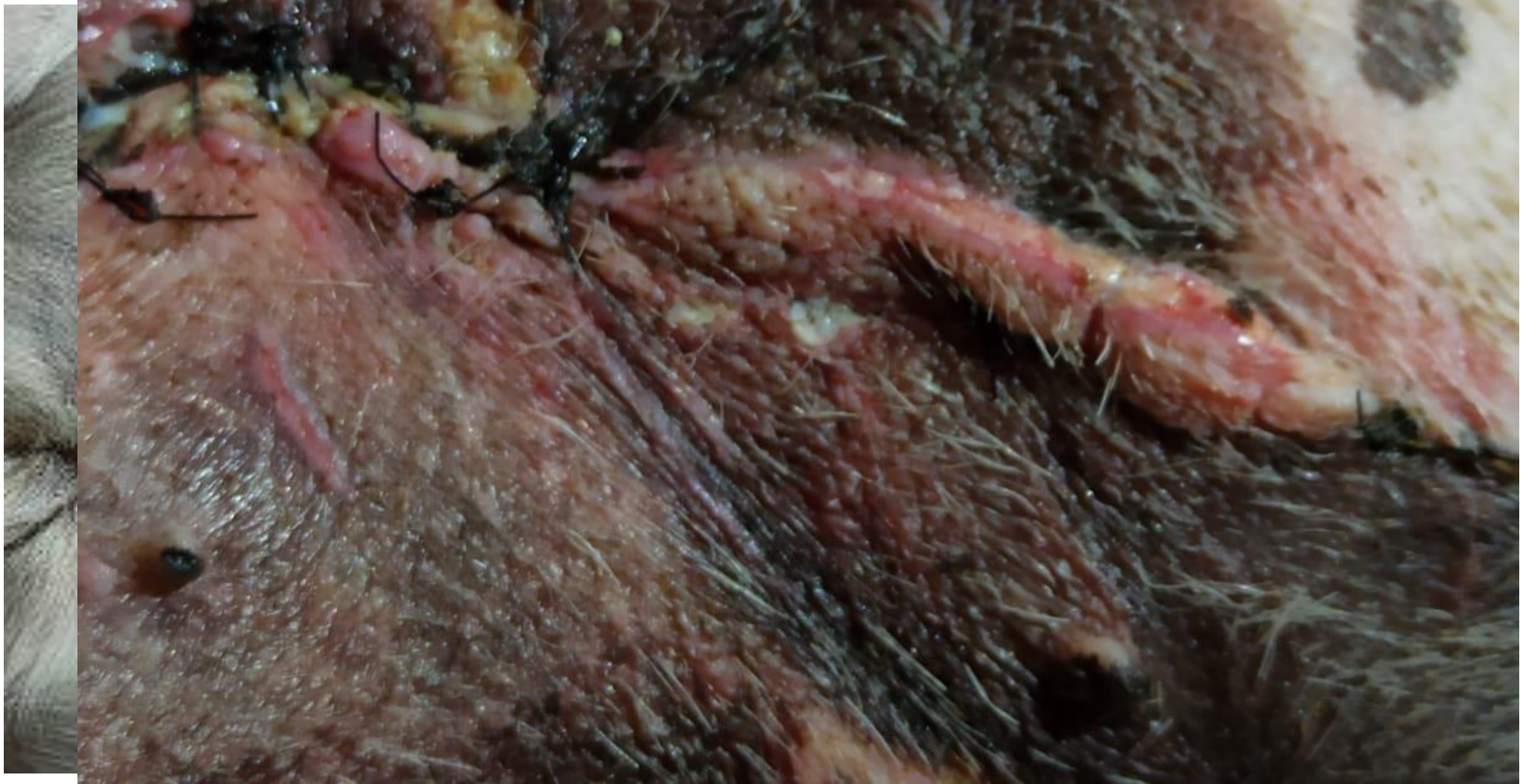


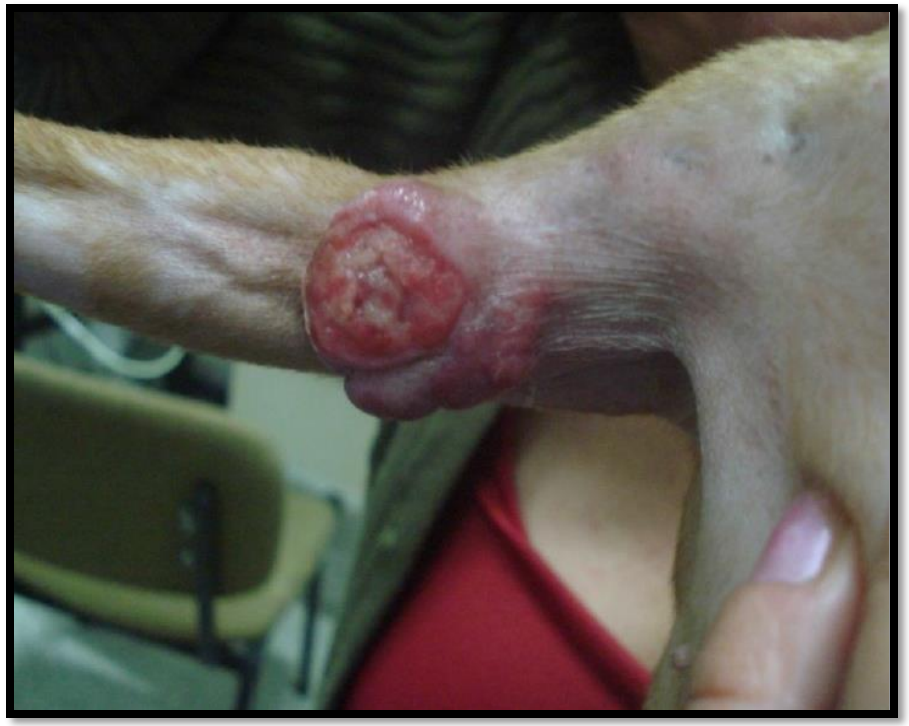
APARÊNCIA CLÍNICA

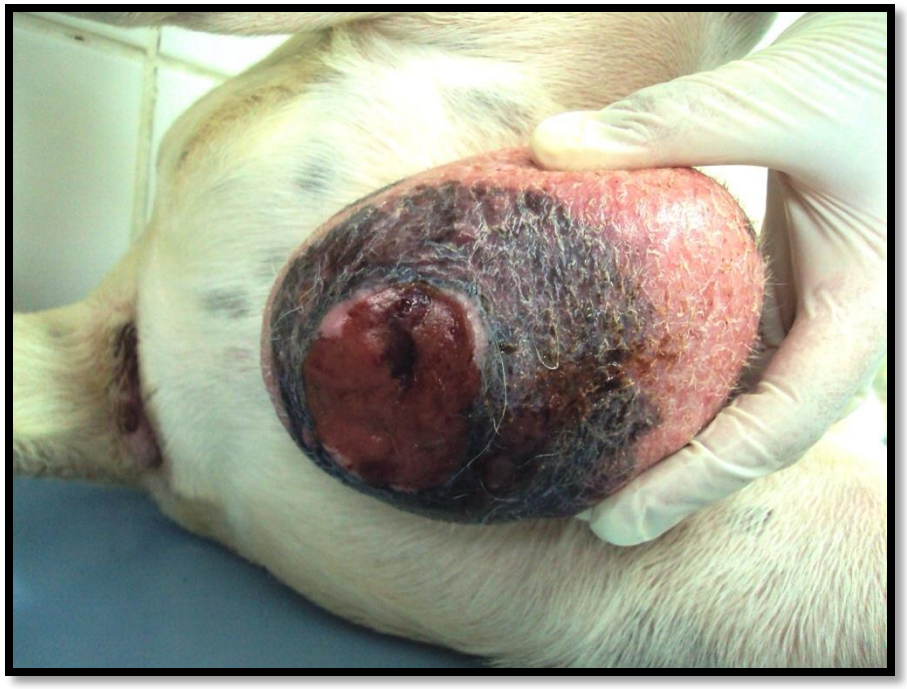
APARÊNCIA CLÍNICA

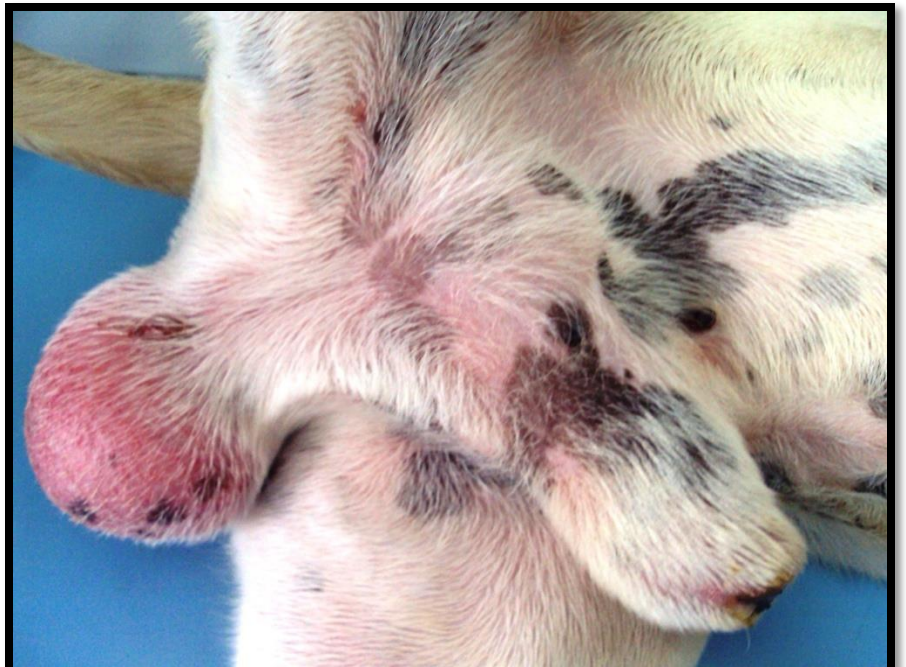


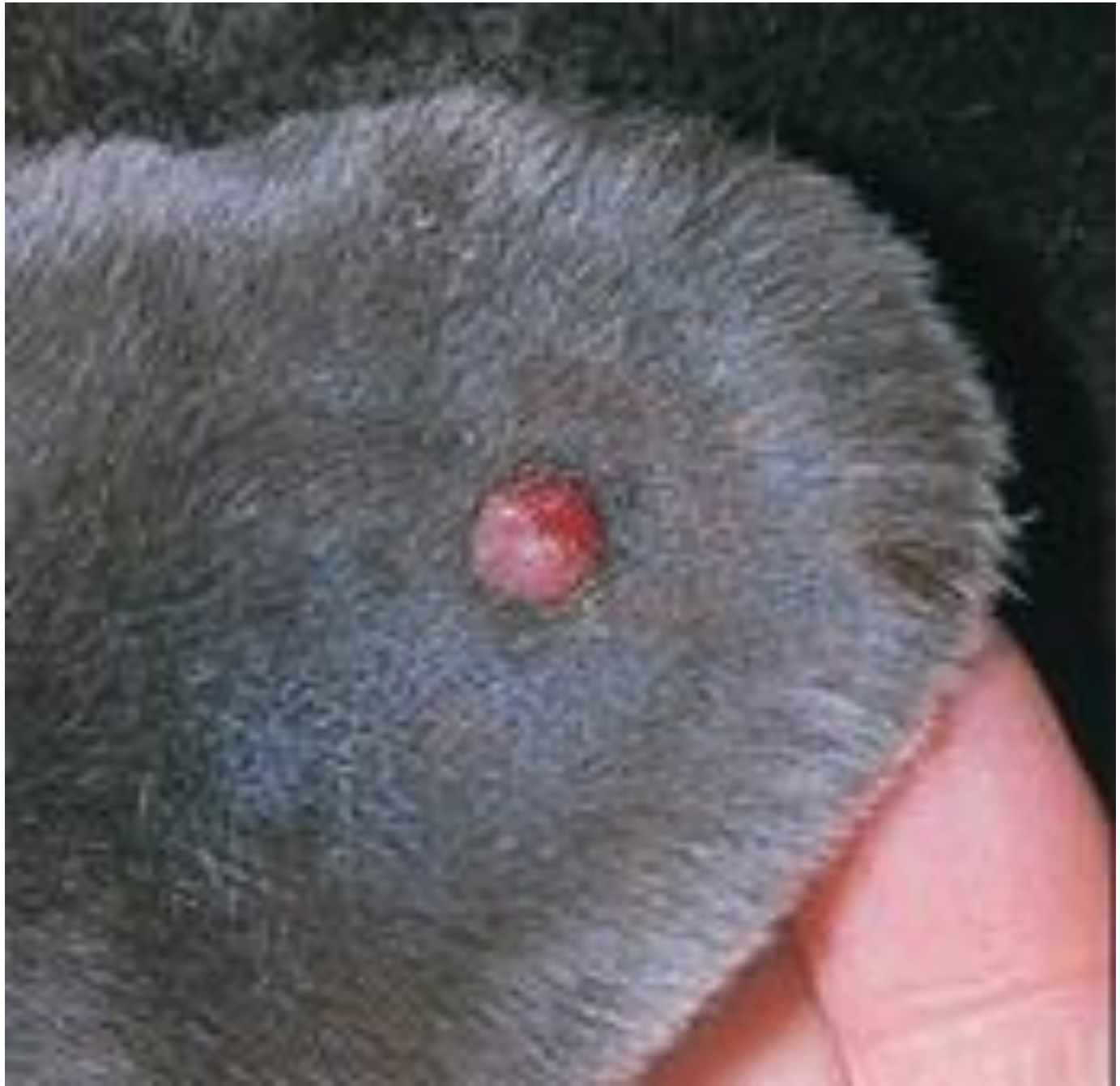
A

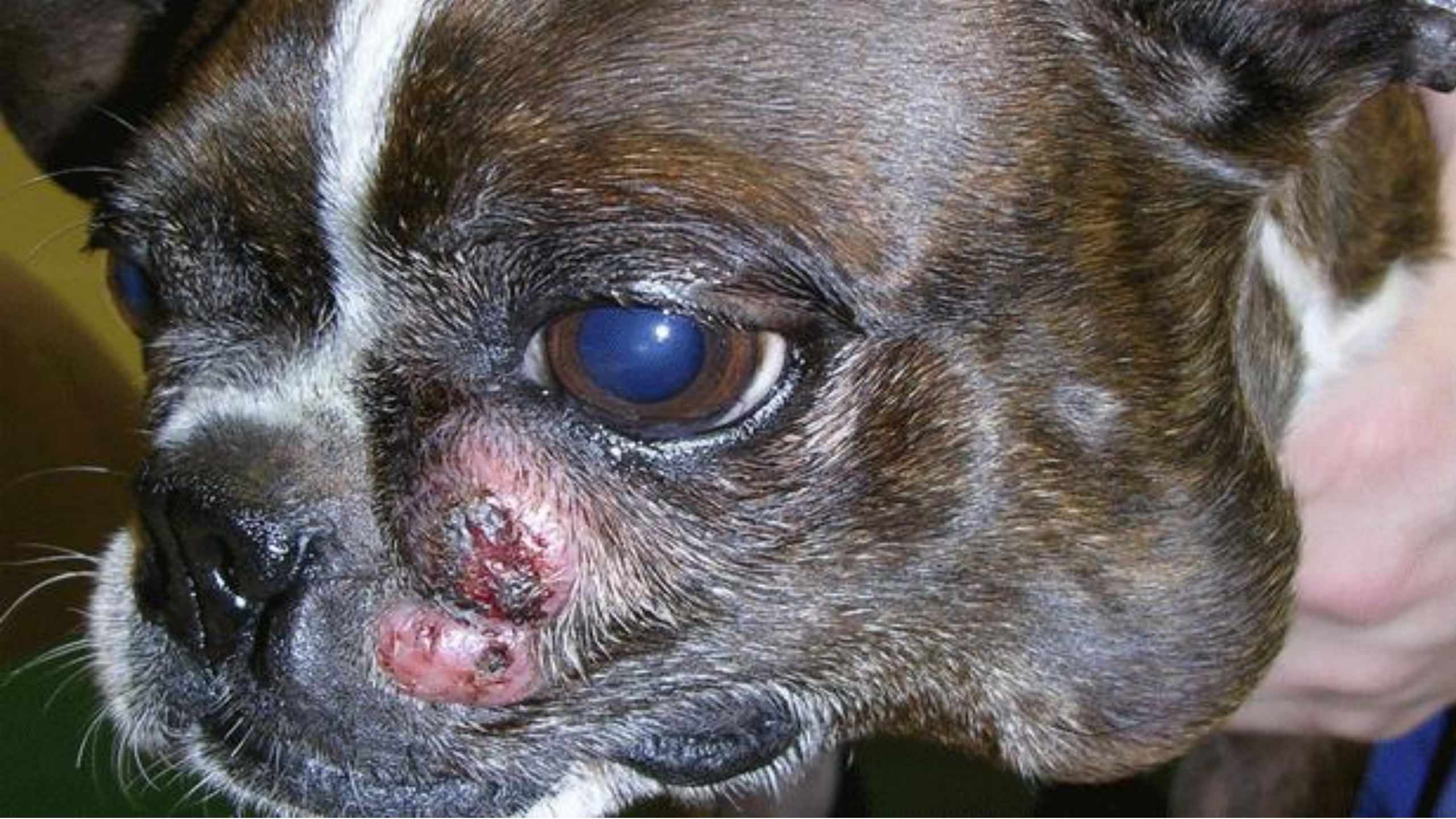






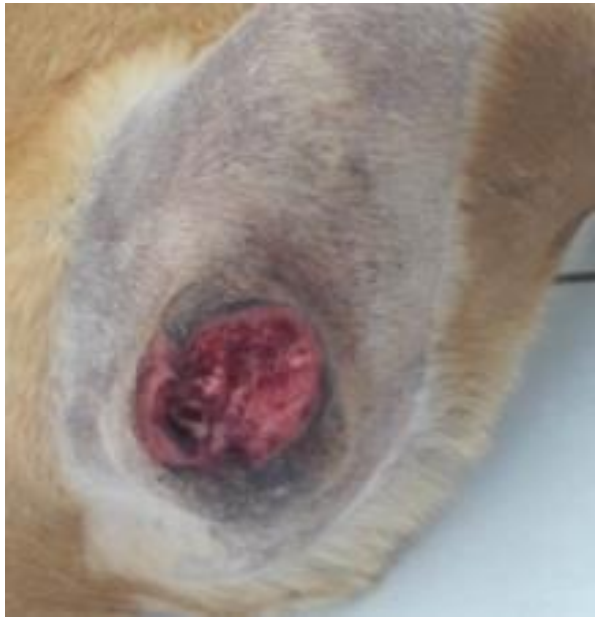






DESAFIOS DO MASTOCITOMA

- Tratamento com prednisona
- Tratamento cirúrgico
- Tratamento com quimioterápicos



DIAGNÓSTICO

- Citologia
- Histopatologia
- Imuno-histoquímica

BMC Vet Res. 2020 Jan 6;16(1):5. doi: 10.1186/s12917-019-2227-8.

A systematic review of surgical margins utilized for removal of cutaneous mast cell tumors in dogs

Laura E Selmic [1], Audrey Ruple [2]

Affiliations + expand

PMID: 31906934 PMCID: PMC6945696 DOI: 10.1186/s12917-019-2227-8

Free PMC article

Abstract

Background: Traditionally, wide lateral surgical margins of 3 cm and one fascial plane deep have been recommended for resection of canine cutaneous mast cell tumor (MCT). Several studies have been published assessing surgical margins of less than this traditional recommendation. The objective of this systematic review was to determine if resection MCT with lateral surgical margins < 3 cm results in low rates of incomplete resection and local tumor recurrence. Systematic searches of digital bibliographic databases were performed with two authors (AR & LES) screening abstracts to identify relevant scientific articles. Studies regarding surgical treatment of dogs with cutaneous MCT were reviewed. Data abstraction was performed and the quality of individual studies and the strength of the body of evidence for utilization of surgical margins < 3 cm for removal of MCTs was assessed.

› Vet Comp Oncol. 2020 Jun 18. doi: 10.1111/vco.12630. Online ahead of print.

Evaluation of a modified proportional margin approach for complete surgical excision of canine cutaneous mast cell tumours and its association with clinical outcome

Harvey Saunders [1], Maurine J Thomson [1], Kathleen O'Connell [1], Janis P Bridges [2], Lincoln Chau [1]

Affiliations + expand

PMID: 32558125 DOI: 10.1111/vco.12630

Abstract

Canine cutaneous mast cell tumours (MCTs) represent a common neoplasm in veterinary practice. Several reported techniques are available to guide surgical excision. Our study examined one hundred cutaneous MCTs that were excised surgically using a modified proportional margin approach. A 2 cm lateral margin upper limit was applied for any tumour diameter that exceeded this size with a deep surgical margin of one fascial plane applied. A retrospective, cross-sectional study with follow-up was used to determine the clinical utility of this excision technique. Associations between explanatory

J Am Vet Med Assoc. 2020 Mar 1;256(5):567-572. doi: 10.2460/javma.256.5.567.

Comparison of lateral surgical margins of up to two centimeters with margins of three centimeters for achieving tumor-free histologic margins following excision of grade I or II cutaneous mast cell tumors in dogs

Margaret L Chu, Galina M Hayes, Joshua G Henry, Michelle L Oblak

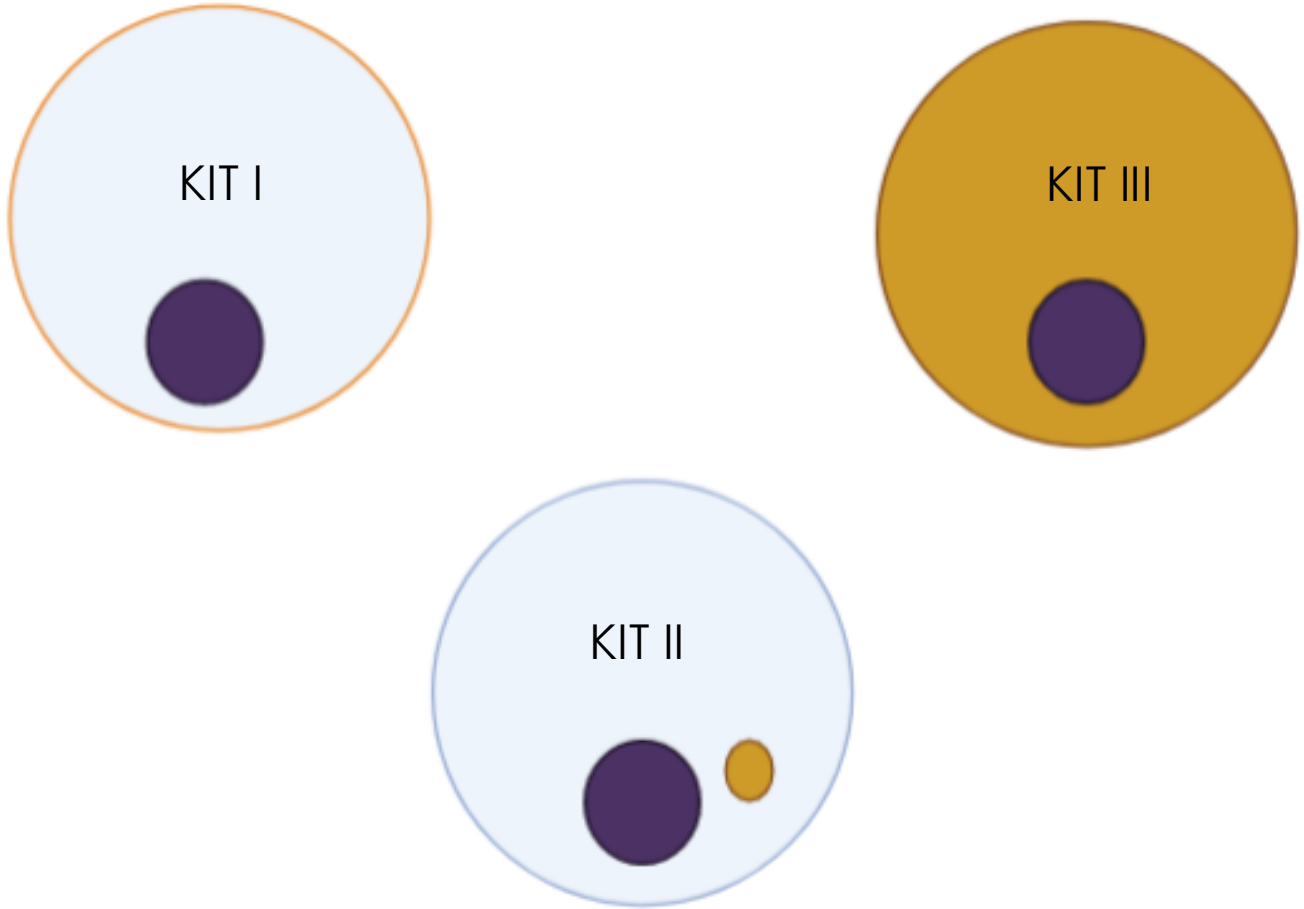
PMID: 32068517 DOI: 10.2460/javma.256.5.567

Abstract

Objective: To determine whether conservative lateral surgical margins (equal to tumor diameter for tumors < 2 cm in diameter or 2 cm for larger tumors) were noninferior to wide (3-cm) lateral surgical margins for achieving tumor-free histologic margins following excision of grade I and II cutaneous mast cell tumors (MCTs) in dogs.

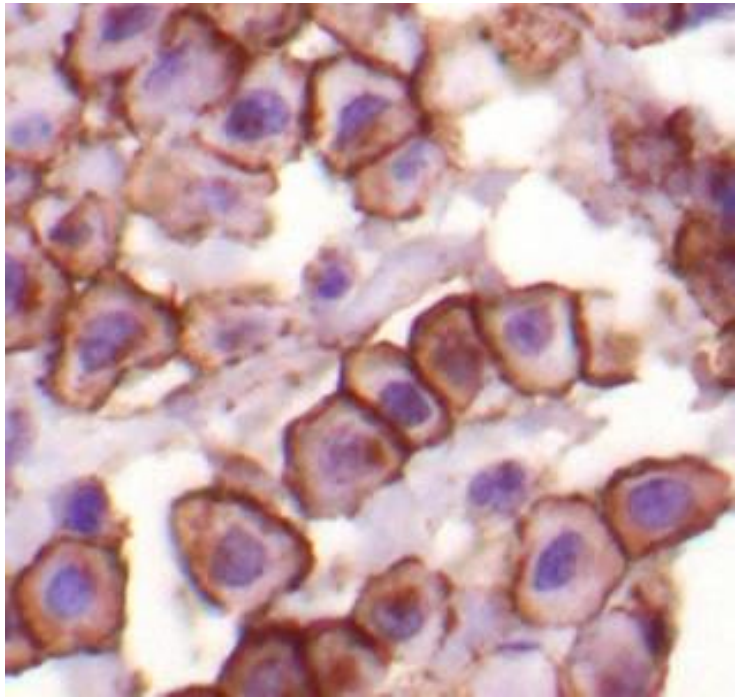
Animals: 83 grade I and II MCTs excised with a deep surgical fascial margin and requisite lateral surgical margins from 68 dogs from 2007 to 2017. Tumors representing scar revision or local

IMUNO-HISTOQUÍMICA

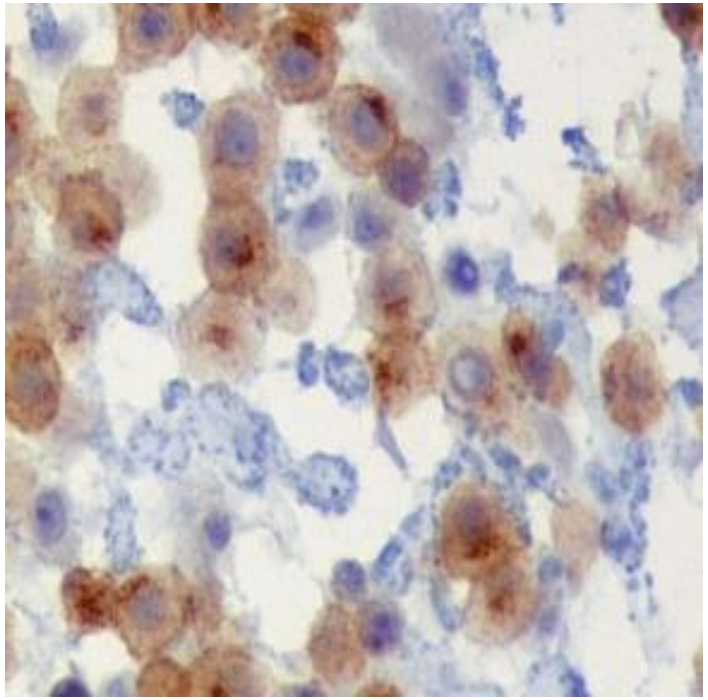


IMUNO-HISTOQUÍMICA

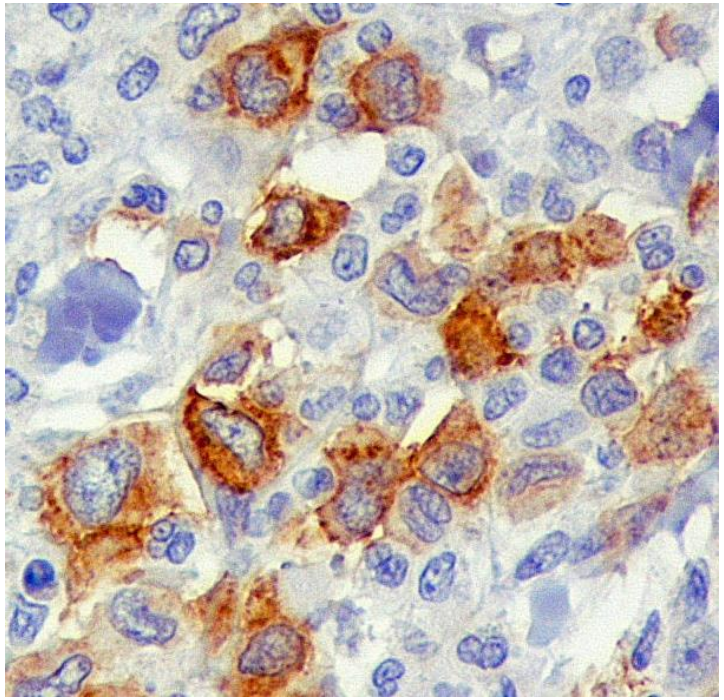
KIT I



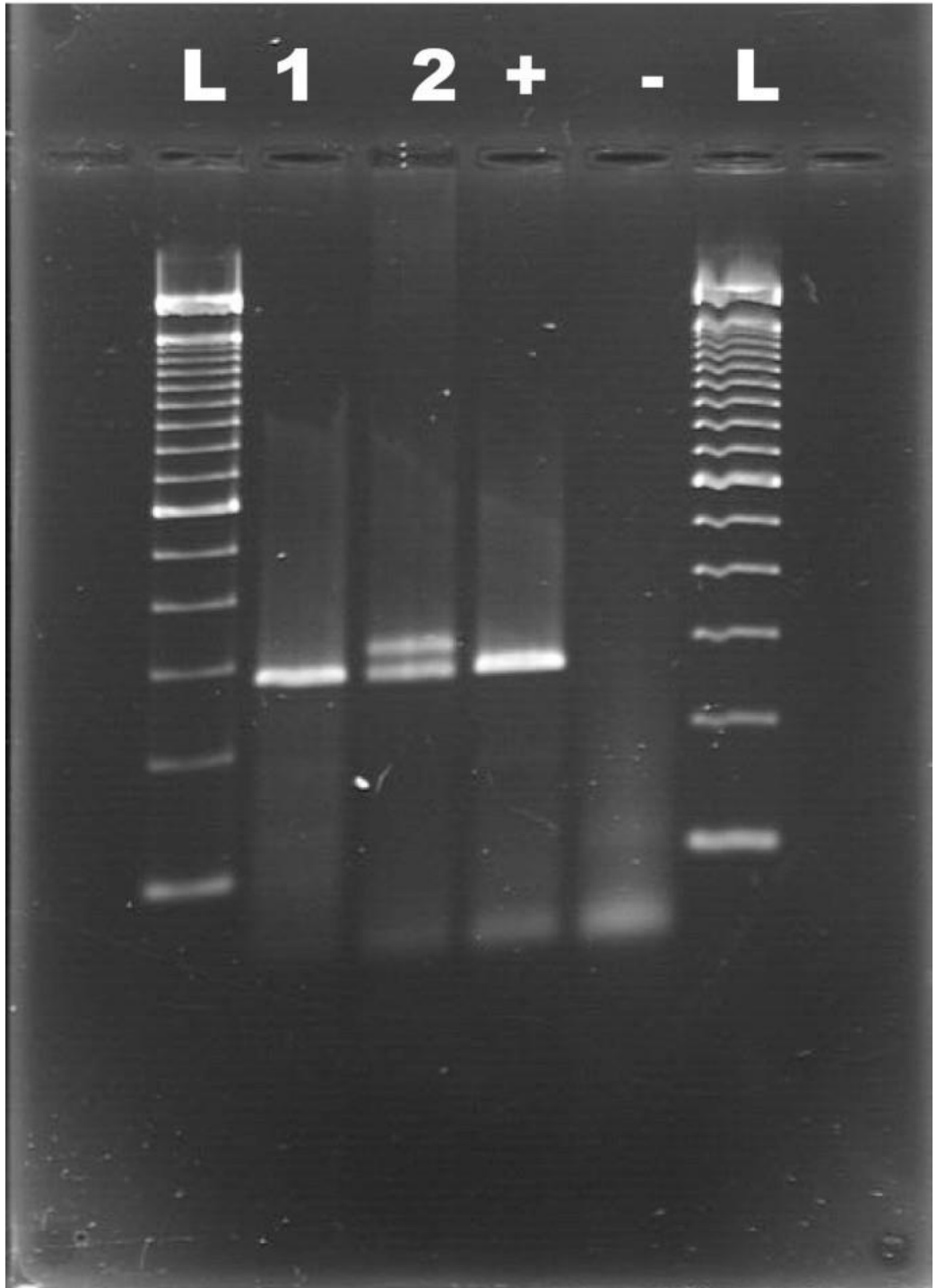
KIT II



KIT III



PCR



› Vet Comp Oncol. 2020 Sep;18(3):389-401. doi: 10.1111/vco.12563. Epub 2020 Jan 7.

Ultrasound is a poor predictor of early or overt liver or spleen metastasis in dogs with high-risk mast cell tumours

Evi Pecceu [1], Juan Carlos Serra Varela [1], Ian Handel [1], Chiara Piccinelli [1], Elspeth Milne [1], Jessica Lawrence [1]

Affiliations + expand

PMID: 31863546 DOI: 10.1111/vco.12563

Abstract

Conflicting evidence exists regarding the importance of routine abdominal ultrasound (US) with hepatic and splenic fine needle aspiration (FNA) cytology during staging of canine mast cell tumours (MCT). The objective of this study was to correlate ultrasonographic and cytologic findings in dogs with strictly defined high-risk MCTs and to determine the influence on outcome. Our hypothesis was that US poorly predicts visceral metastasis in high-risk MCTs and that early metastasis is associated with improved outcome when compared to overt metastasis. US of liver and spleen correlated to cytologic results, categorized as no metastasis, early metastasis or overt metastasis. Of 82 dogs prospectively enrolled, 18% had early visceral metastasis and 7% had overt metastasis on cytology; 67% with visceral metastasis had regional LN metastasis. US was a poor predictor of metastasis with

Open Access Review

Diagnosis, Prognosis and Treatment of Canine Cutaneous and Subcutaneous Mast Cell Tumors

by Andrigo Barboza de Nardi [1], Rodrigo dos Santos Horta [2], Carlos Eduardo Fonseca-Alves [3,4], Felipe Noleto de Paiva [1], Laís Calazans Menescal Linhares [1], Bruna Fernanda Firmo [5], Felipe Augusto Ruiz Sueiro [6], Krishna Duro de Oliveira [7], Silvia Vanessa Lourenço [8], Ricardo De Francisco Strefezzi [9], Carlos Henrique Maciel Brunner [10], Marcelo Monte Mor Rangel [11], Paulo Cesar Jark [12], Jorge Luiz Costa Castro [13], Rodrigo Ubukata [14], Karen Batschinski [14], Renata Afonso Sobral [15], Natália Oyafuso da Cruz [16], Adriana Tomoko Nishiya [17], Simone Crestoni Fernandes [18], + Show full author list

ONCOLOGY-PATHOLOGY WORKING GROUP

MCT Subgroup, Prognostic & Predictive Markers

Chair: Doug Thamm, DVM MS DACVIM (Oncology)

Co-Chair: Josh Webster, DVM PhD DACVP (AP)

Focus: Prognostic and predictive significance of KIT expression and c-kit mutations in canine cutaneous mast cell tumors

MCT Subgroup, Update on Grading

Chair: Davide Berlato, DECVIM-CA (Onc) MSc (Clinical Onc) PhD MRCVS

Co-Chair: Roberta Rassoto, DVM PhD MRCVS DECVP (AP)

Focus: Update to the current OPWG CCMCT consensus on grading (est. Feb 2013)

IM E MARCADORES DE PROLIFERAÇÃO

Vet Pathol 44:335–341 (2007)

Mitotic Index Is Predictive for Survival for Canine Cutaneous Mast Cell Tumors

E. M. Romansik, C. M. Reilly, P. H. Kass, P. F. Moore, and C. A. London

Veterinary Medical Teaching Hospital, School of Veterinary Medicine, UC Davis, CA (EMR); Departments of Pathology, Microbiology, and Immunology (CMR, PFM); and Population Health and Reproduction (PHK), School of Veterinary Medicine, UC Davis, CA; and Department of Veterinary Biosciences, College of Veterinary Medicine, The Ohio State University, Columbus, OH (CAL)

IM $\leq$ 5: 70 meses

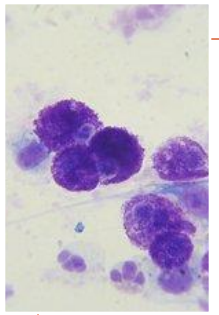
IM $\geq$ 5: 2 meses

TRATAMENTO DO MASTOCITOMA CUTÂNEO CANINO

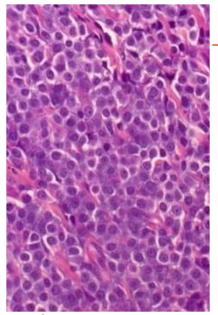
O QUE DEVE SER LEVADO EM CONSIDERAÇÃO AO INDICAR UM PROTOCOLO TERAPÊUTICO?

Estadiamento do Mastocitoma de acordo com a WHO

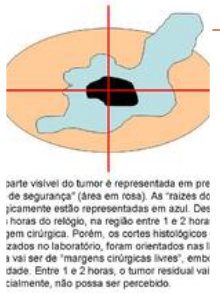
Estadio	Descrição
0	Tumor único, excisado de forma incompleta da derme, identificado histologicamente, sem metástase em linfonodo. 1. Sem sinais sistêmicos 2. 2. Com sinais sistêmicos
I	Tumor único confinado à derme, sem envolvimento de linfonodo regional. 1. Sem sinais sistêmicos 2. 2. Com sinais sistêmicos
II	Tumor único confinado à derme, com envolvimento de linfonodo regional. 1. Sem sinais sistêmicos 2. Com sinais sistêmicos
III	Múltiplos tumores dermais, grandes e infiltrativo com ou sem envolvimento de linfonodo regional. 1. Sem sinais sistêmicos 2. Com sinais sistêmicos
IV	Qualquer tumor com metástase à distância, incluindo envolvimento sanguíneo e de MO



Confirmar



Graduação



Margens

- Histopatológico → Qual grau? Qual classificação?
- Critérios Histopatológicos → IM
- Critérios Clínicos → tamanho? ulceração? localização?
- Imuno-histoquímica*

Mastocima de Baixo/intermediário Grau – estádio o ou 1

O local anatômico permite cirurgia radical?

SIM

Retirar com margem, confirmar grau e margem.

Margem cirúrgica completa?

SIM

Acompanhamento: 1, 3, 9, 12, 15, 18 meses.
A cada 6 meses
Exame físico e linfonodo

Não

Não

Ideal: citorredução com cirurgia + radioterapia.
Alternativas:
- Citorredução + tratamento clínico
- Radioterapia sozinha
- Quimioterapia sozinha
- Amputação

Opções:
- Nova intervenção cirúrgica
- Radioterapia adjuvante
- Quimioterapia Adjuvante

Mastocima de alto grau

O local anatômico permite cirurgia radical?

SIM

Retirar com margem, confirmar grau e margem.

Margem cirúrgica completa?

SIM

Quimioterapia Adjuvante
Radioterapia linfonodo regional

Acompanhamento: 1, 3, 9, 12, 15, 18 meses.
A cada 6 meses
Exame físico e linfonodo

Não

Ideal a combinação:
- Redução com cirúrgica + radioterapia.
- Radioterapia Adjuvante
- Quimioterapia Adjuvante

Alternativas:
- Citorredução cirúrgica + tratamento clínico
- Radioterapia sozinha
- Quimioterapia sozinha
- Amputação

Opções:
- Nova intervenção cirúrgica
- Radioterapia adjuvante
- Quimioterapia Adjuvante

Vet Comp Oncol. 2020 Sep;18(3):409-415. doi: 10.1111/vco.12566. Epub 2020 Jan 17.

Adjuvant medical therapy provides no therapeutic benefit in the treatment of dogs with low-grade mast cell tumours and early nodal metastasis undergoing surgery

Laura Marconato [1], Damiano Stefanello [2 3], Matti Kiupel [4], Riccardo Finotello [5], Gerry Polton [6], Federico Massari [7], Roberta Ferrari [2 3], Chiara Agnoli [1], Ombretta Capitani [1], Chiara Giudice [2 3], Luca Aresu [8], Maria Elisabetta Vasconi [9], Antonella Rigillo [1], Silvia Sabattini [1]

Affiliations + expand

PMID: 31930651 DOI: 10.1111/vco.12566

Abstract

Lymph node (LN) metastasis is a negative prognostic factor in dogs with cutaneous mast cell tumours (cMCTs). While elective lymphadenectomy of metastatic LNs improves outcome, the benefit of adjuvant medical therapy in dogs with early metastatic (HN2) LNs is debated. The aim of this retrospective multicentre study was to evaluate the therapeutic benefit of adjuvant medical therapy following surgical removal of the primary low-grade cMCT (Patnaik grade 1-2 and Kiupel low-grade)

› Vet Comp Oncol. 2020 Sep;18(3):402-408. doi: 10.1111/vco.12565. Epub 2020 Jan 14.

Retrospective outcome evaluation for dogs with surgically excised, solitary Kiupel high-grade, cutaneous mast cell tumours

Antony S Moore [1], Angela E Frimberger [1], David Taylor [2], Neill Sullivan [3]

Affiliations + expand

PMID: 31916687 DOI: 10.1111/vco.12565

Abstract

Published outcomes for dogs with specifically high-grade mast cell tumours (MCTs), controlled for clinical stage, are few. Clinical outcomes for 49 dogs with Kiupel high-grade, clinical stage I, cutaneous MCTs were evaluated. Median survival time (MST) was 1046 days; 1 and 2-year survival rates were 79.3% and 72.9%, respectively. At study end 24 dogs had died, 23 dogs were alive (median follow-up 980 days) and 2 dogs were lost to follow-up. Death was considered MCT-related in 14 of 20 dogs with a known cause of death. Local tumour recurrence developed in nine dogs (18.4%); regional lymph node metastasis occurred in six dogs (12.2%); and a new MCT developed in 15 dogs (30.1%). Tumour location, histologic margin size and use of chemotherapy did not affect MST; increasing mitotic count (P = .001) and increasing tumour diameter (P = .024) were independently negatively prognostic. Six

› Vet Comp Oncol. 2020 Jun;18(2):239-246. doi: 10.1111/vco.12541. Epub 2019 Oct 29.

Treating the locoregional lymph nodes with radiation and/or surgery significantly improves outcome in dogs with high-grade mast cell tumours

Susan E Mendez [1], Kenneth J Drobatz [1], Lilian E Duda [1 2], Pamela White [3], Lyndsay Kubicek [4], Karin U Sorenmo [2 5]

Affiliations + expand

PMID: 31509648 DOI: 10.1111/vco.12541

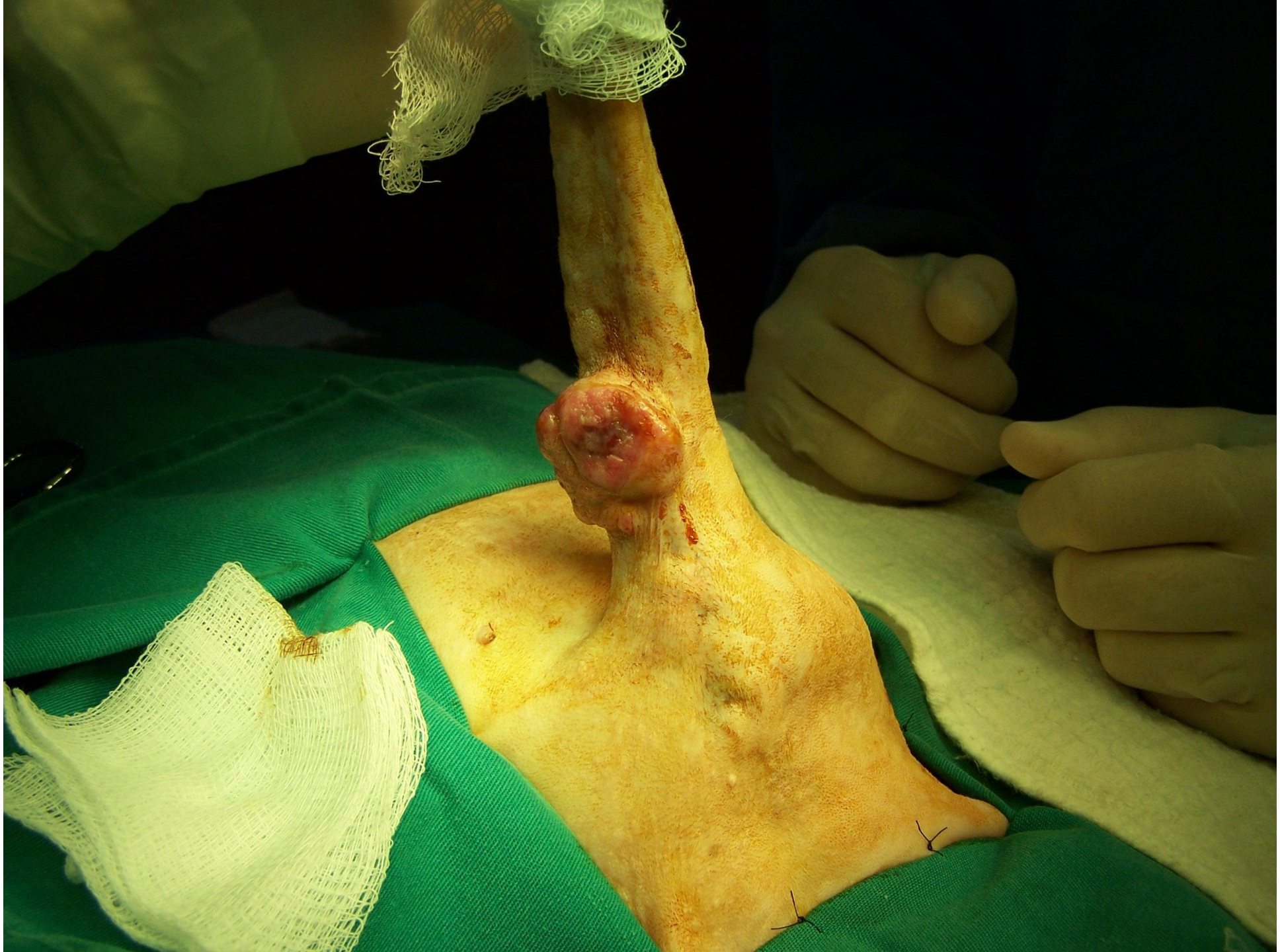
Abstract

High-grade canine mast cell tumours (HG-MCT) have a high rate of locoregional relapse. In this study, dogs with HG-MCT treated with radiation therapy (RT) were retrospectively evaluated to determine the benefit associated with treating the locoregional lymph nodes (LNs). Forty-two dogs were included. Variables assessed for association with overall survival (OS) and progression-free survival (PFS) included WHO stage, tumour location and size, LN irradiation (prophylactic, therapeutic or none), LN treatment (yes or no), LN status at RT (metastatic or nonmetastatic) and RT intent (definitive vs palliative). Lower-stage disease at irradiation was significantly associated with prolonged median

Open Access Review

Diagnosis, Prognosis and Treatment of Canine Cutaneous and Subcutaneous Mast Cell Tumors

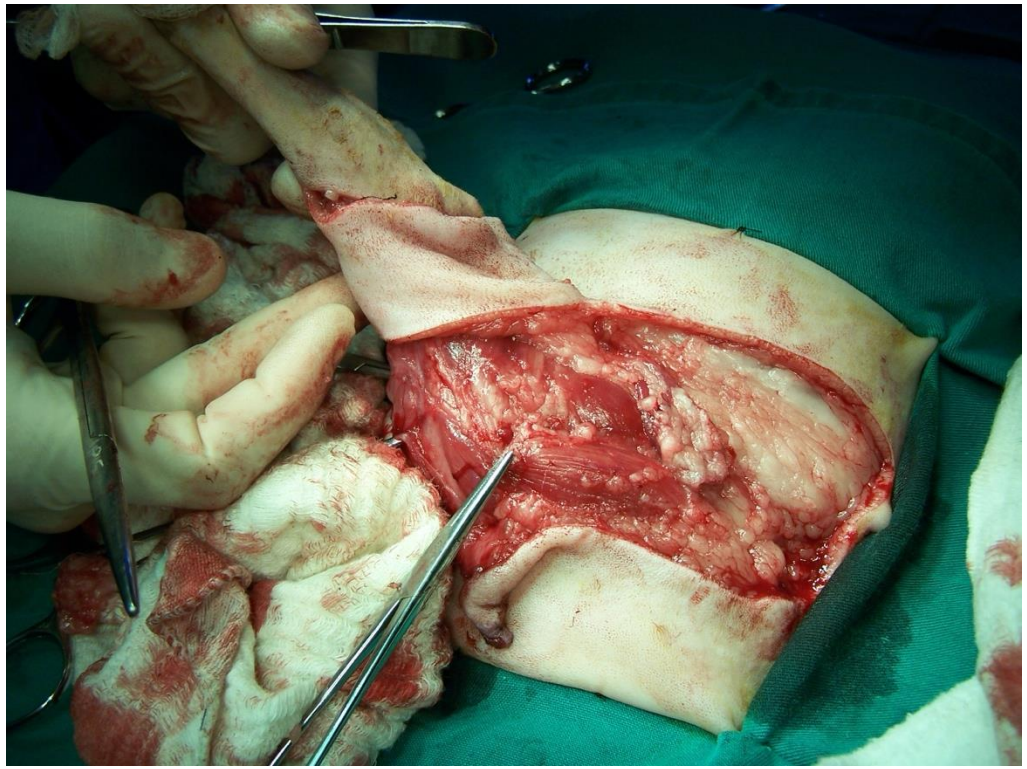
by Andrigo Barboza de Nardi [1], Rodrigo dos Santos Horta [2], Carlos Eduardo Fonseca-Alves [3,4], Felipe Noleto de Paiva [1], Laís Calazans Menescal Linhares [1], Bruna Fernanda Firmo [5], Felipe Augusto Ruiz Sueiro [6], Krishna Duro de Oliveira [7], Silvia Vanessa Lourenço [8], Ricardo De Francisco Strefezzi [9], Carlos Henrique Maciel Brunner [10], Marcelo Monte Mor Rangel [11], Paulo Cesar Jark [12], Jorge Luiz Costa Castro [13], Rodrigo Ubukata [14], Karen Batschinski [14], Renata Afonso Sobral [15], Natália Oyafuso da Cruz [16], Adriana Tomoko Nishiya [17], Simone Crestoni Fernandes [18], + Show full author list



TRATAMENTO

- Cirurgia??

- 3 cm de margens



CITORREDUÇÃO

- Tumor sem possibilidade de ressecção cirúrgica com margem
- Tumores com edema
- Inflamação peritumoral
- Minimizar células na margem cirúrgica??

PROTOCOLOS DE QUIMIOTERAPIA

- Vimblastina + Prednisona

- Vimblastina → 2 mg/m2 IV, Semanalmente por 4 semanas, a cada 15 dias 8 semanas

- Prednisona → 2mg/kg, PO q24, 1 semana; 1 mg/kg, PO q24 por 2 semanas. Caso seja prolongado o protocolo com vimblastina, manter prednisona a 1 mg/kg, PO q24h.

*Protocolo pode ser utilizado por até 6 meses

PROTOCOLOS DE QUIMIOTERAPIA

- Lomustina → 70mg/m2 PO, q21d por 4 ciclos

*4 – 6 ciclos

PROTOCOLOS DE QUIMIOTERAPIA

- Vimblastina e Lomustina
- Vimblastina → 2 mg/m2 IV, Dia 0 = vimblastina, dia 7: Lomustina, Dia 28: Vimblastina.
- Lomustina → 70mg/m2 PO, q21d
- Prednisona → 1mg/kg, PO q24, 1 semana; 0.5 mg/kg, PO q24

*4 – 6 ciclos

PROTOCOLOS DE QUIMIOTERAPIA

*Não publicado

- Vimblastina/lomustina e prednisona
- Vimblastina 2 mg/m2 IV, 1 semana e próxima após 4 semanas.
- Lomustina 70mg/m2 PO, q21d
- Prednisona 0.5 mg/kg, PO, q24h

*Protocolo contínuo por 6 meses

PROTOCOLOS DE QUIMIOTERAPIA

- Vimblastina, Ciclofosfamida e Prednisona

- Vimblastina → 2 a 3 mg/m2 IV dia 1.

- Ciclofosfamida → 50mg/m2, PO do 8 ao 11 dia.

(dividir a dose)

- Prednisona → 1 mg/kg q24 durante todo o período

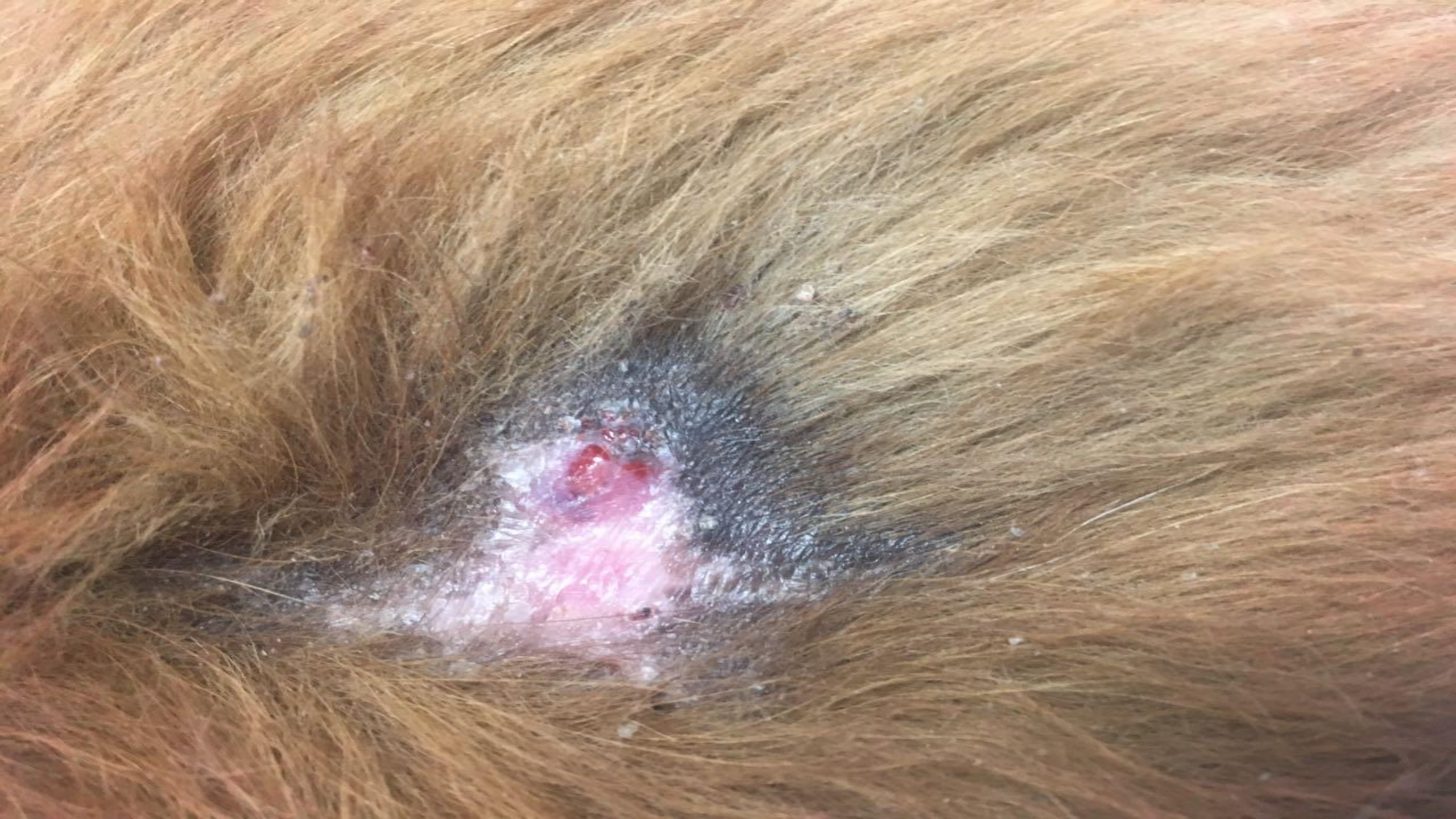
*Protocolo por até 6 meses

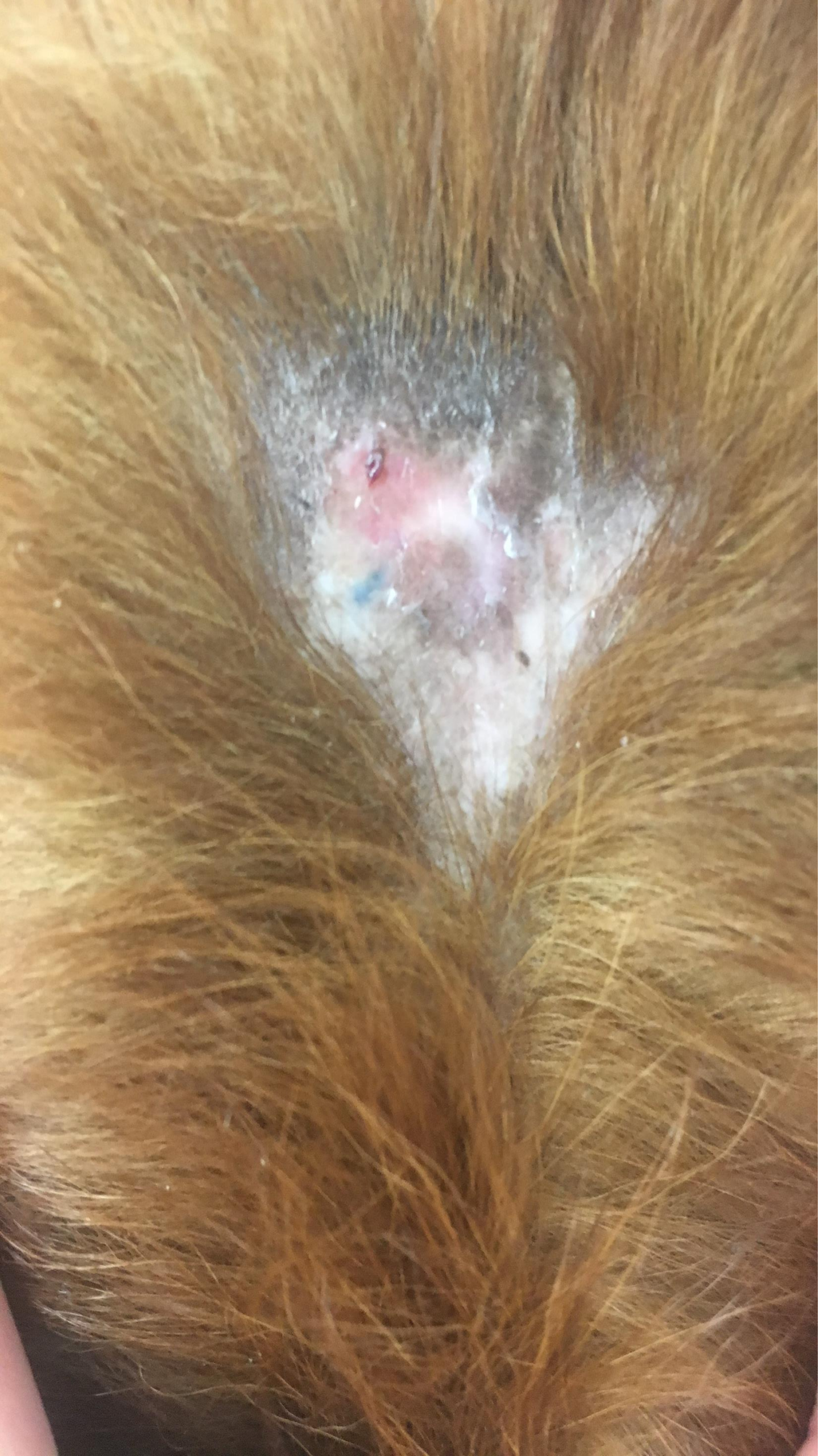
TRATAMENTO SUPORTE

- Antagonista de H2
- Cimetidina: 4mg/kg PO, q8h
- Ranitidina: 2mg/kg PO, q12-24h
- Famotidina: 0.5 -1 mg/kg
- Inibidor de Próton – Omeprazol: 0.5 – 1 mg/kg
- Difenidramina 2-4 mg/kg PO, 12q
- Sucralfato – animais com sinais clínicos

VIMBLASTINA E PREDNISONA

- Animais com mastocitoma Grau II
- Classificação histológica – baixo grau
- Margem comprometida
- Recidiva em curto período de tempo





Veterinary Medicine and Science
Open Access

Vet Med Sci. 2016 Nov; 2(4): 266–280.
Published online 2016 Sep 5. doi: 10.1002/vms3.42

PMCID: PMC5645846
PMID: 29067202

Tolerability of a rapid-escalation vinblastine-prednisolone protocol in dogs with mast cell tumours

Juan Carlos Serra Varela,[1] Evi Pecceu,[1] Ian Handel,[1] and Jessica Lawrence[1]

Author information ▶ Article notes ▶ Copyright and License information ▶ Disclaimer

Table 1

Rapid escalation vinblastine-prednisolone protocol (VPP) involving eight planned doses of vinblastine

Day	Vinblastine (mg/m^2)	Prednisolone (mg/kg SID)
0	2.3	1
7	2.6	1
14	3	0.5
21	3	0.5
35	3	0.5
49	3	0.5
63	3	0.5
77	3	0.5

INIBIDORES RECEPTOR TIROSINA QUINASE

- Palladia → Toceranib
- 3,25 mg/kg - dias alternados
- Tempo se relaciona resposta do tumor
- Inibidor receptor tirosina quinase
- Inibidor do fator de crescimento de fibroblastos

Journal of Veterinary Internal Medicine

ACVIM
American College of Veterinary Internal Medicine

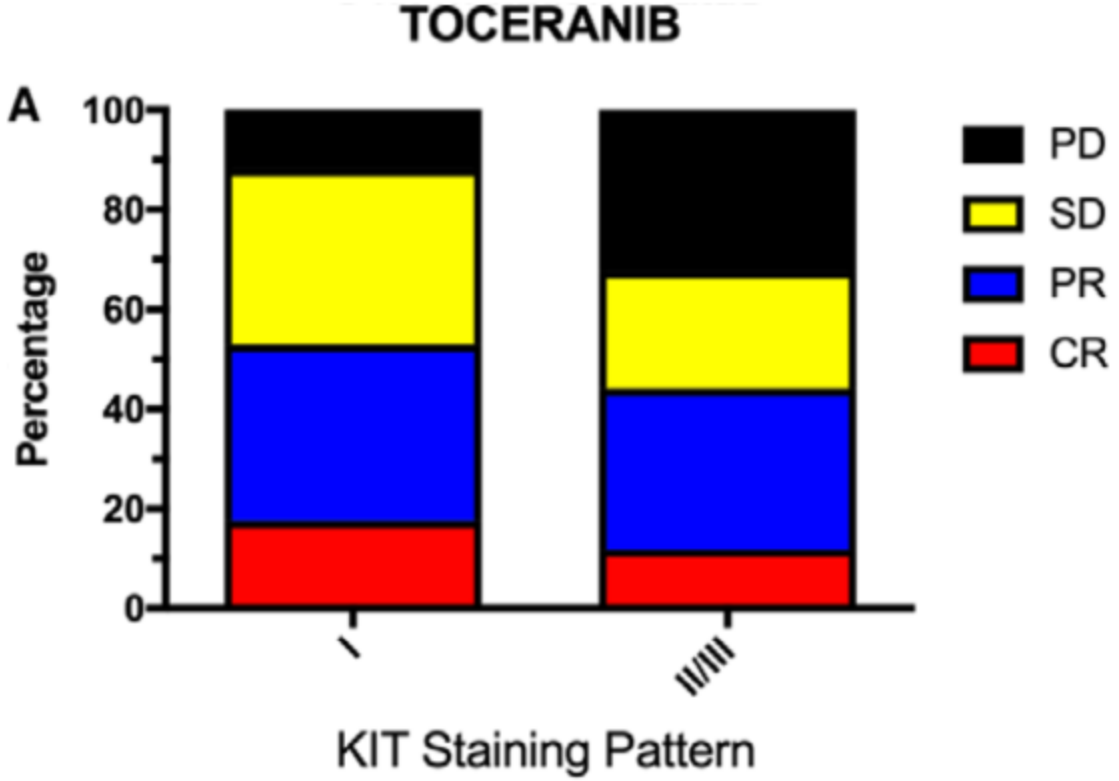
Open Access

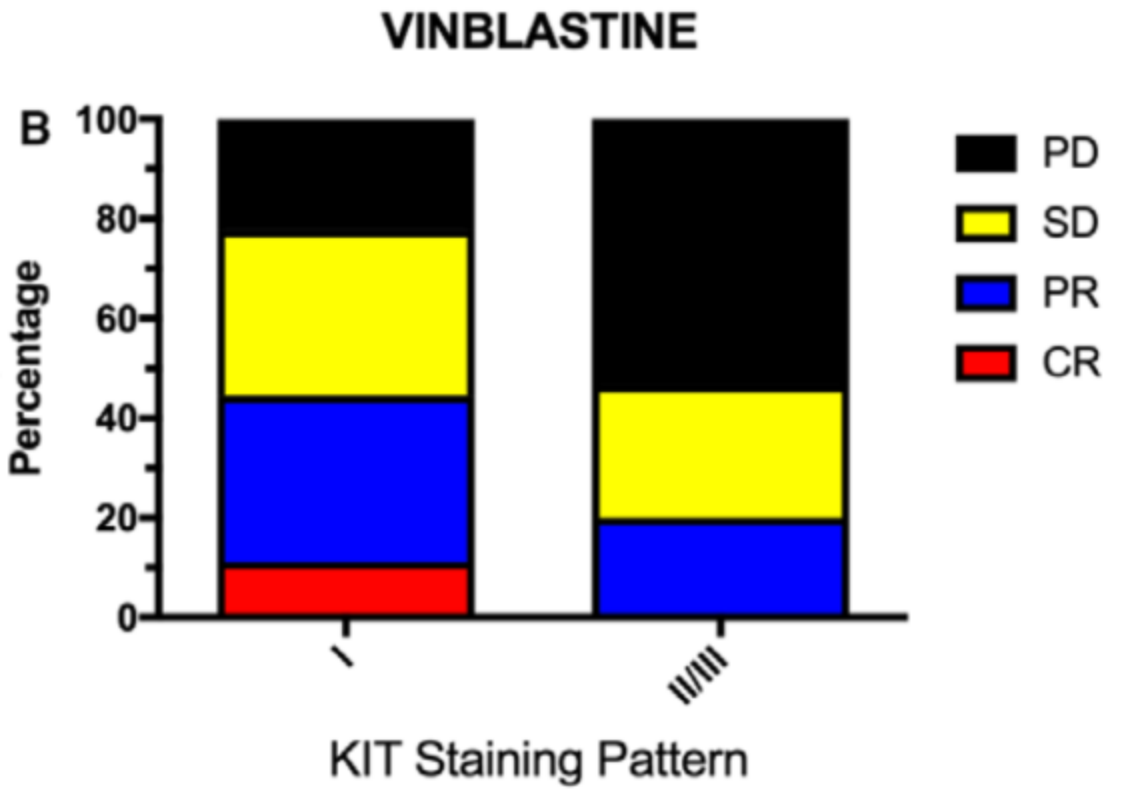
Standard Article

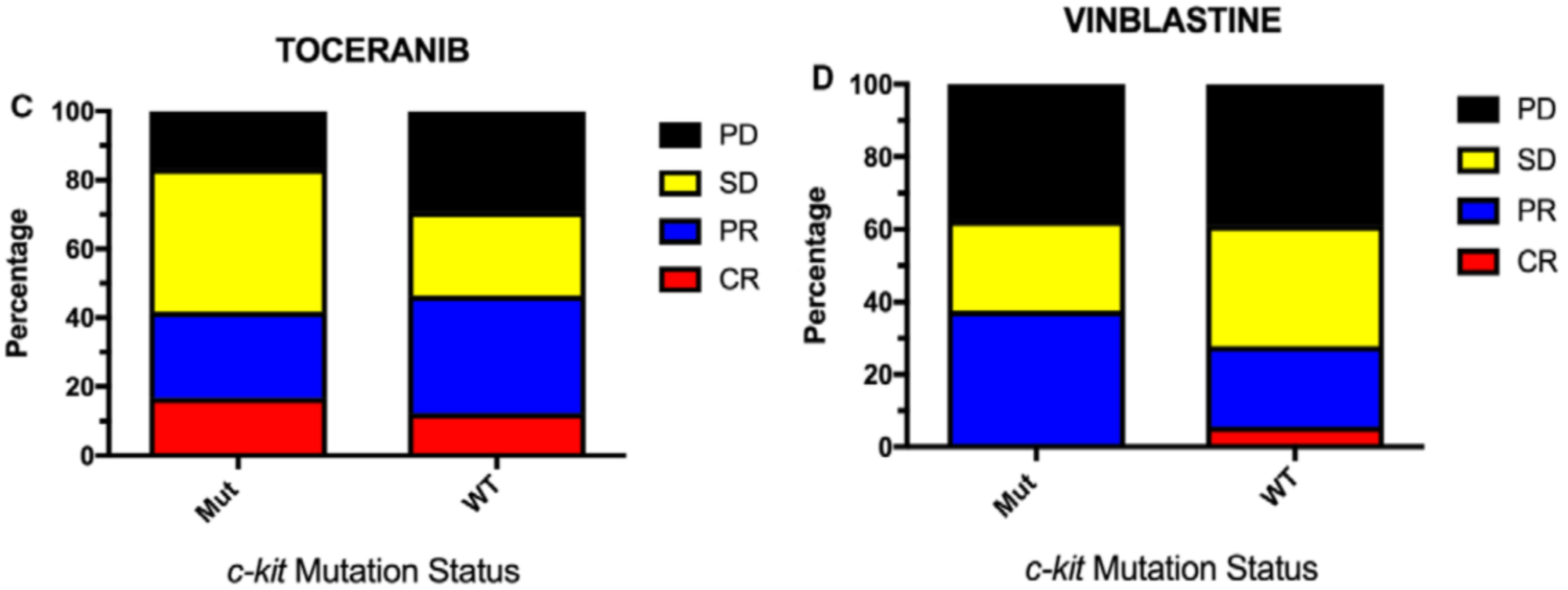
J Vet Intern Med 2018;32:394–405

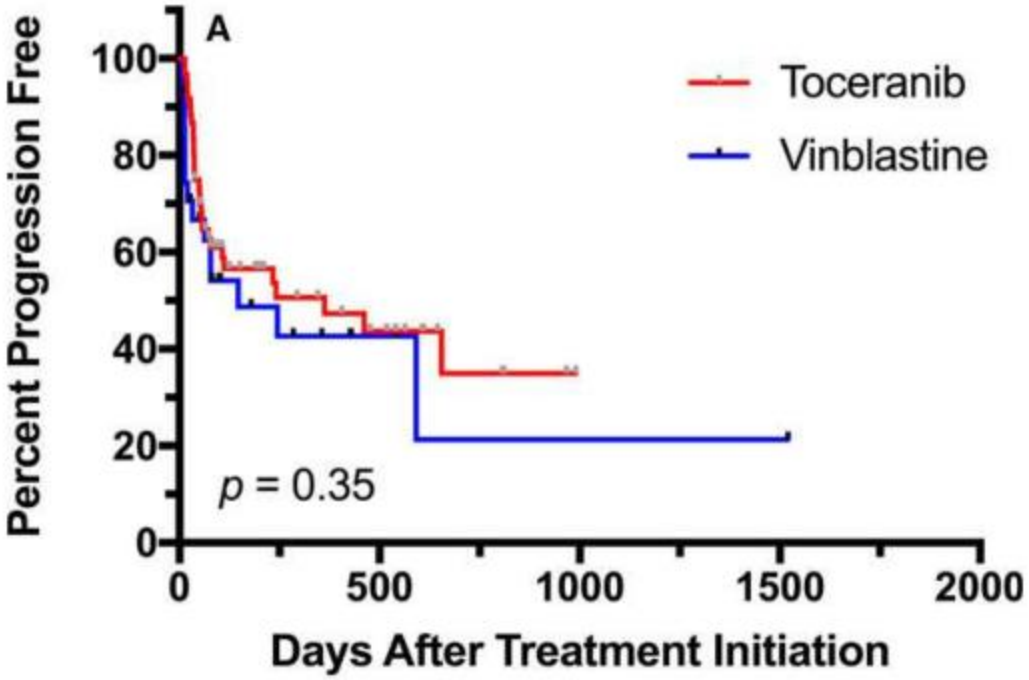
c-Kit Mutation and Localization Status as Response Predictors in Mast Cell Tumors in Dogs Treated with Prednisone and Toceranib or Vinblastine

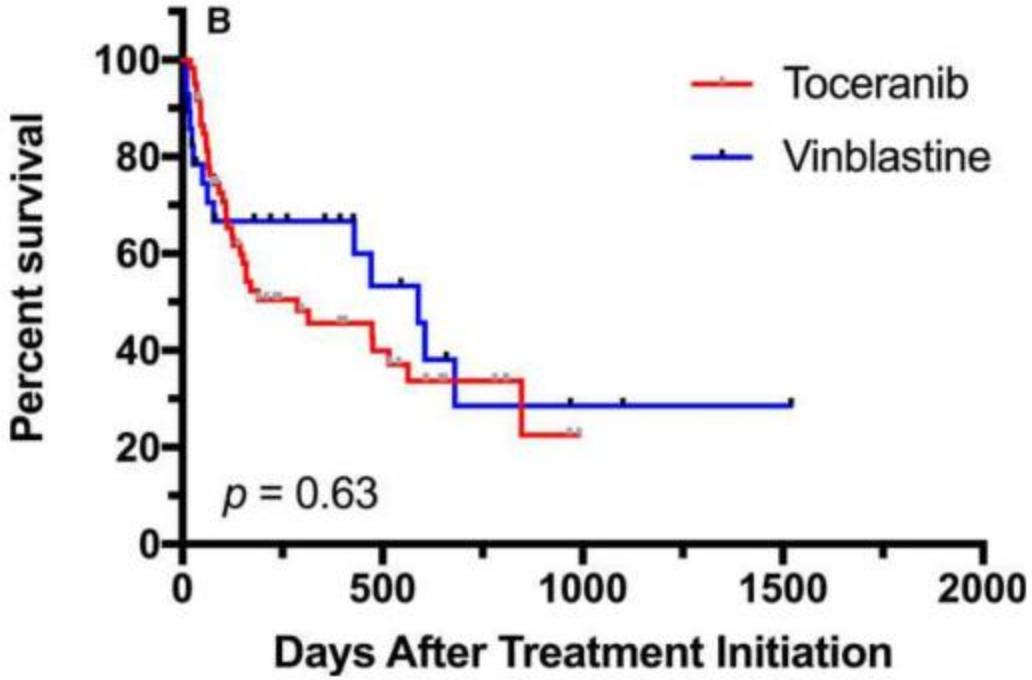
K.M. Weishaar, E.J. Ehrhart, A.C. Avery, J.B. Charles, R.E. Elmslie, D.M. Vail, C.A. London, C.A. Clifford, J.C. Eickhoff, and D.H. Thamm


TOCERANIB
A
100
80
60
40
20
0
Percentage
PD
SD
PR
CR
KIT Staining Pattern


VINBLASTINE
B
100
80
60
40
20
0
Percentage
PD
SD
PR
CR
KIT Staining Pattern


C
TOCERANIB
Percentage
100
80
60
40
20
0
Mut
WT
c-kit Mutation Status
PD
SD
PR
CR
D
VINBLASTINE
Percentage
100
80
60
40
20
0
Mut
WT
c-kit Mutation Status
PD
SD
PR
CR


A
Percent Progression Free
100
80
60
40
20
0
0
500
1000
1500
2000
Days After Treatment Initiation
Toceranib
Vinblastine
p = 0.35


B
Percent survival
100
80
60
40
20
0
0
500
1000
1500
2000
Days After Treatment Initiation
Toceranib
Vinblastine
p = 0.63

J Comp Pathol. 2014 Nov;151(4):329-38. doi: 10.1016/j.jcpa.2014.07.004. Epub 2014 Aug 27.

Correlation of nodal mast cells with clinical outcome in dogs with mast cell tumour and a proposed classification system for the evaluation of node metastasis

K M Weishaar [1], D H Thamm [1], D R Worley [1], D A Kamstock [2]

Affiliations + expand

PMID: 25172053 DOI: 10.1016/j.jcpa.2014.07.004

Abstract

Lymph node metastasis in dogs with mast cell tumour has been reported as a negative prognostic indicator; however, no standardized histological criteria exist to define metastatic disease. The primary aim of this study was to determine whether different histological patterns of node-associated mast cells correlate with clinical outcome in dogs with mast cell tumour. A secondary goal was to propose a criteria-defined classification system for histological evaluation of lymph node metastasis. The Colorado State University Diagnostic Medicine Center database was searched for cases of canine mast

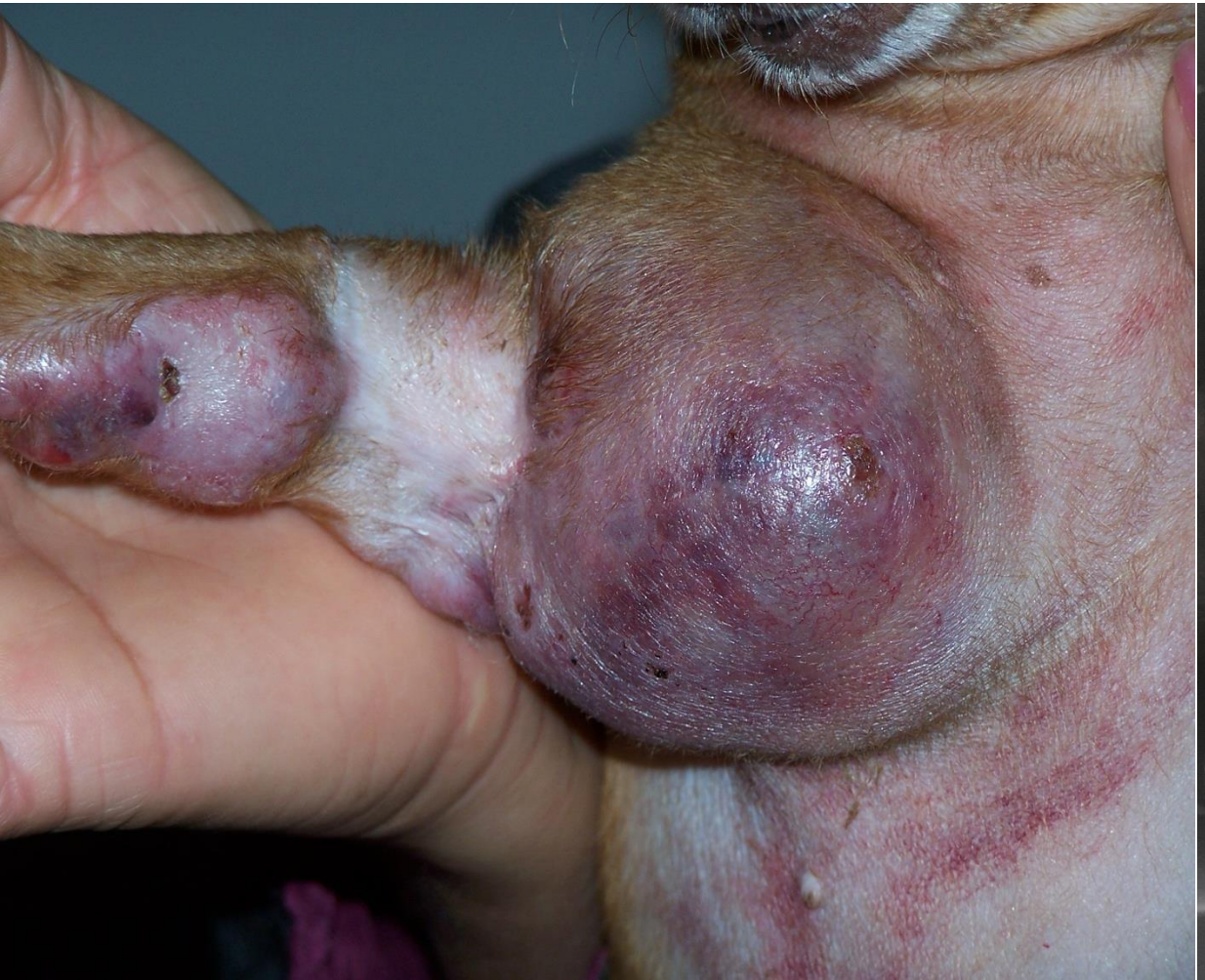
CLASSIFICAÇÃO

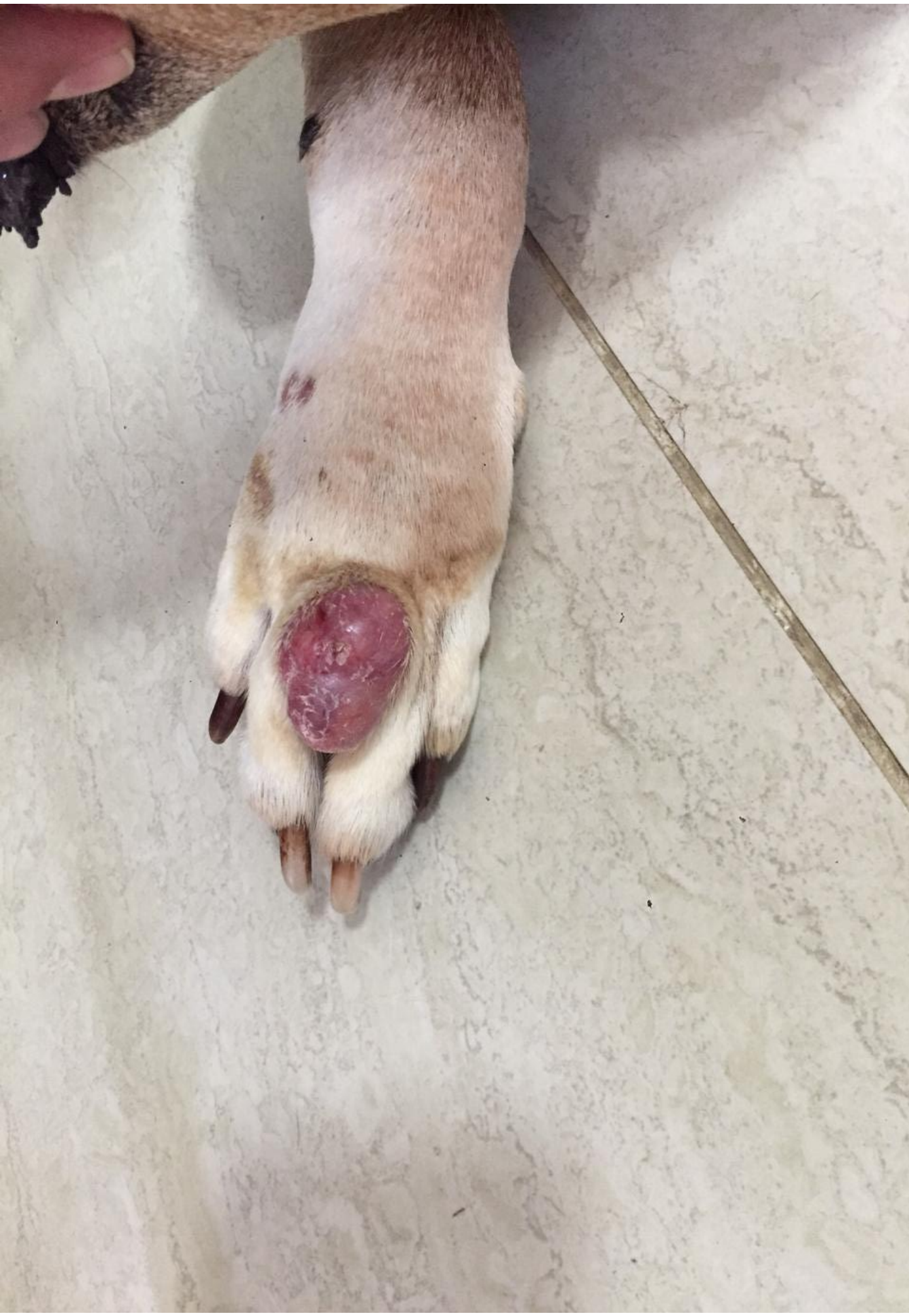
Classification	Histopathological criteria	Proposed interpretation
HN0	None to rare (0–3), scattered, individualized (isolated) mast cells in sinuses (subcapsular, paracortical or medullary) and/or parenchyma per ×400 field (0–3 mast cells per ×400 field), or does not meet criteria for any other classification below.	Non-metastatic
HN1	Greater than three individualized (isolated) mast cells in sinuses (subcapsular, paracortical or medullary) and/or parenchyma in a minimum of four ×400 fields (unless otherwise stated, at least four ×400 fields each, which contain more than three mast cells)	Pre-metastatic

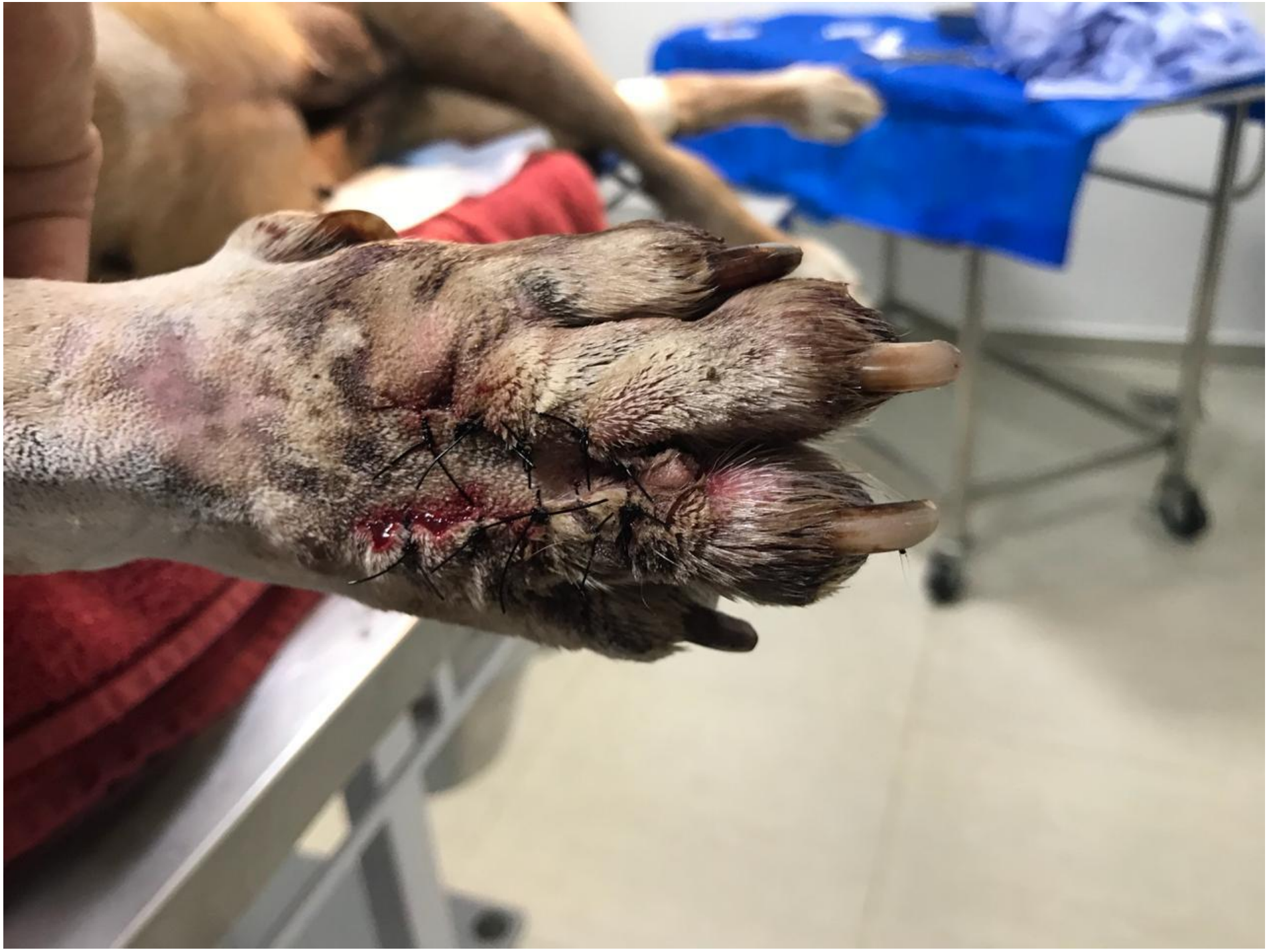
HN2	Aggregates (clusters) of mast cells (≥3 associated cells) in sinuses (subcapsular, paracortical or medullary) and/or parenchymal, or sinusoidal sheets of mast cells	Early metastasis
HN3	Disruption or effacement of normal nodal architecture by discrete foci, nodules, sheets, or overt masses composed of mast cells	Overt metastasis

QUANDO USAR???

CASOS CLÍNICOS

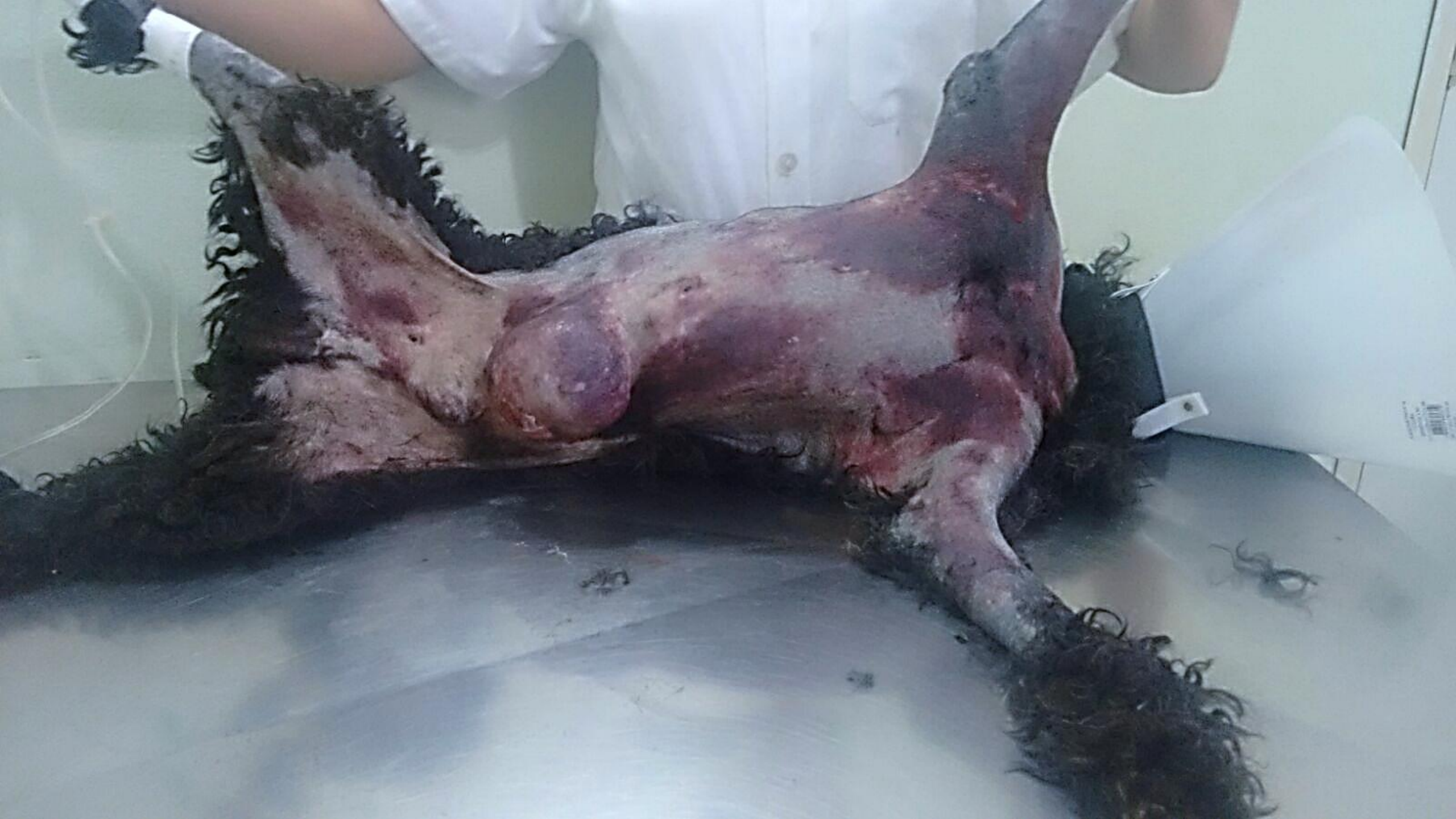


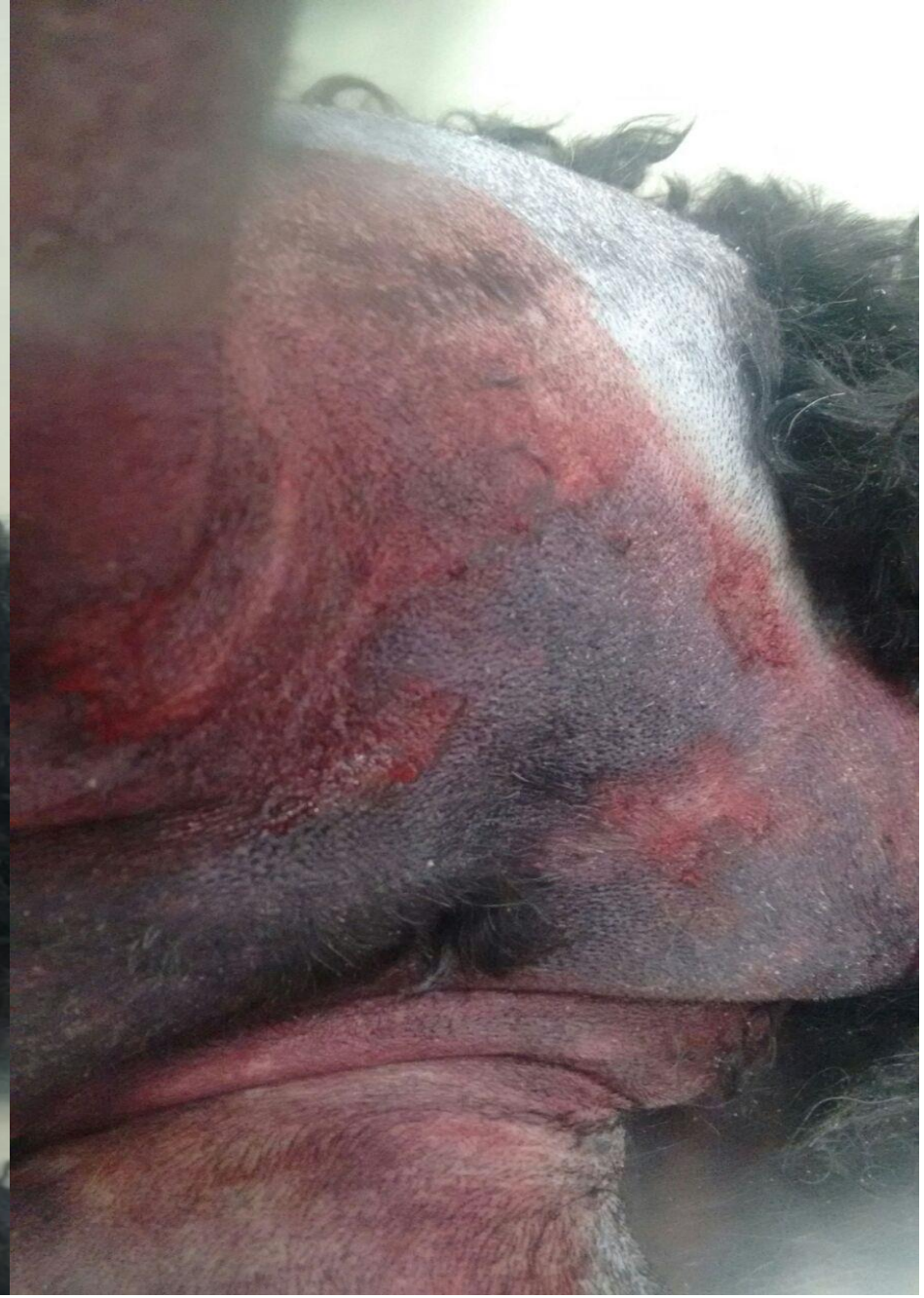




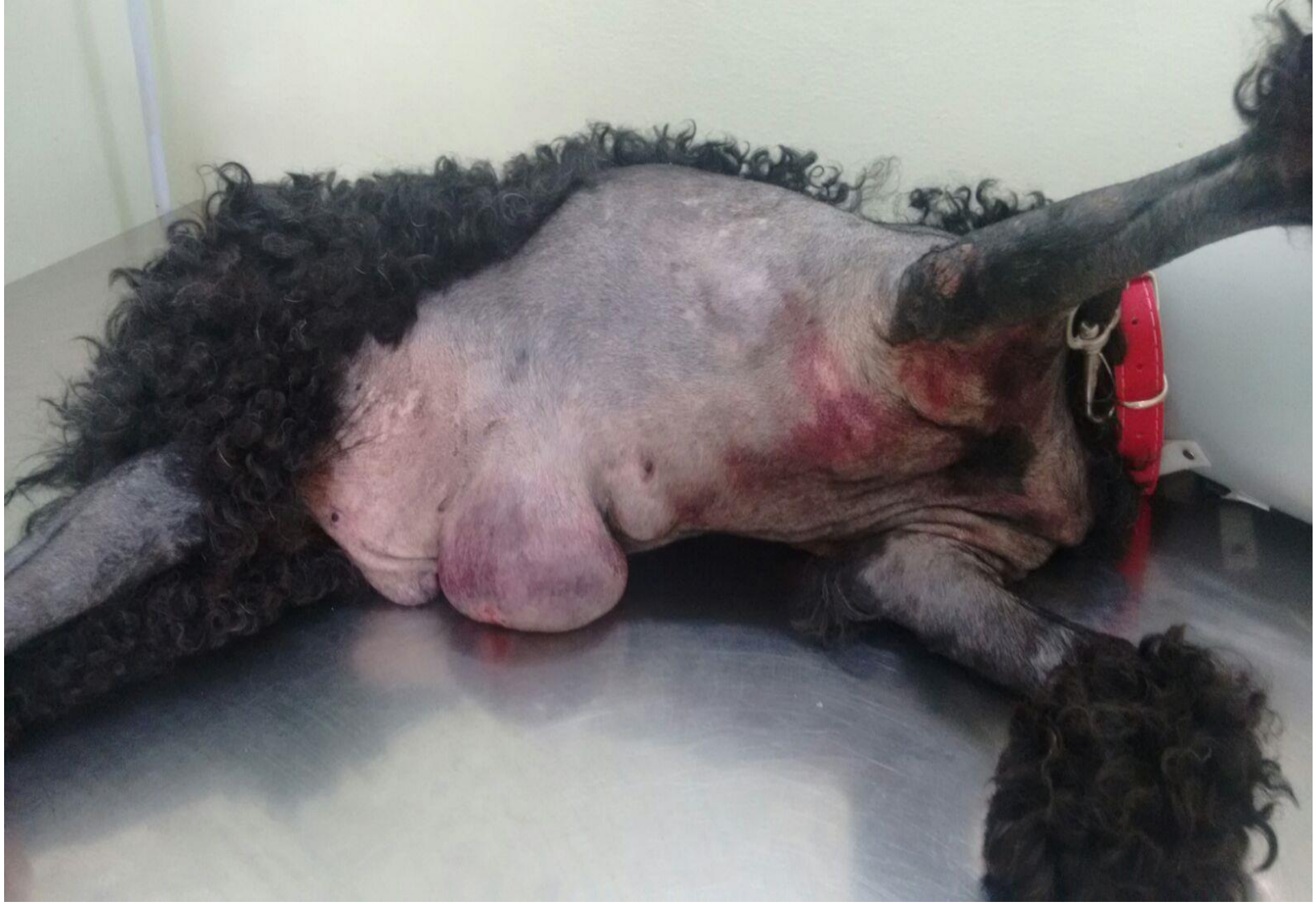
CASO CLÍNICO

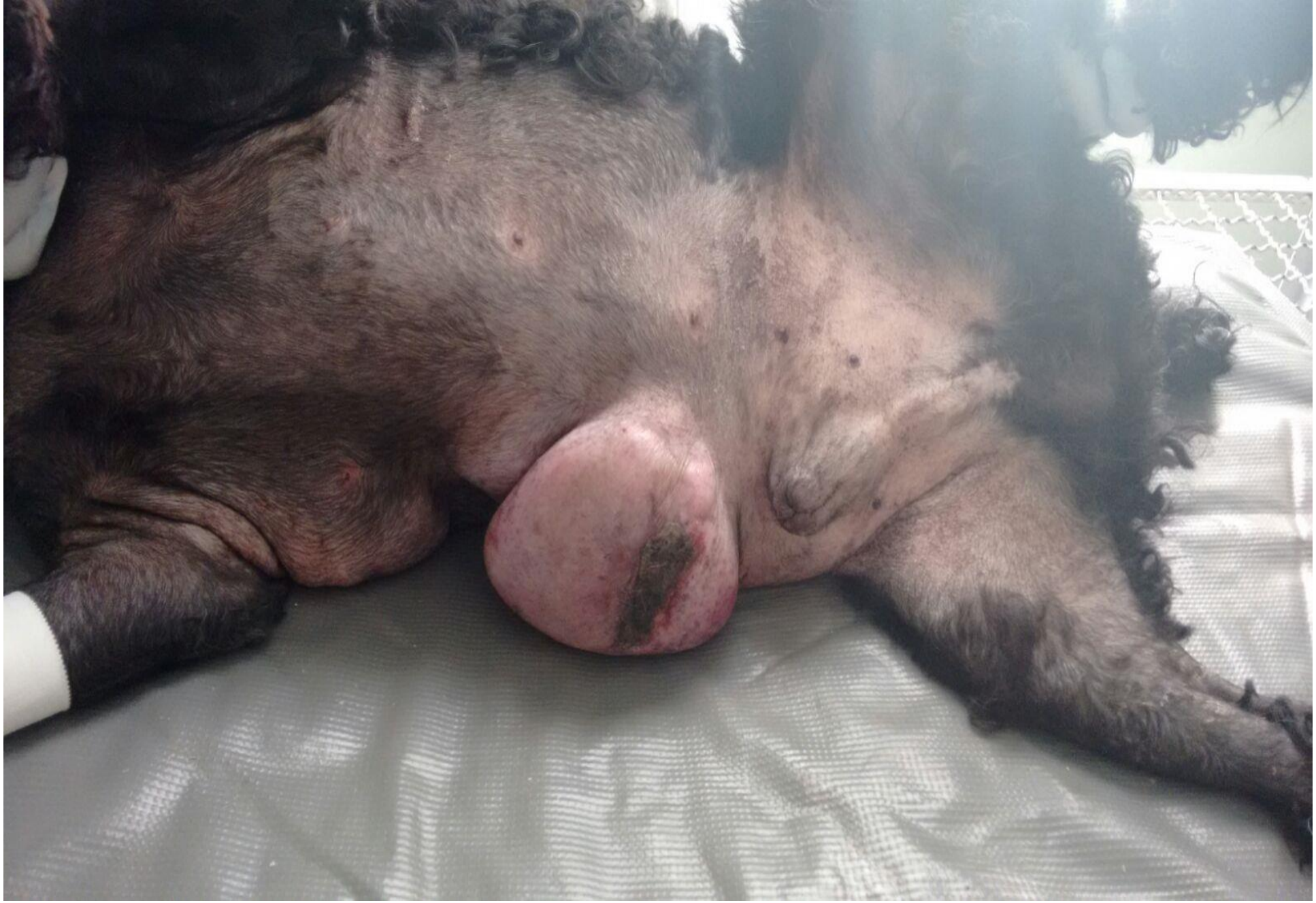
- Cão
- Macho, poodle
- 9 anos
- Lesões nodulares múltiplas em região ventral associada a hiperemia, hemorragia e ulceração





QUAL TRATAMENTO?





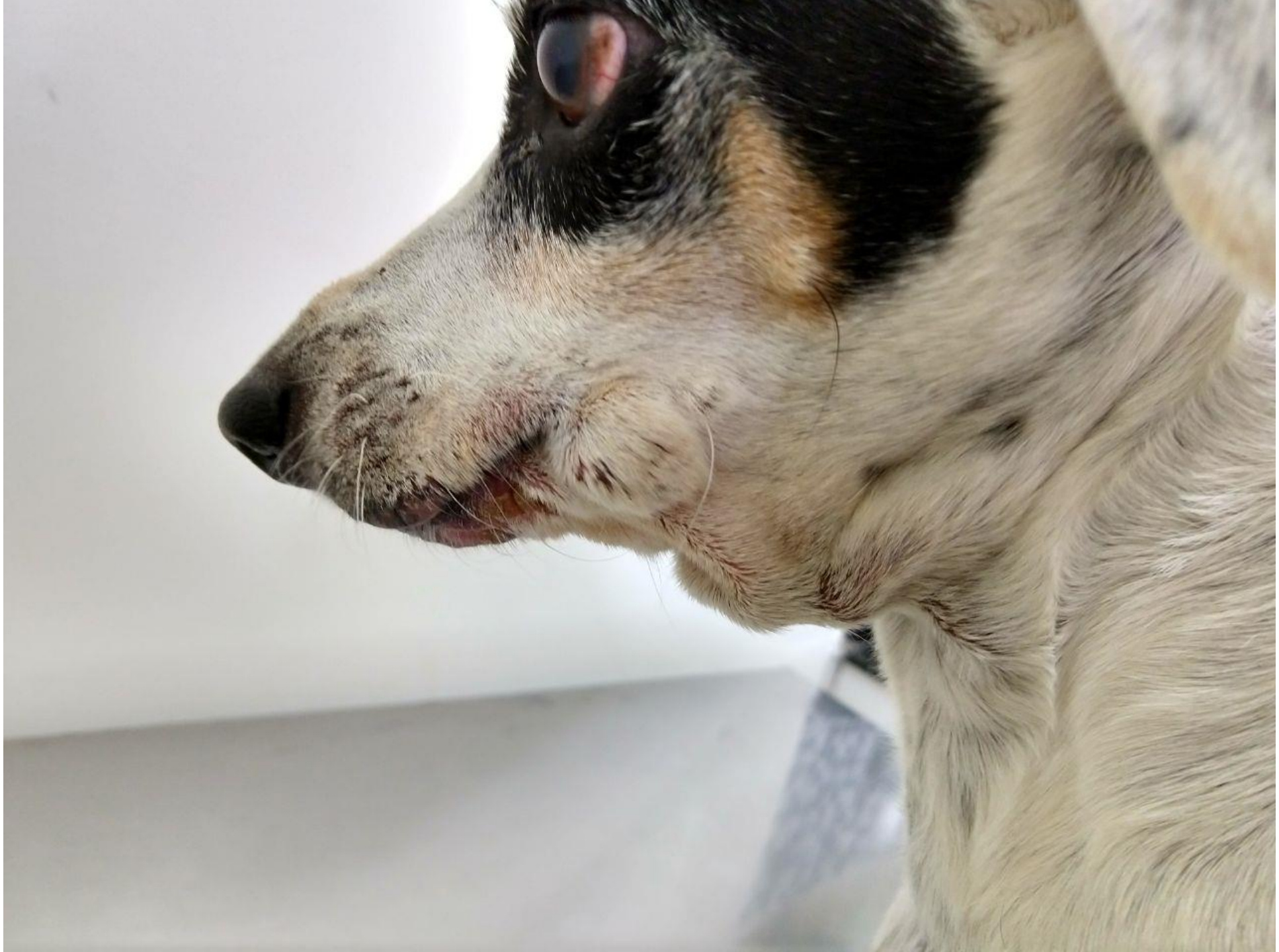
E AGORA?

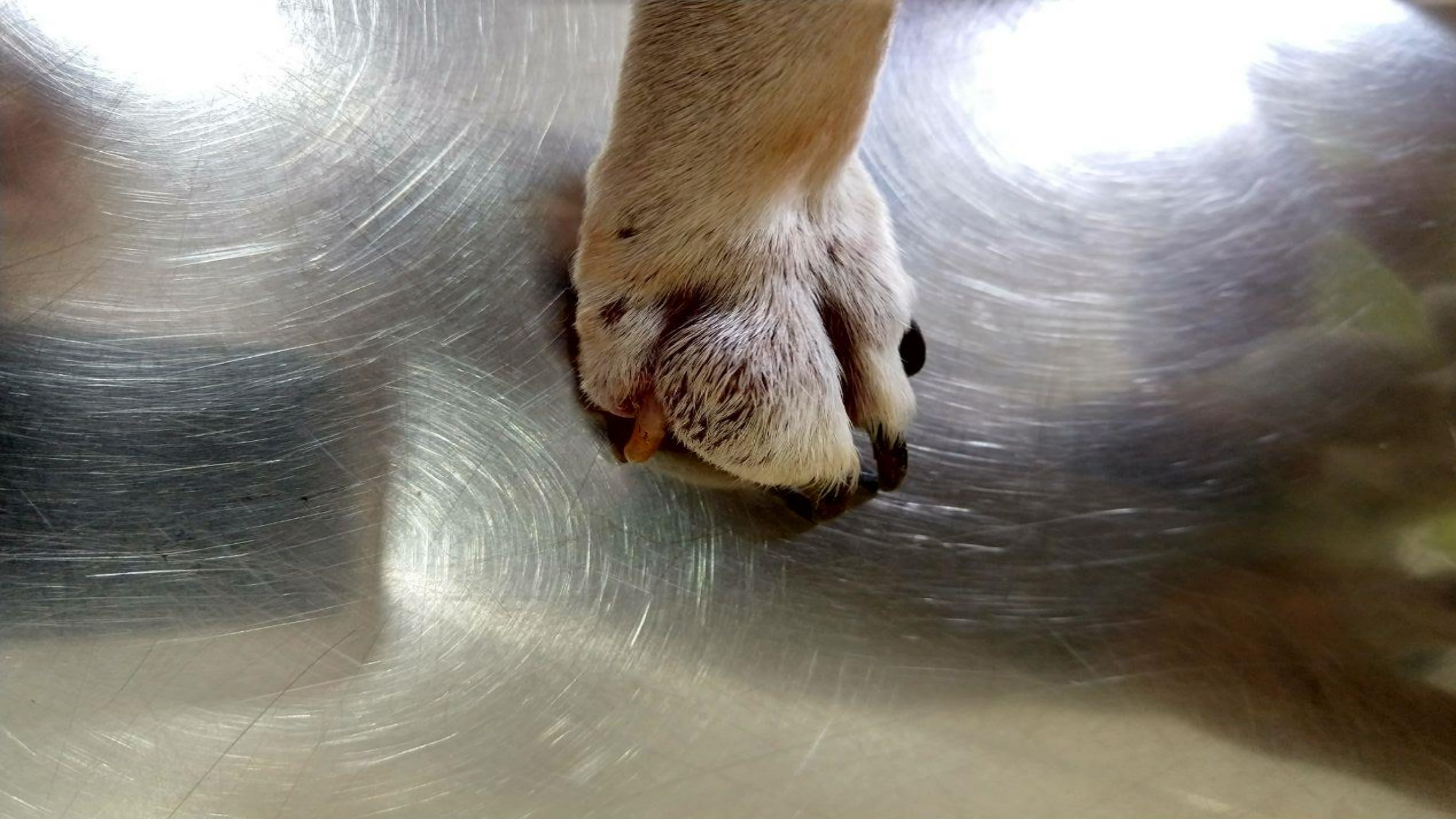
ACOMPANHAMENTO

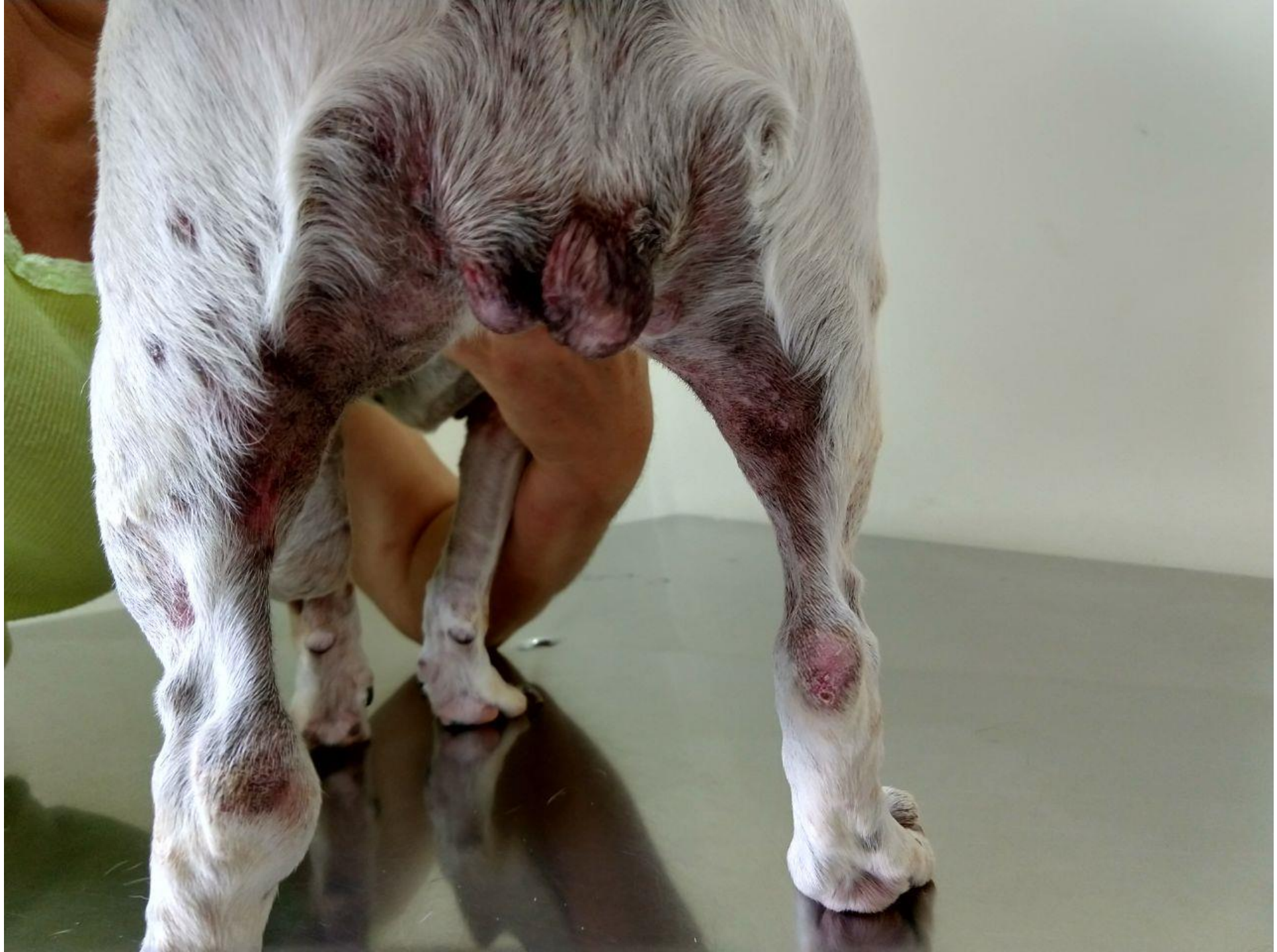
- Após 132 dias pós-cirúrgico animal foi atropelado
- Não haviam sinais de recidiva até o momento

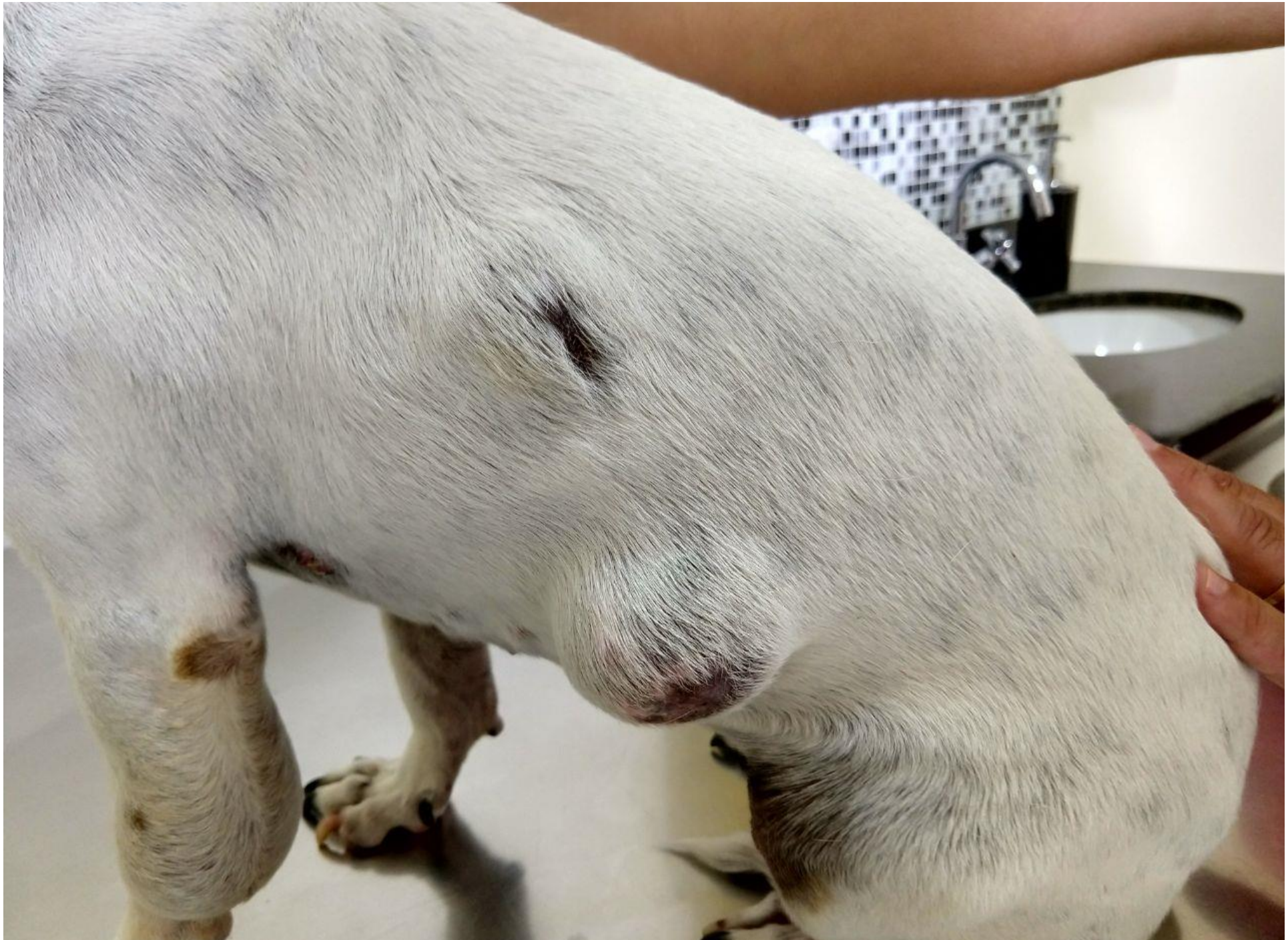
CASO CLÍNICO

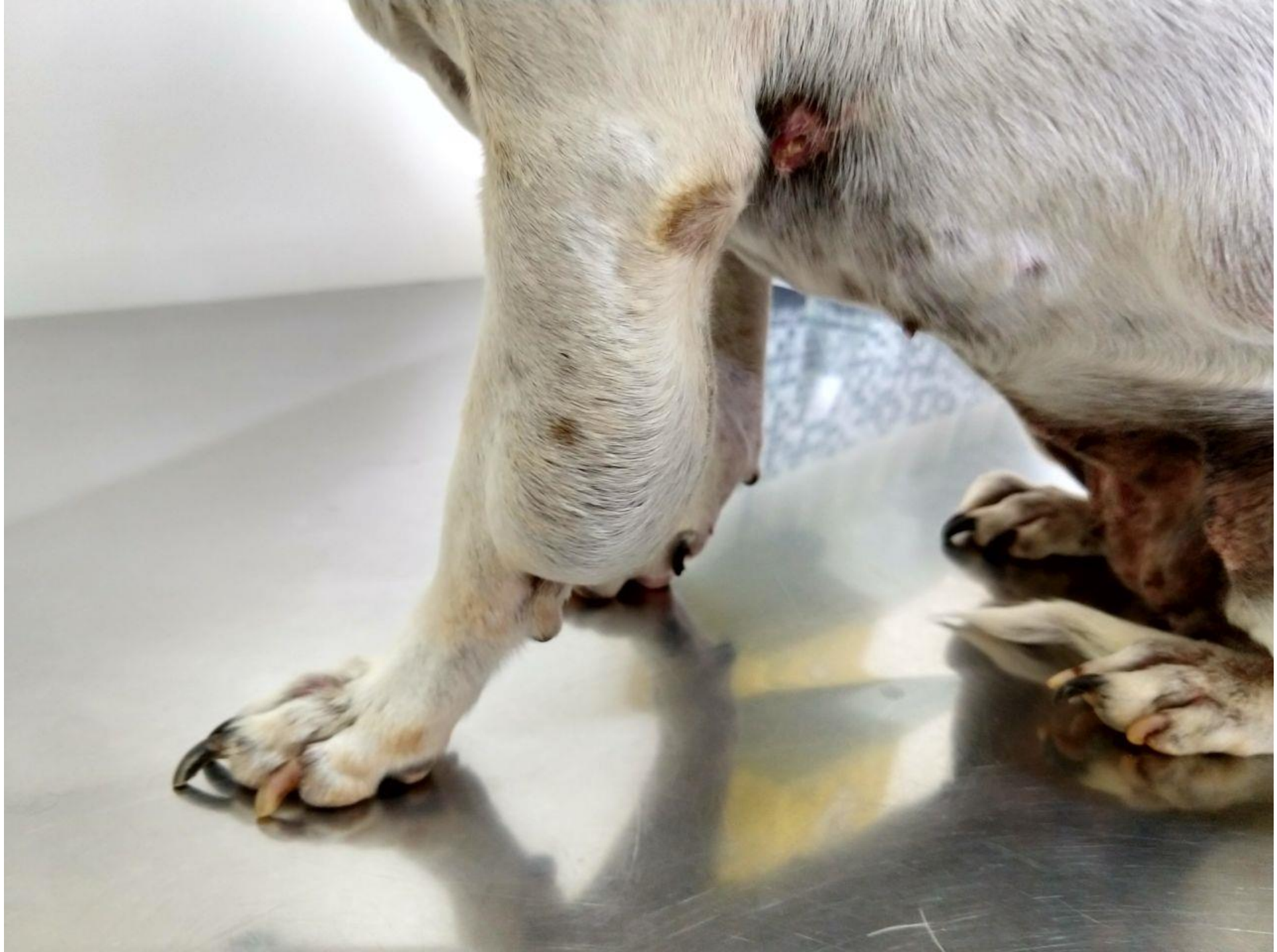
- Cão
- Fêmea
- 8 ano
- Lesões nodulares múltiplas pelo corpo



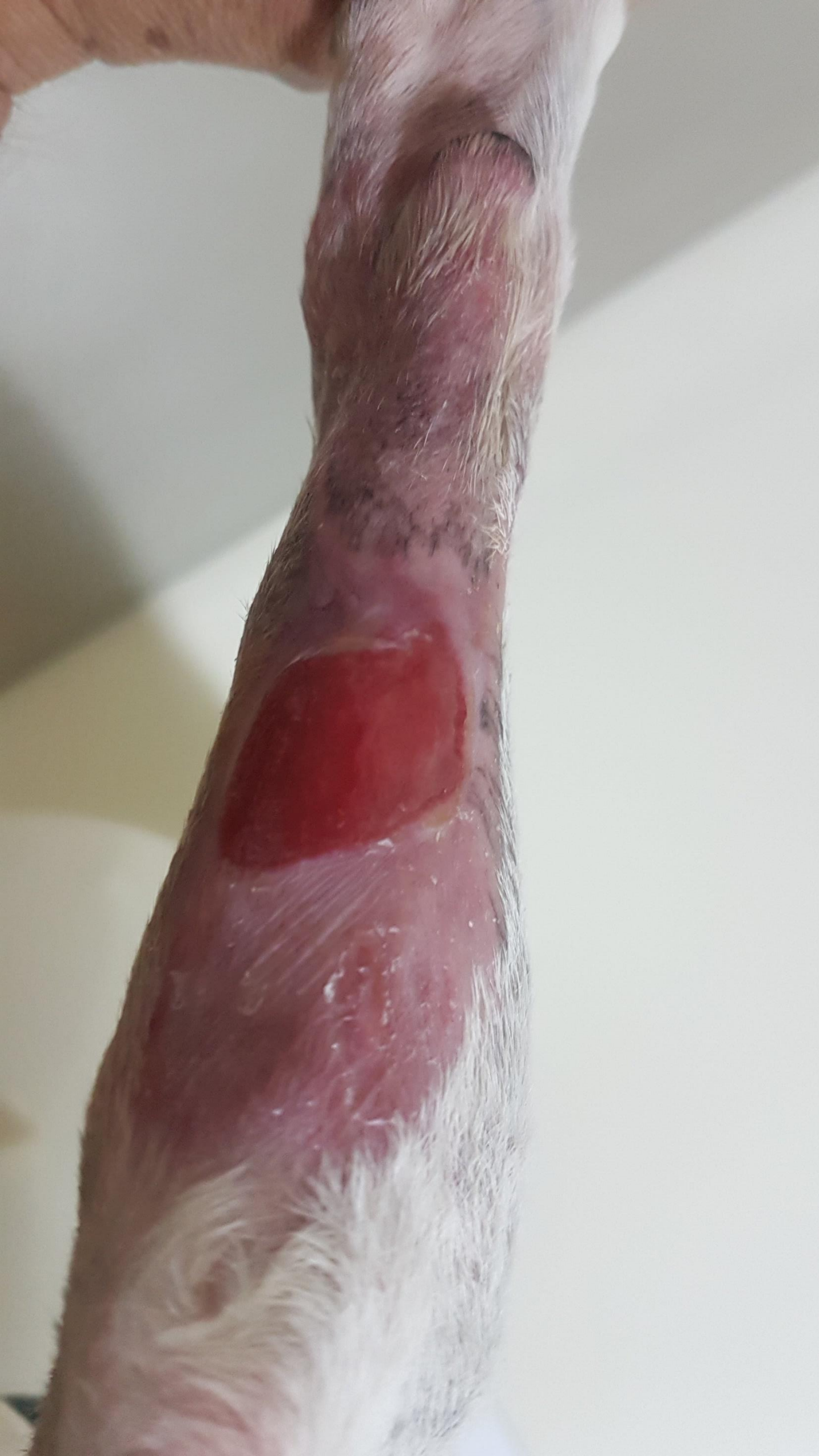


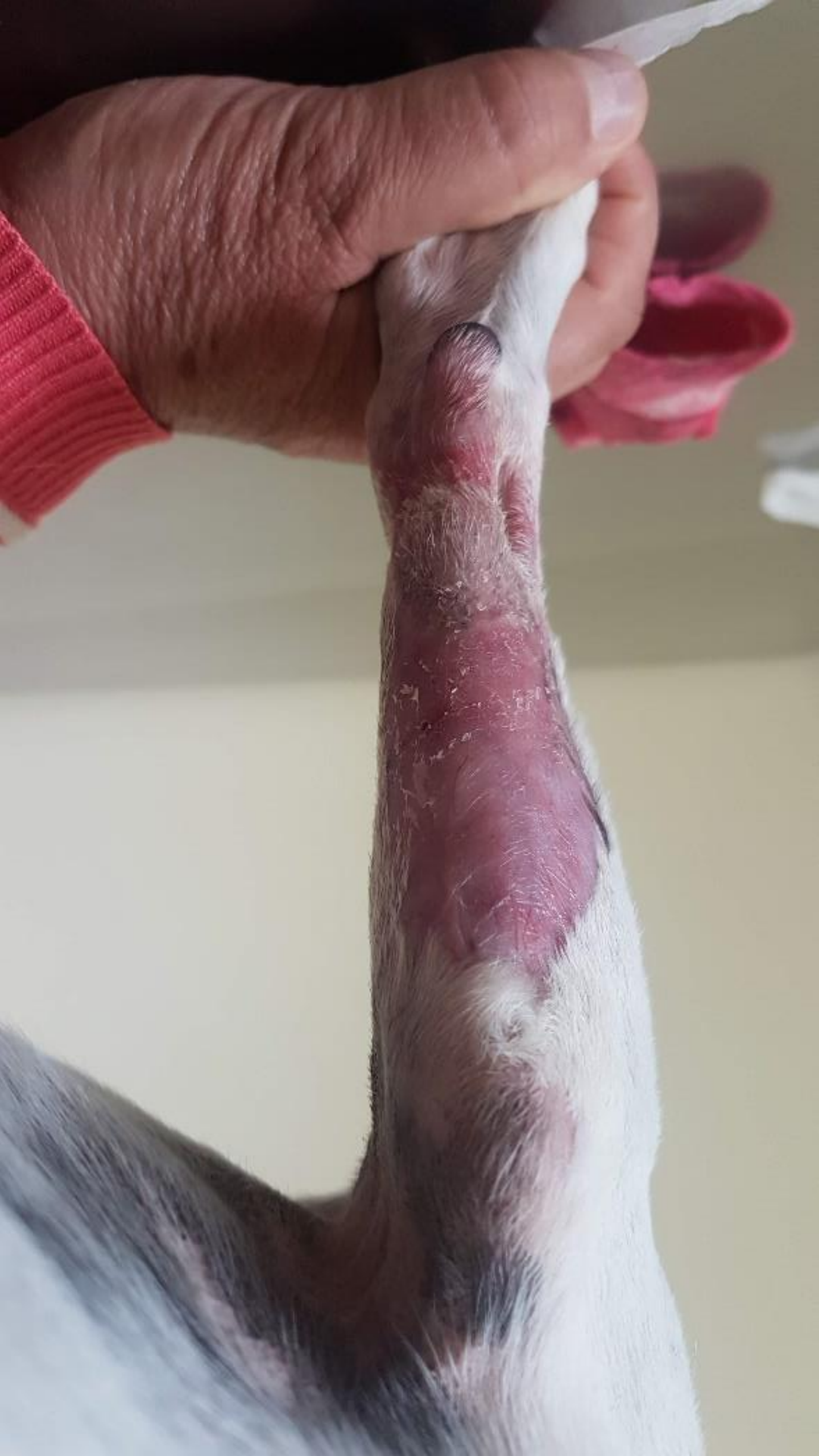


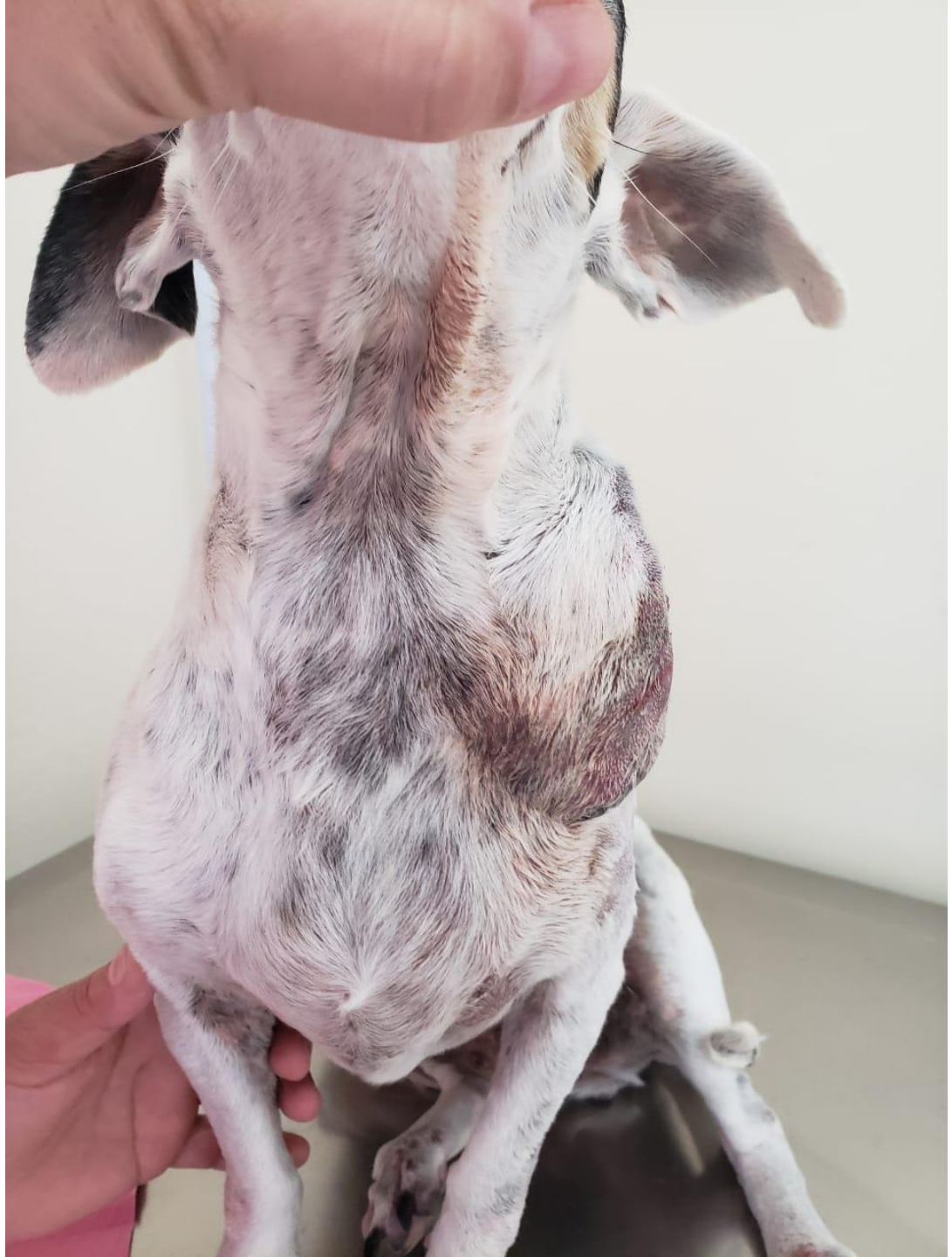


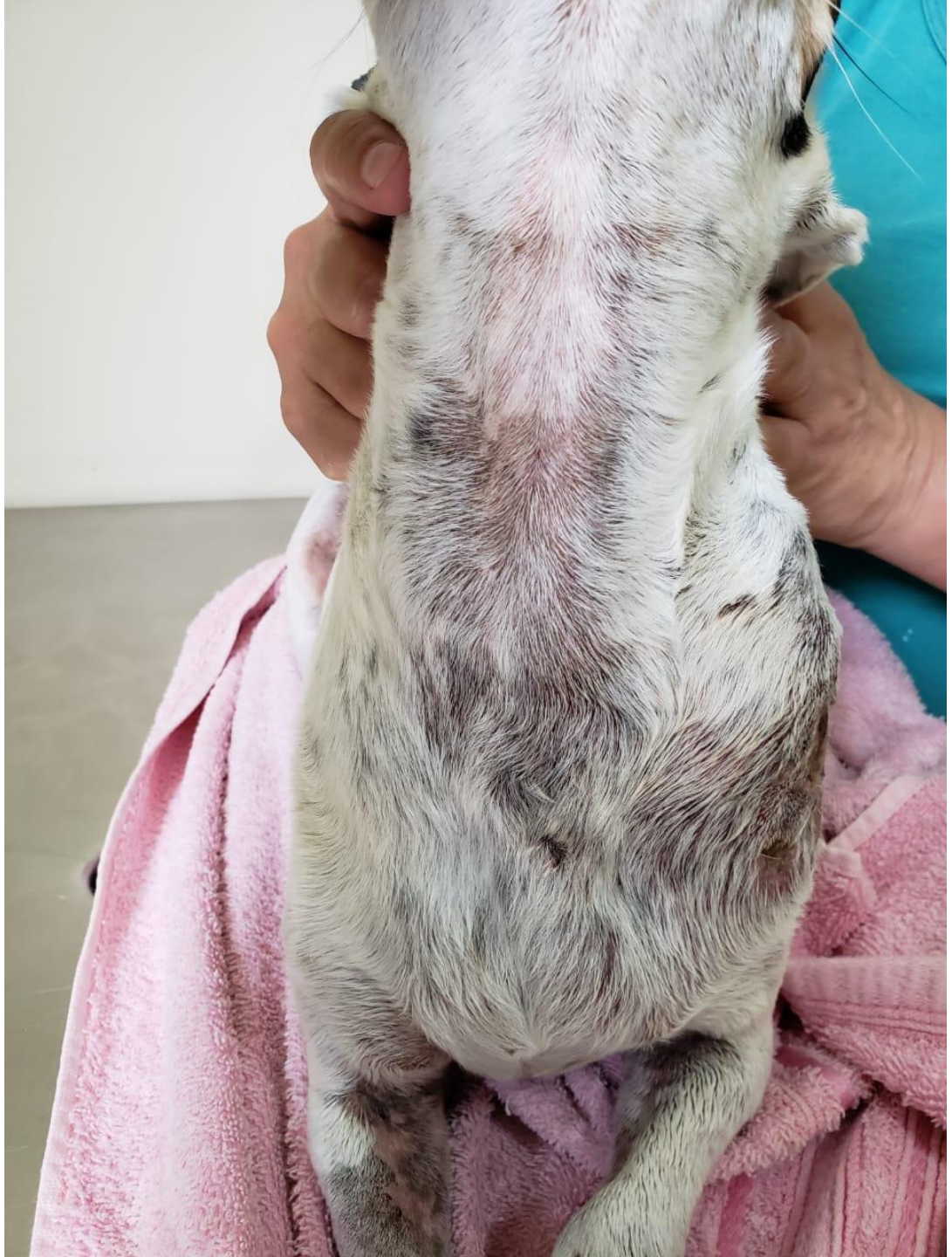


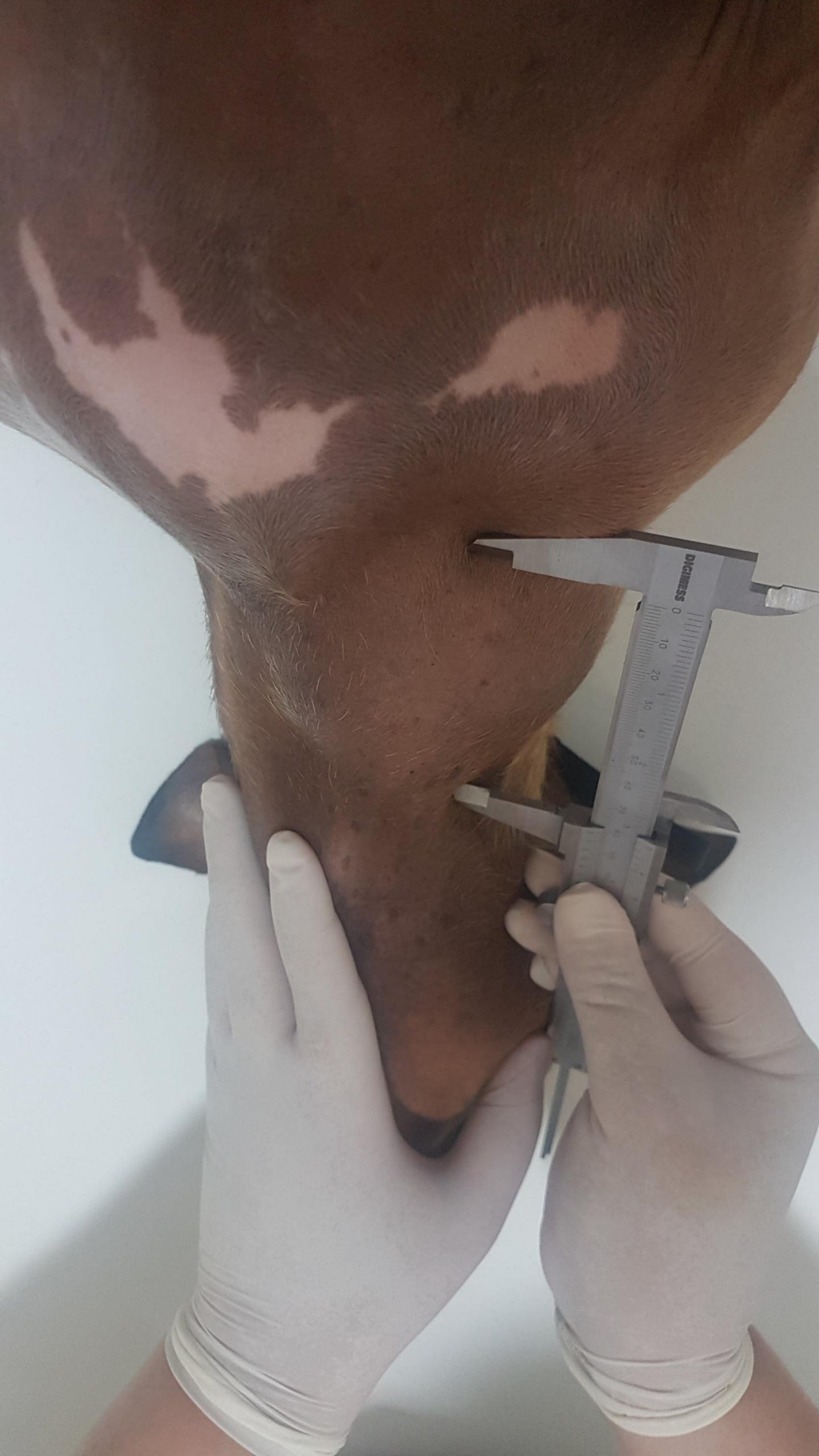
???????

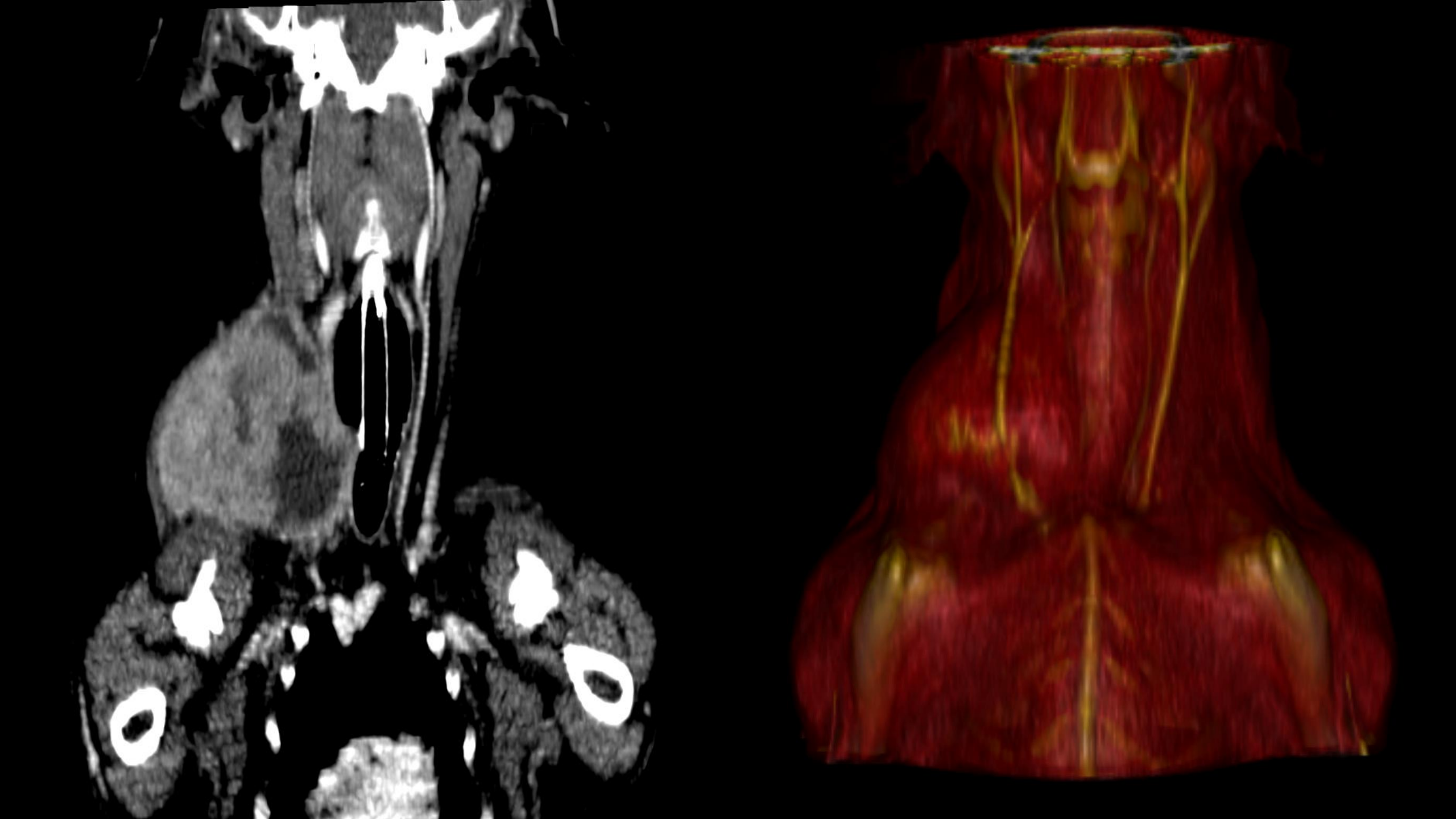


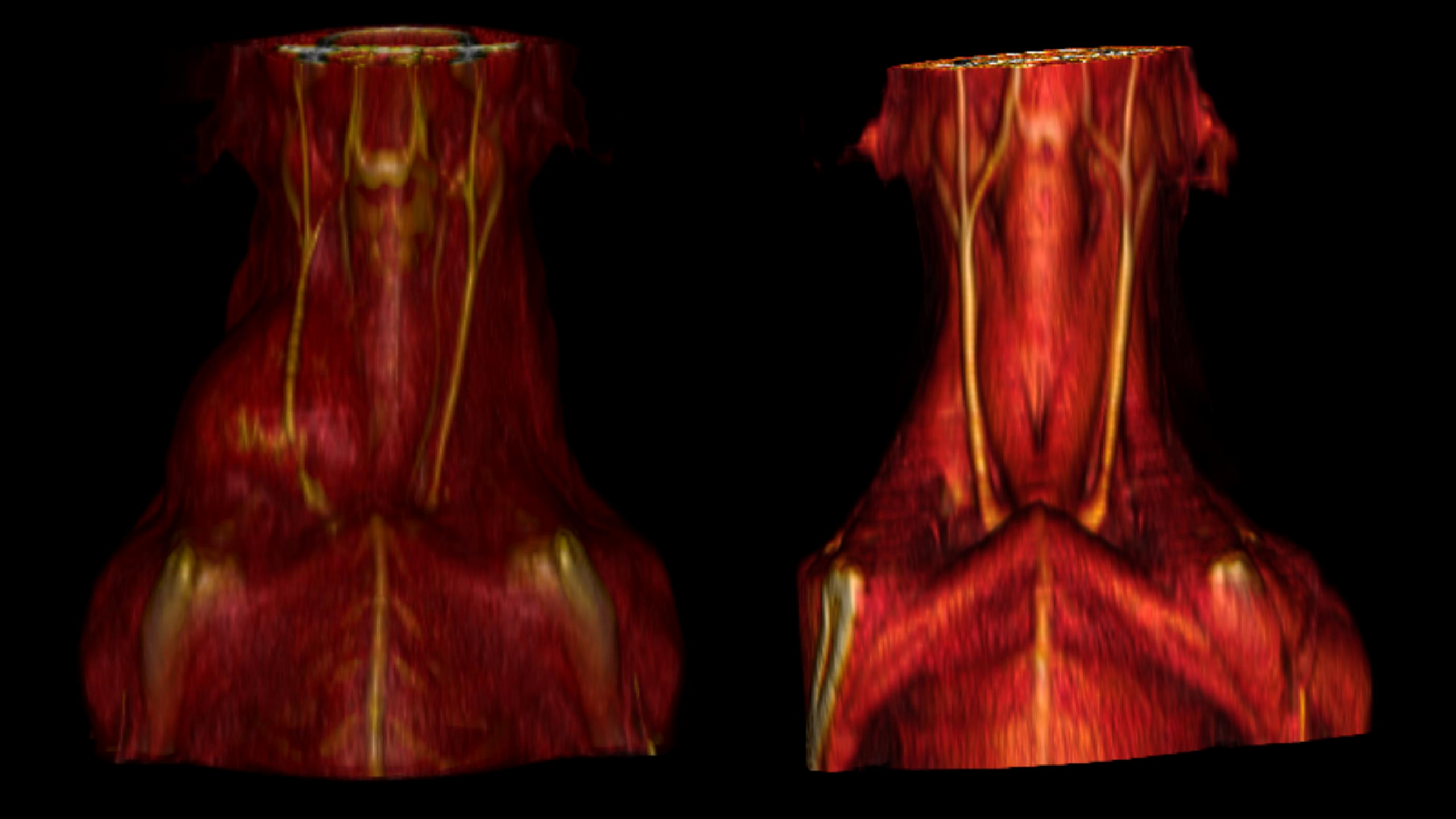


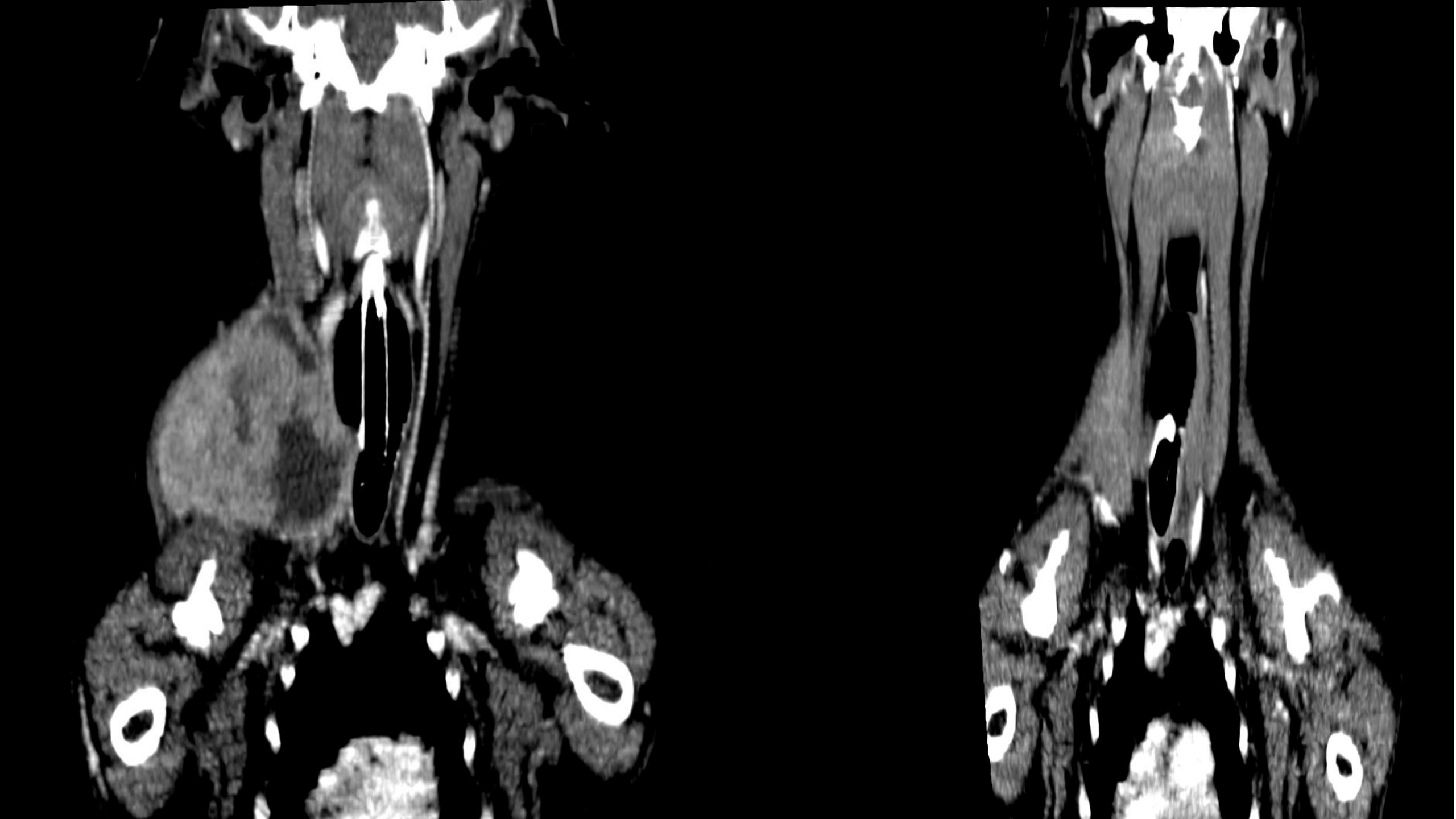


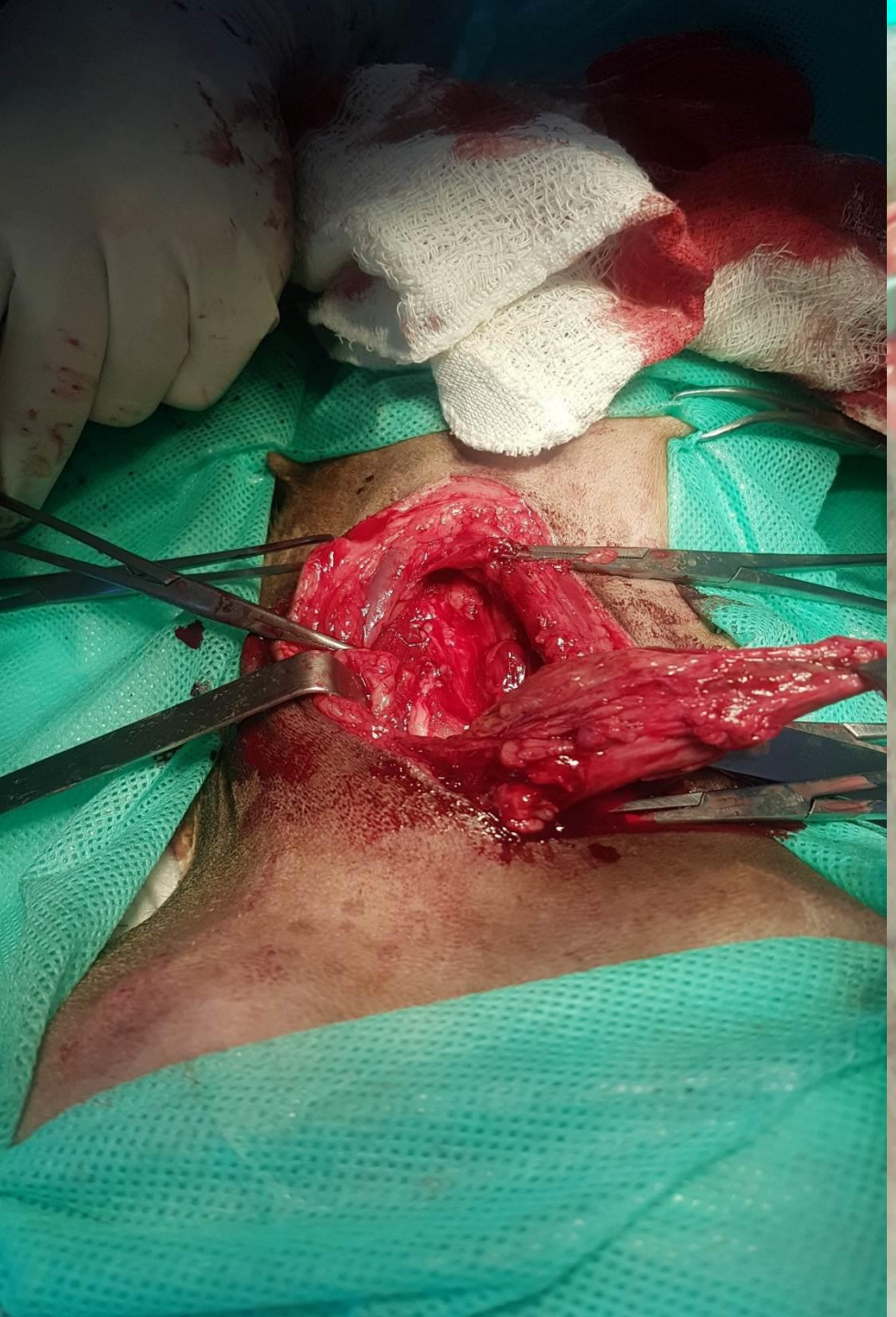
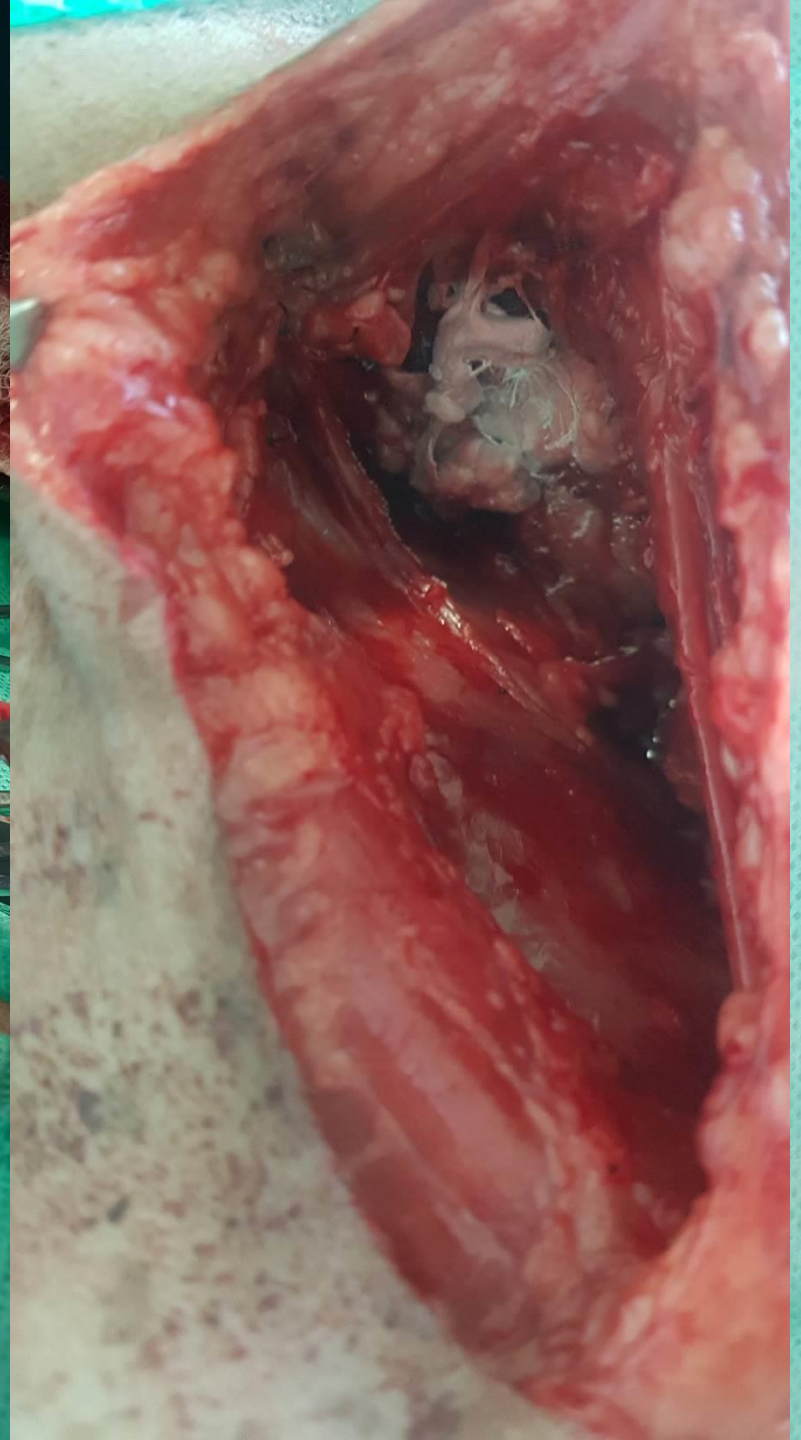
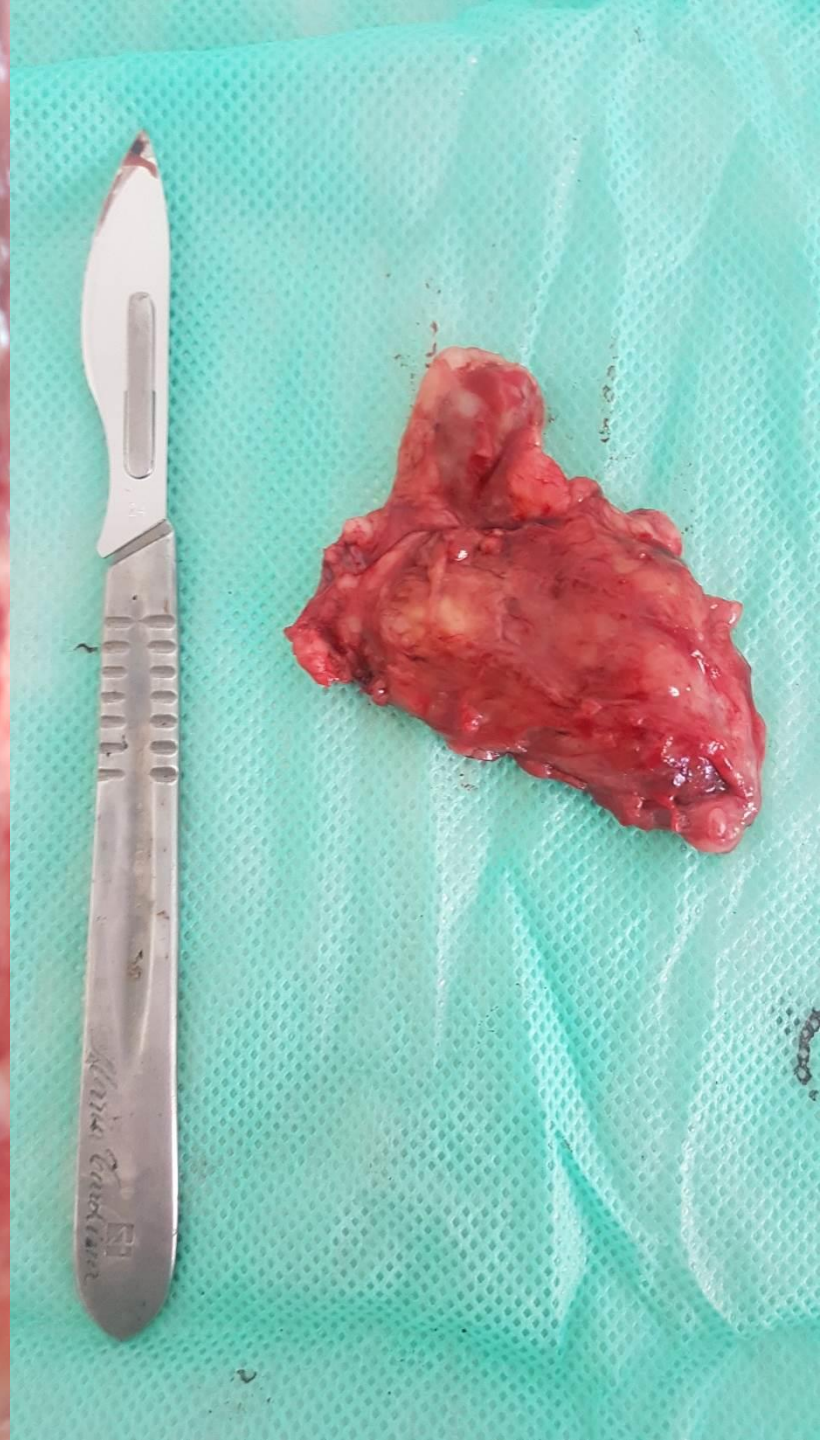


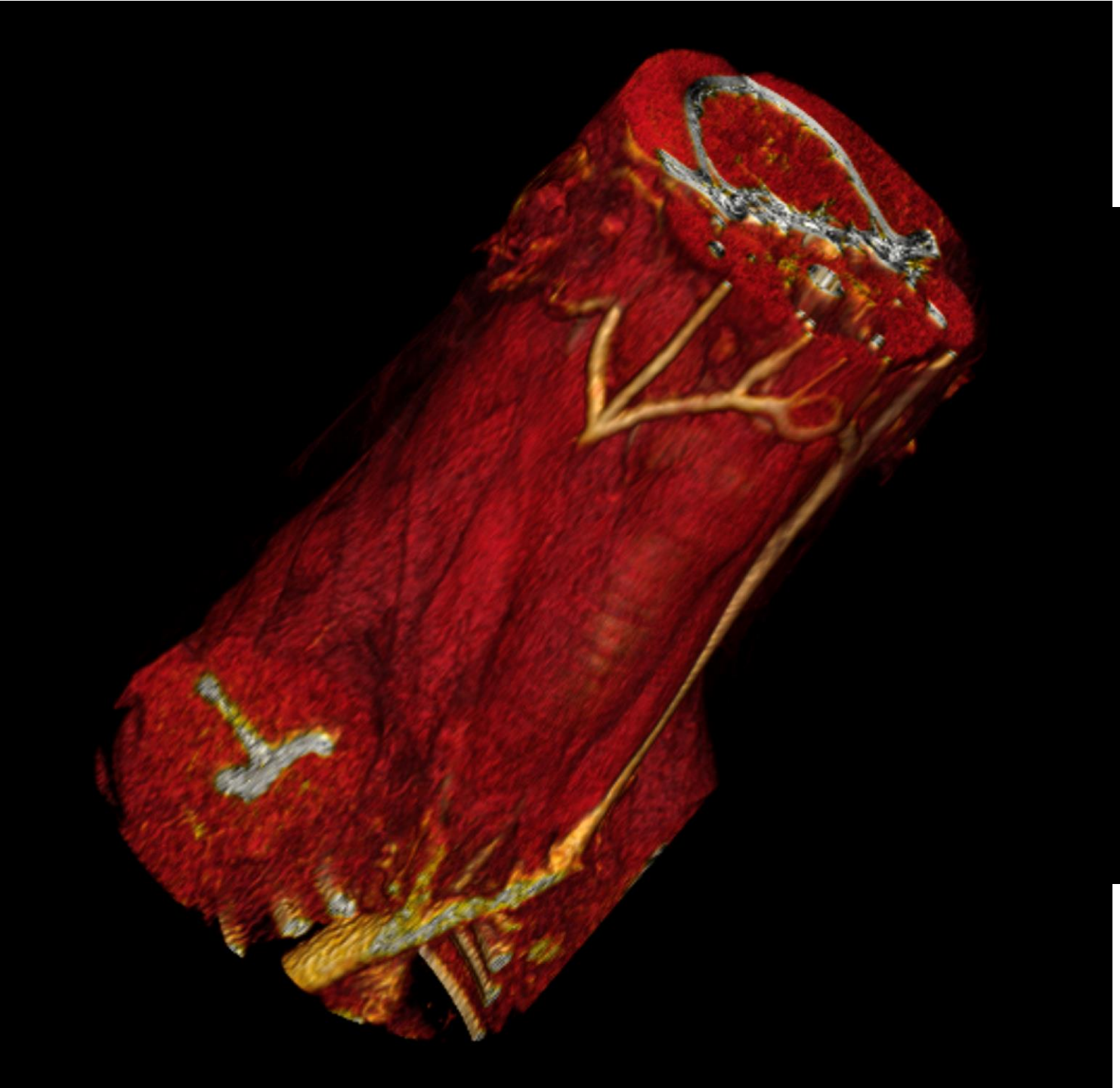

DIGIMESS

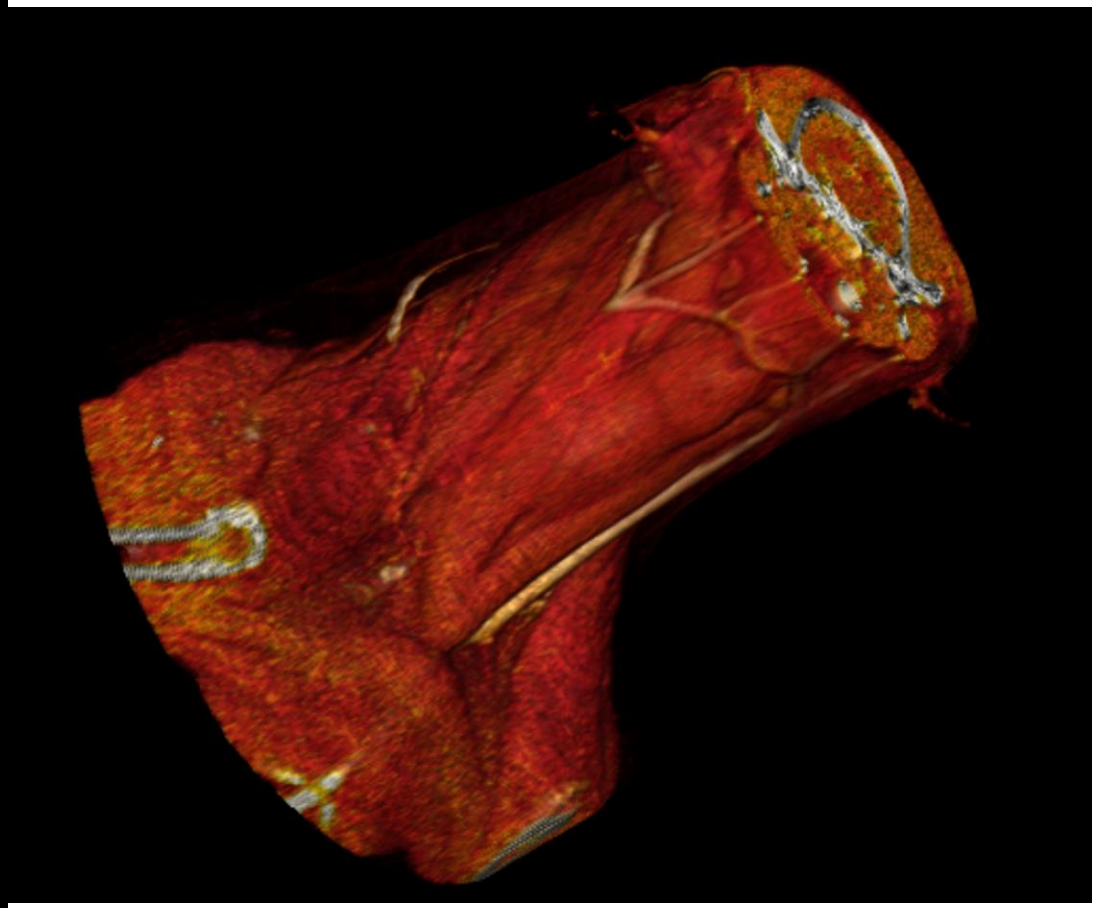


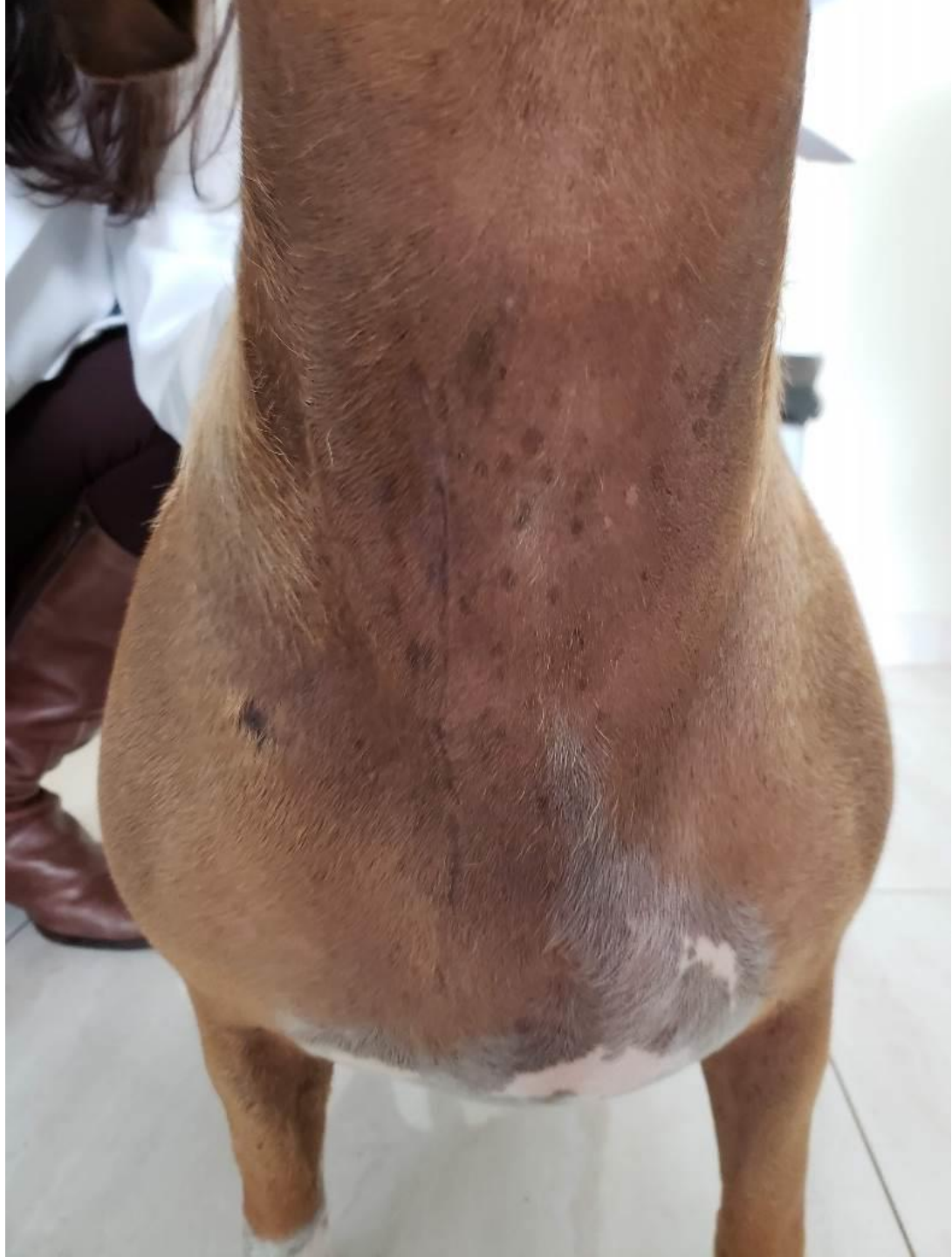


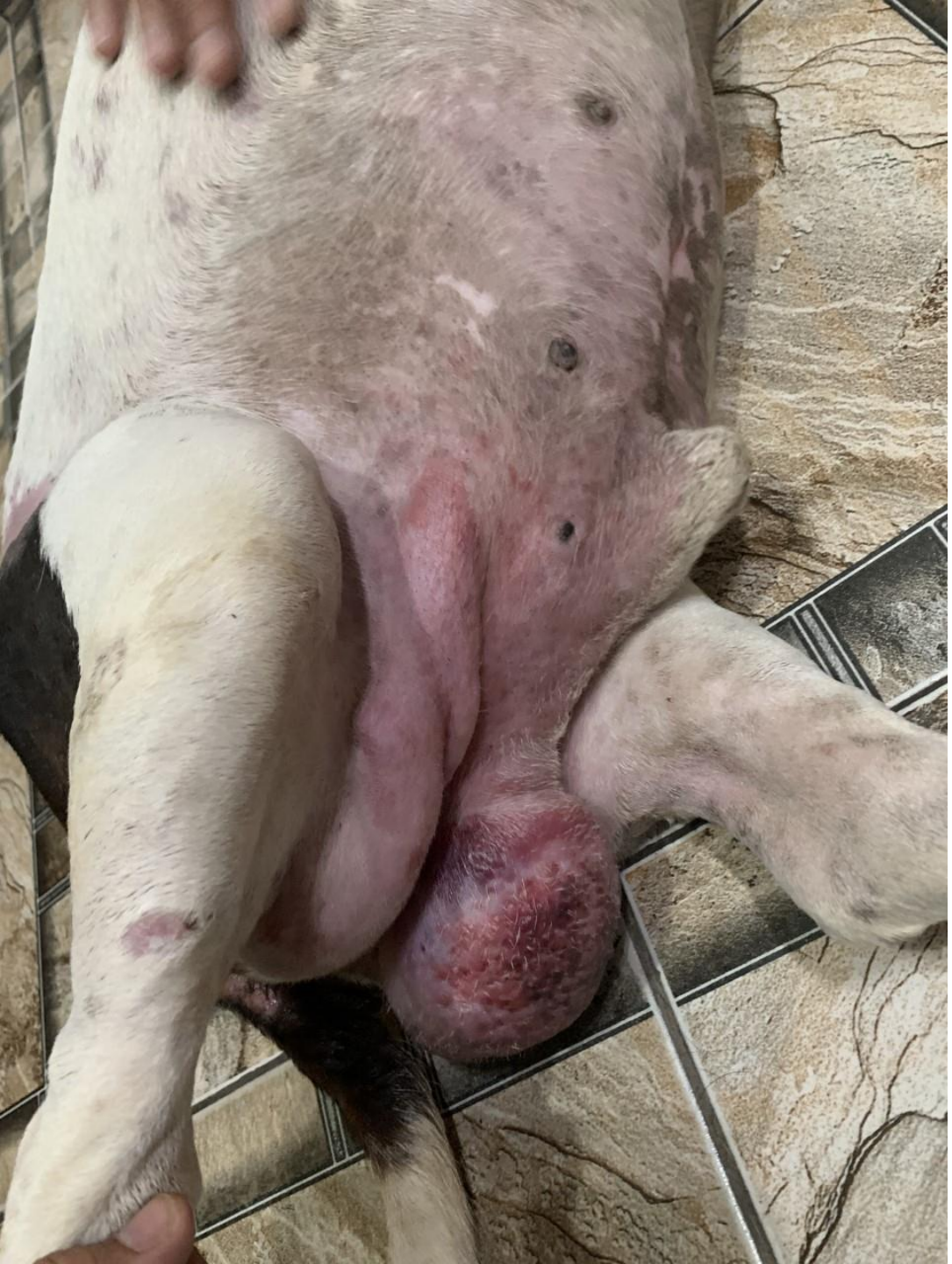


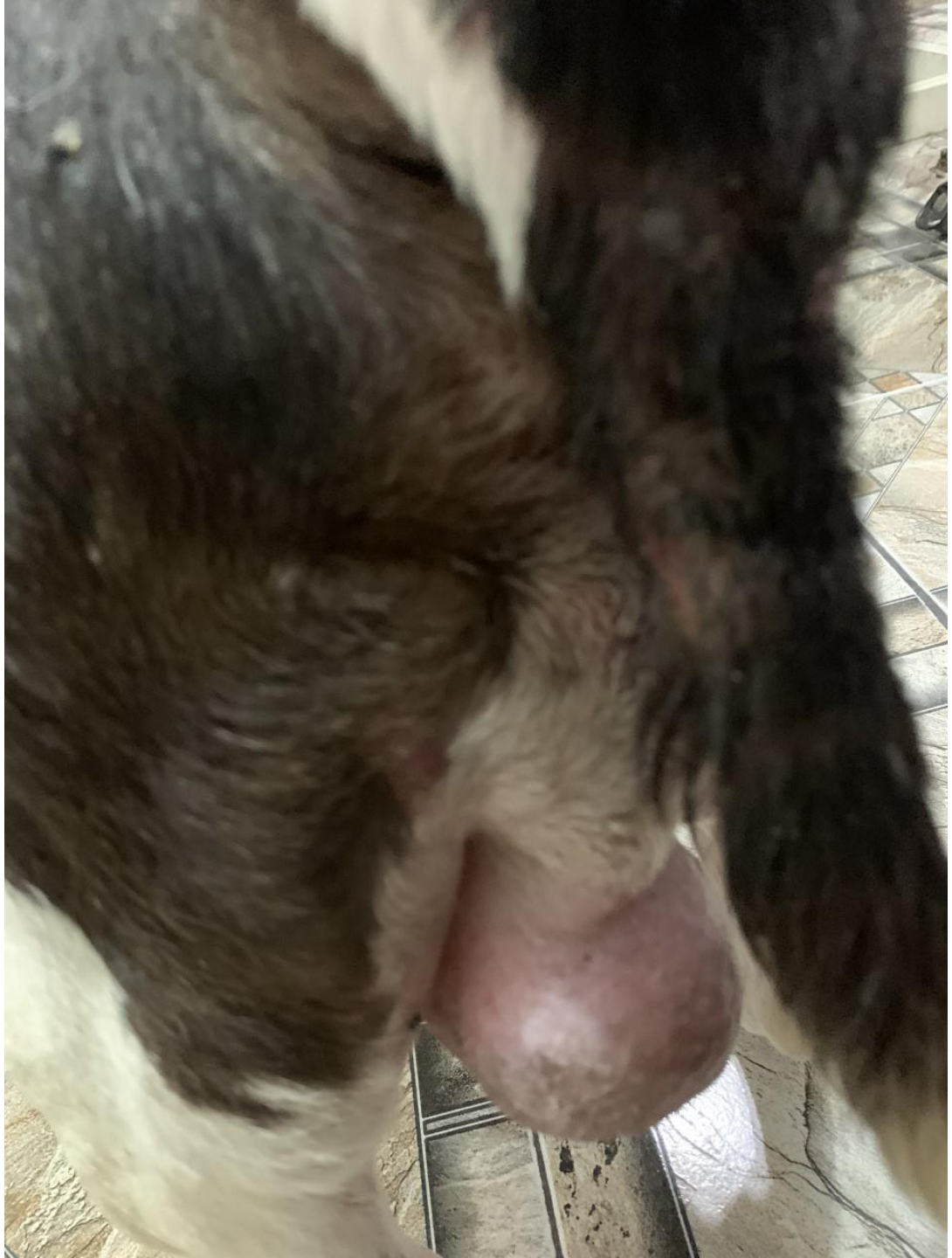




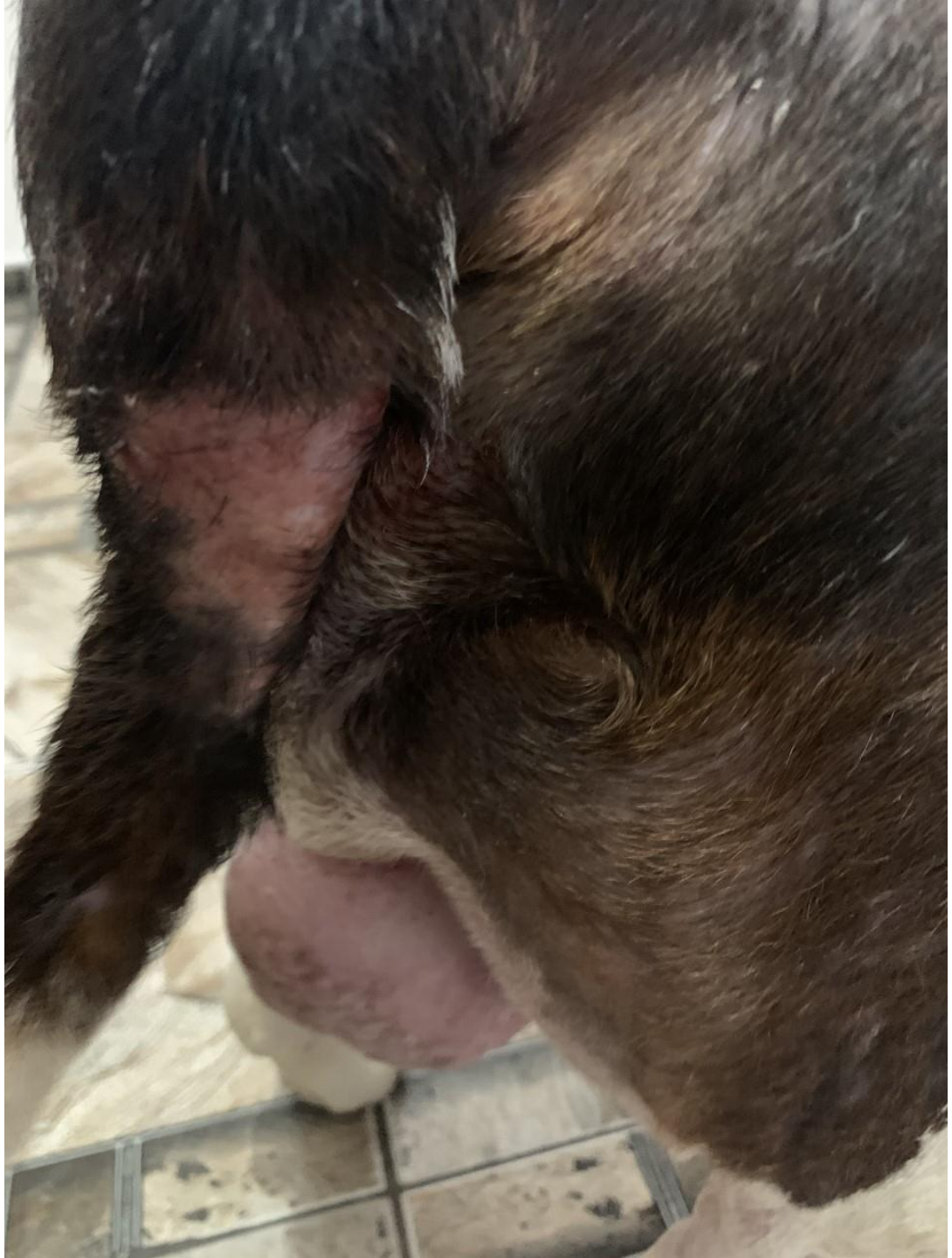


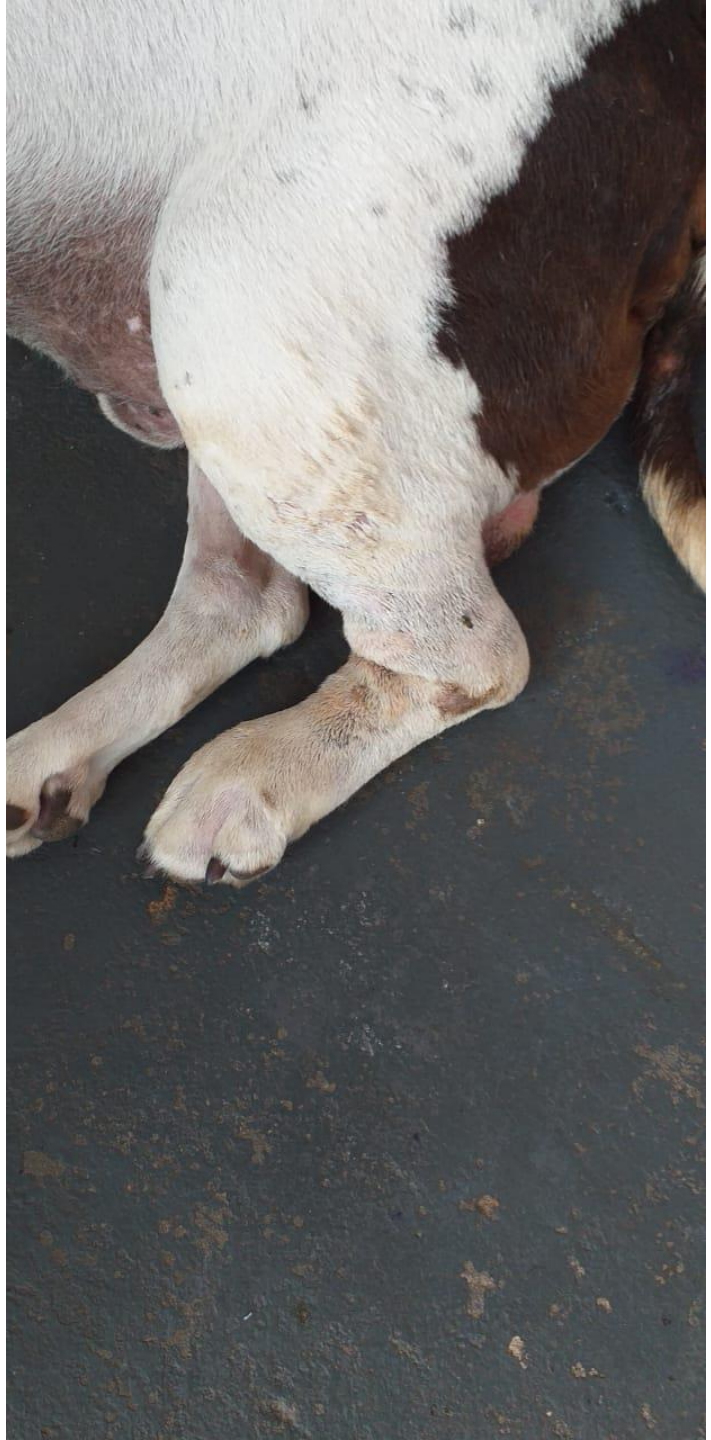




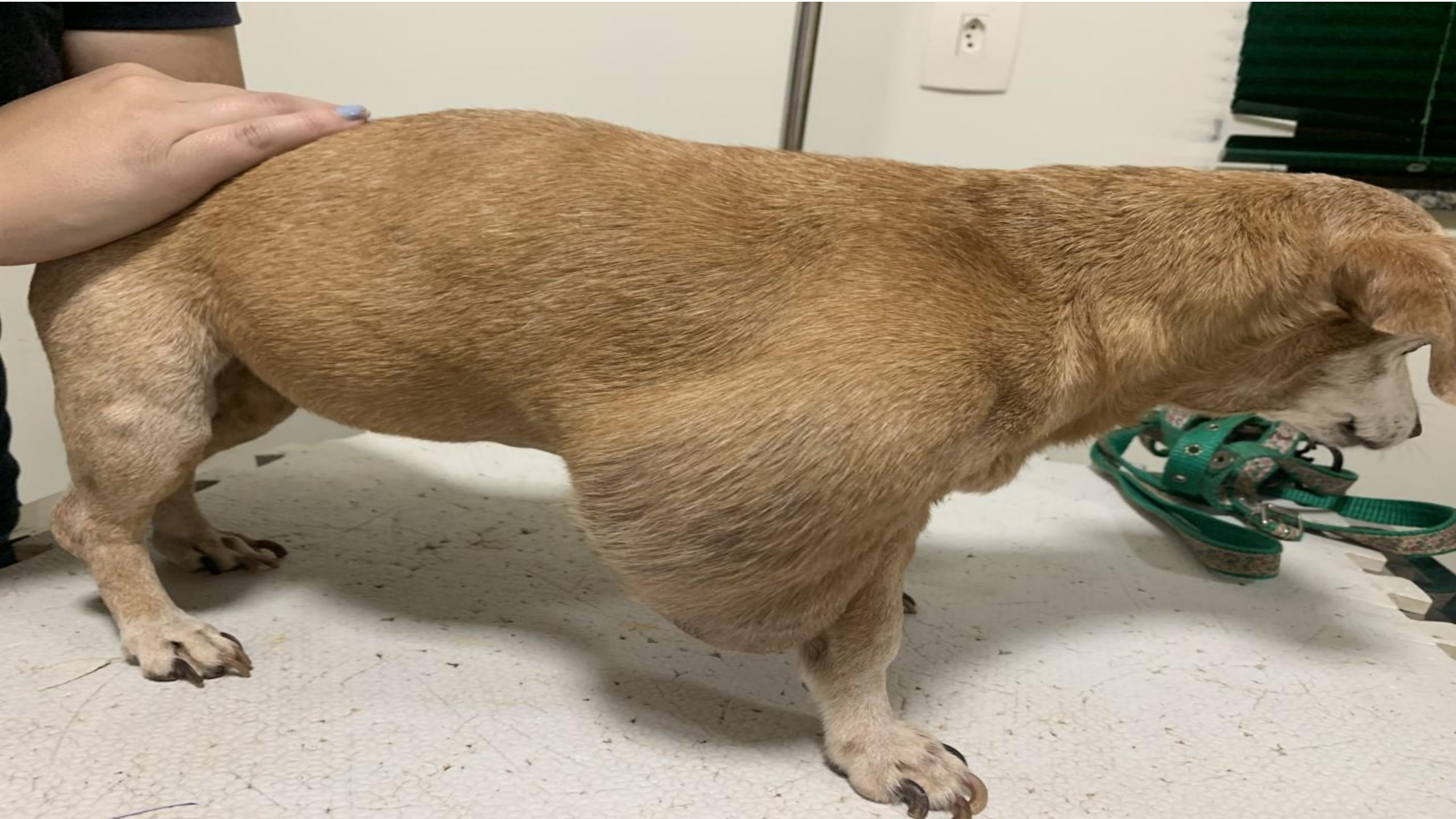


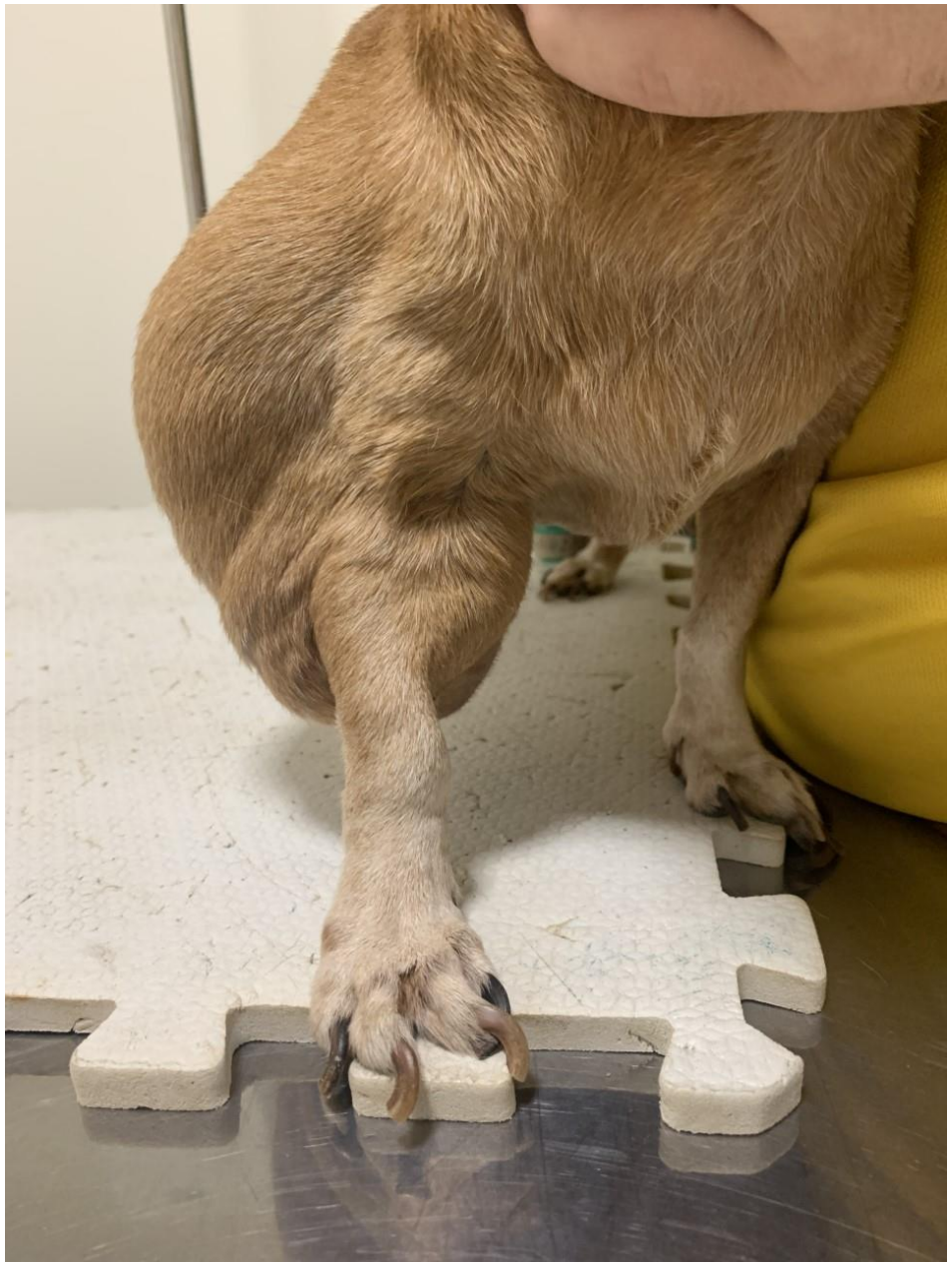


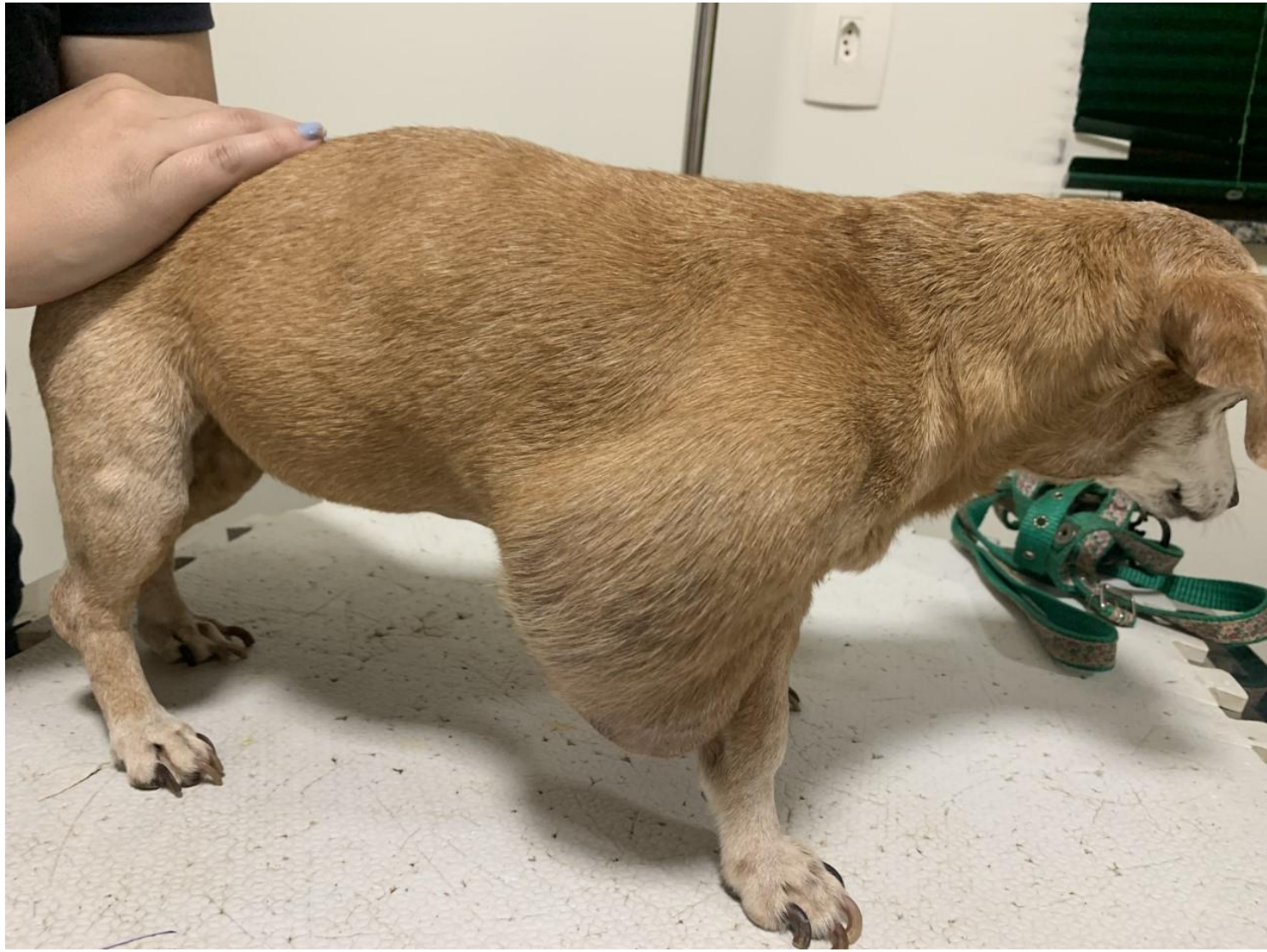


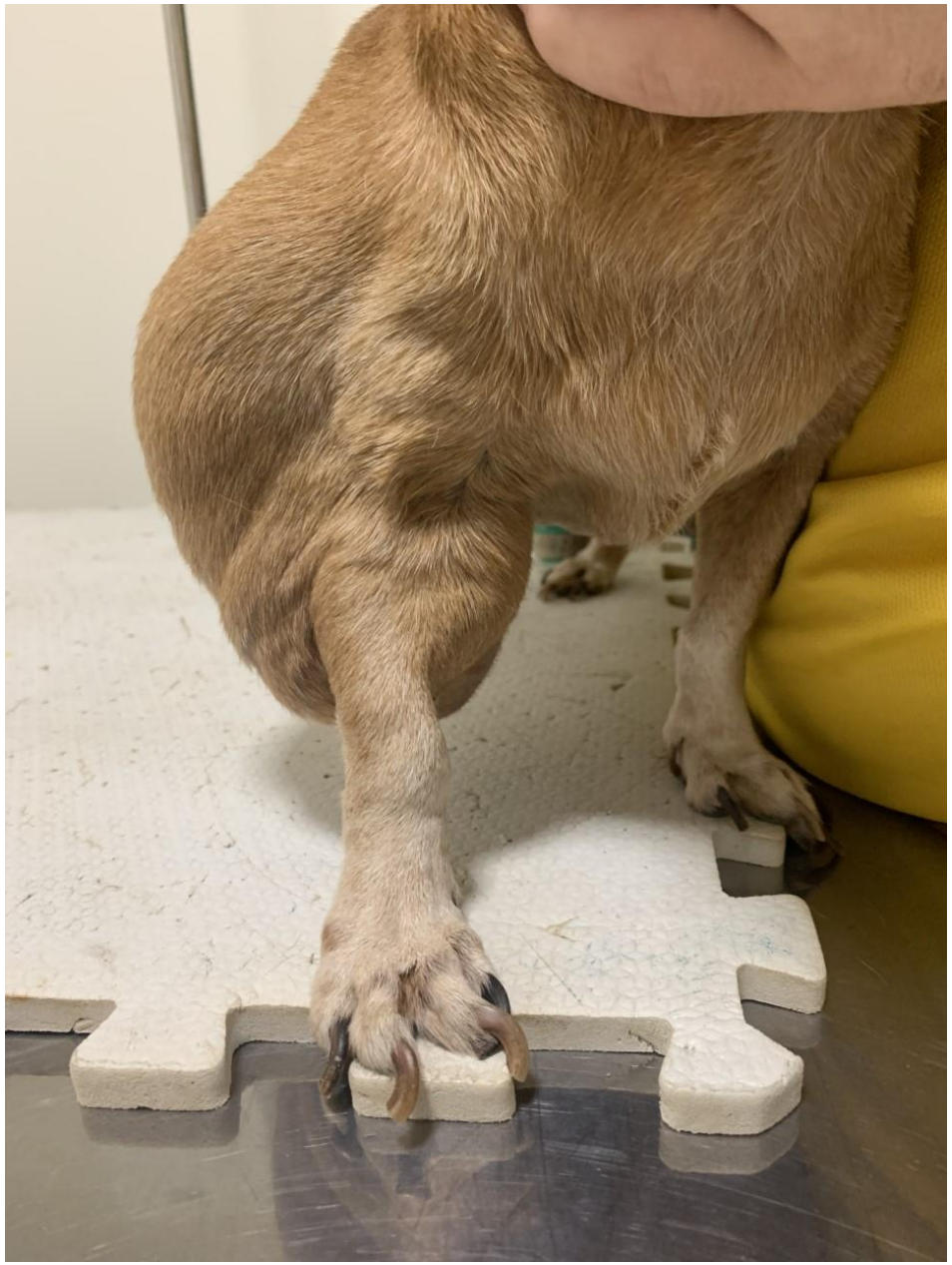


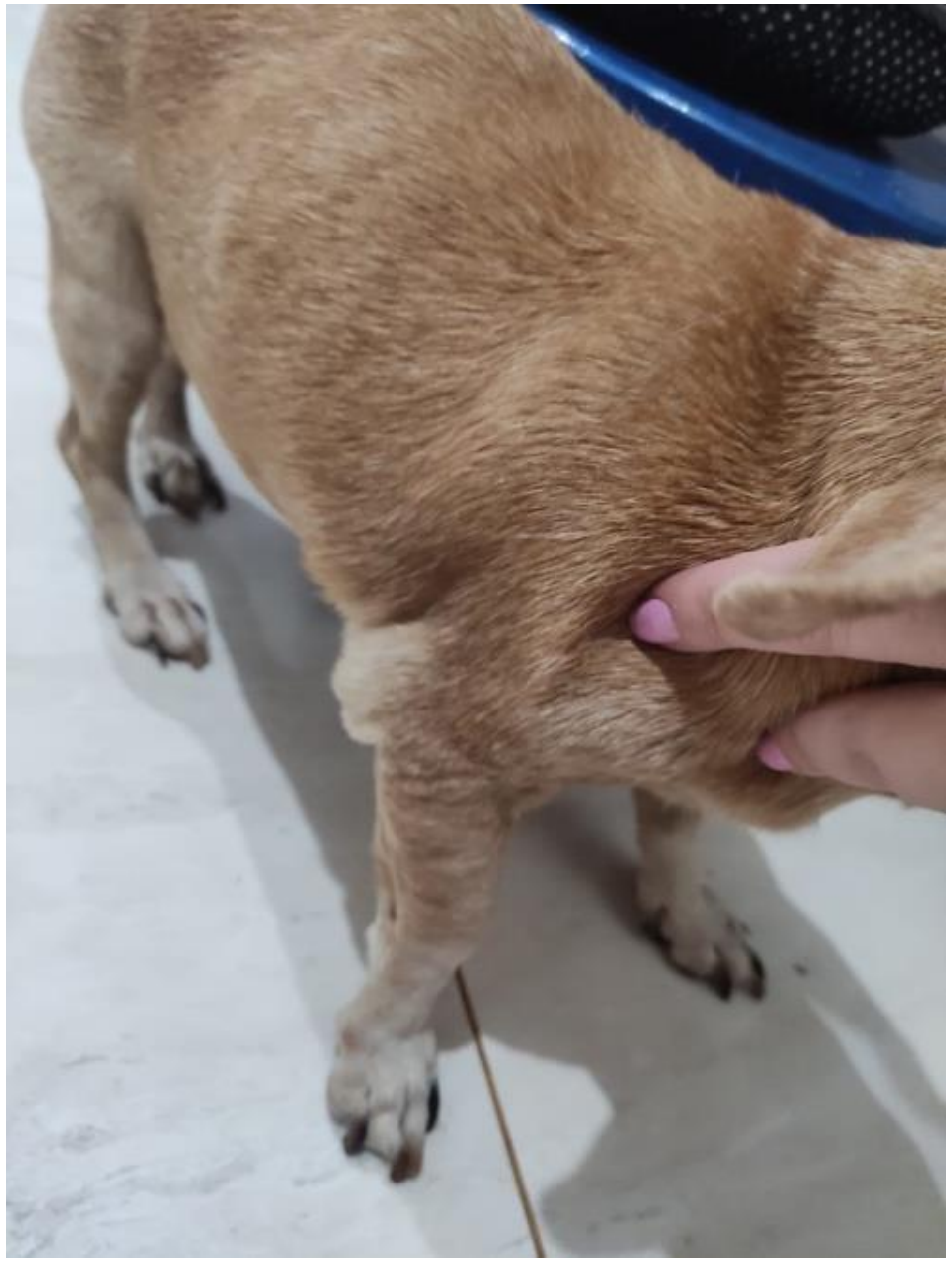

EDD7114











News and reports
Business & Innovation

PDF

Injectable treatment for mast cell tumours in dogs

View Full Text
http://dx.doi.org/10.1136/vr.m3123

Request Permissions

Virbac has launched the first injectable solution for the targeted treatment of canine mast cell tumours (MCTs).

Stelfonta is licensed in dogs for the treatment of non-resectable, non-metastatic subcutaneous MCTs located at or distal to the elbow or the hock; and non-resectable, non-metastatic cutaneous MCTs, where tumours are less than 8 cm^3 in volume and accessible to intratumoural injection.

The solution contains tigilanol tiglate – a compound extracted from the seed of *Fontainea picrosperma*, commonly known as the blushwood tree, which is found in the rainforests of North Queensland, ...

View Full Text

Footnotes

J Vet Intern Med. 2020 Jun 16. doi: 10.1111/jvim.15806. Online ahead of print.

Randomized controlled clinical study evaluating the efficacy and safety of intratumoral treatment of canine mast cell tumors with tigilanol tiglate (EBC-46)

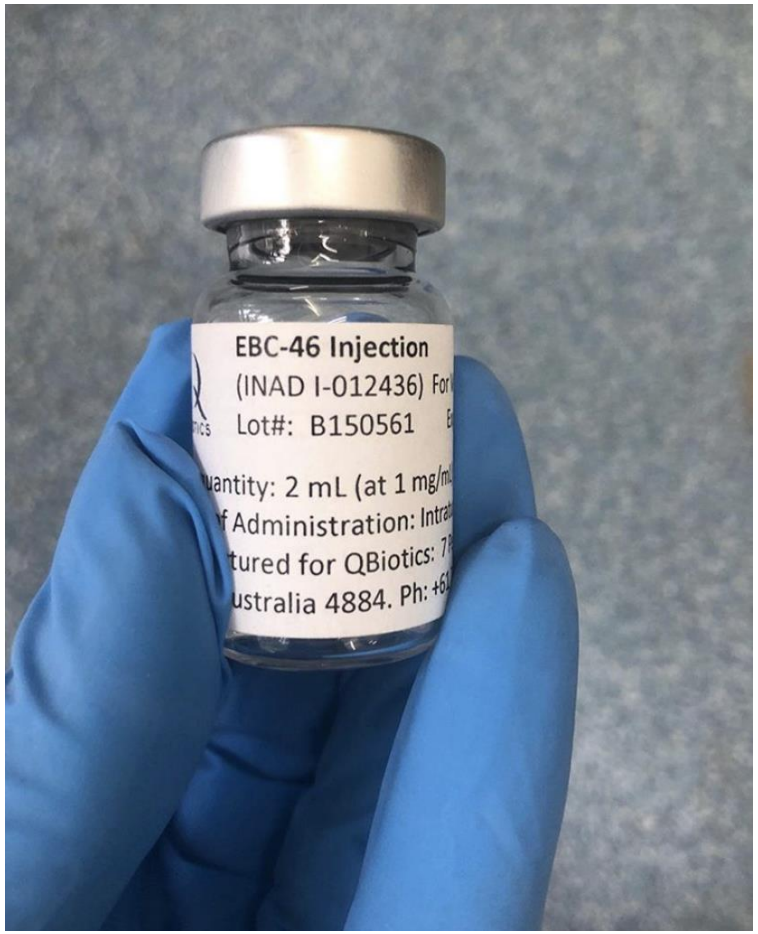
Thomas R De Ridder [1], Justine E Campbell [1], Cheryl Burke-Schwarz [2], David Clegg [3], Emily L Elliot [4], Samuel Geller [5], Wendy Kozak [6], Stephen T Pittenger [7], Jennifer B Pruitt [8], Jocelyn Riehl [2], Julie White [9], Melissa L Wiest [10], Chad M Johannes [11], John Morton [12], Pamela D Jones [1], Peter F Schmidt [1], Victoria Gordon [1], Paul Reddell [1]

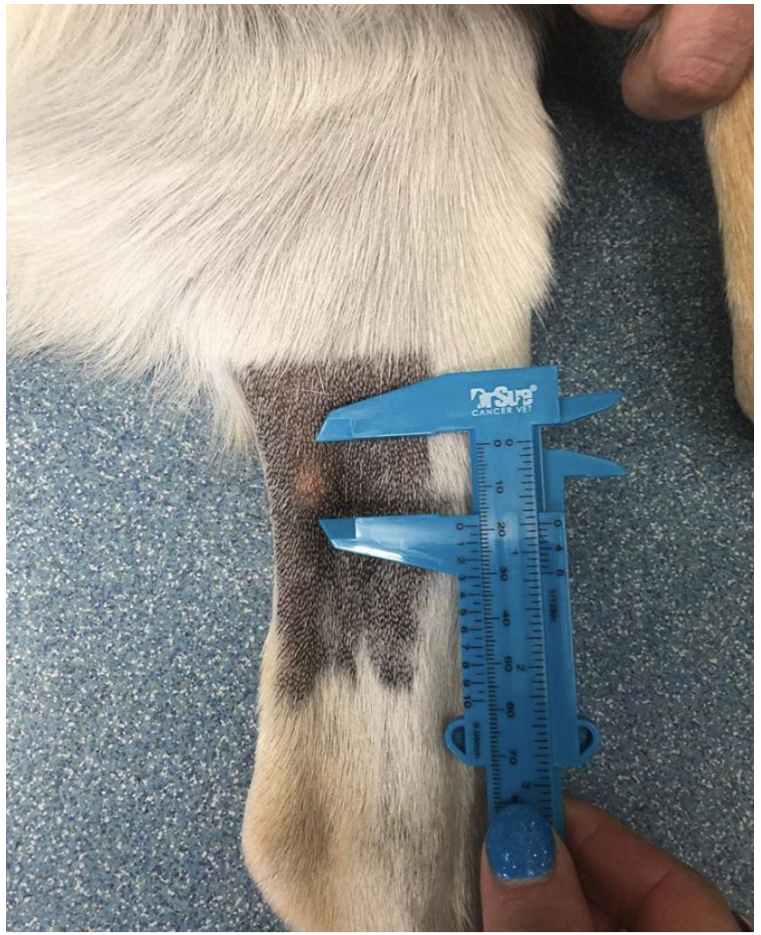
Affiliations + expand

PMID: 32542733 DOI: 10.1111/jvim.15806

Free article

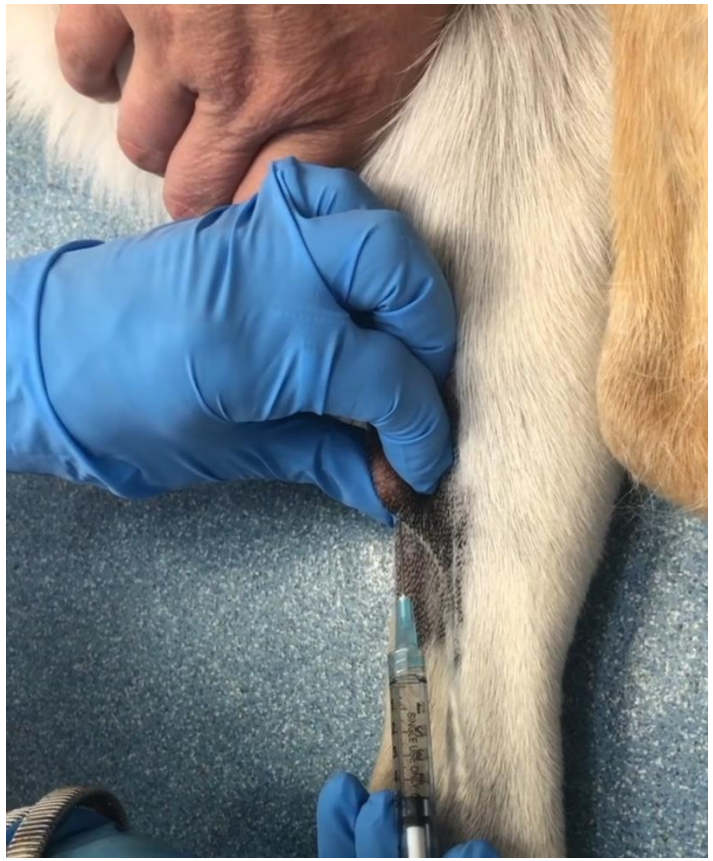
TIGLATO DE TIGINALOL

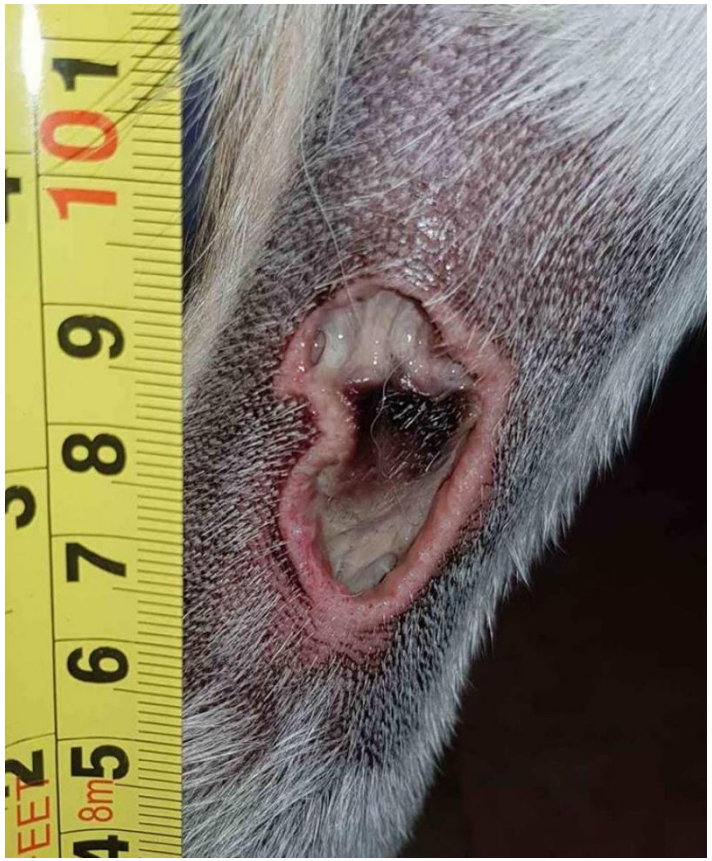




Dr. Sue

TIGLATO DE TIGINALOL





Dr. Sue

OBRIGADO