



#### **ESACROM R&D DEPT.**

#### **PRESENTS**

# APPLICATION OF SURGYSONIC WOUND DEBRIDEMENT IN RAPTOR PODODERMATITIS

## By Dr. Francesco Paesano







## INTRODUCTION

**Ulcerative** or **bumblefoot pododermatitis** is a disease that has always afflicted the legs of birds. To date, several more or less complex treatment attempts have been employed, none of which currently guarantees a certainty of recovery. If left untreated, the disease evolves with necrosis, tendinitis, septic arthritis, lameness and loss of function of the affected limb, systemic problems with infection of other joints, valvular endocarditis, amyloidosis, septicaemia and death.

Today the surgical debridement, combined with the management change, is the treatment of choice, but requires sessions under general anesthesia and presents the risk of damaging vessels, nerves and tendons.

**Ultrasonic debridement** allows you to **selectively remove necrotic tissue** without damaging healthy tissues, has **antibacterial action** and **does not require general anest**hesia.

For the first time this technique has been successfully used in two cases of pododermatitie on two specimens of Common buzzard (Buteo buteo) housed in the wild avifauna recovery center of Empoli (Ce.T.R.A.S).





## **SURGICAL PROTOCOL**

The two examples of **Poiana** were subjected to a **weekly ultrasonic debridement session**, for a total of **4 sessions**.

The treatment consists in the removal of **external eschar** and **cleaning of ulcers** with **ES007ST** insert. Once gained access to the underlying tissues, the **ES020XT** insert is inserted into the cavities to remove caseous necrotic tissue and perform **bacterial decontamination**.

During the first 2 weeks, doughnut bandages were applied that limited the weight of the raptor on the ulcers and medicated with antiseptic ointments on a daily basis.

The two specimens are **completely healed** from the podedermatite without needing any surgical debridement session.



ES007ST





# **SURGICAL PROTOCOL**

#### INITIAL PRESENTATION OF THE ANIMAL

Clinical case n. 1



Clinical case n. 2



### COMPLETE HEALING OF ULCERS AFTER 4 WEEKS

Clinical case n. 1



Clinical case n. 2







## **ADVANTAGES OF ULTRASONIC DEBRIDEMENT:**

- 1 Selective system that does not damage healthy tissues
  - 2 Deep cleansing and cleaning
- 3 Antibacterial effect of bactericidal cavitation
  - 4 Reduction of debridement time and number of treatments
- 5 Riduzione e gestione del dolore
  - 6 Reduction exudate





## **DEDICATED TIPS**



#### ES007ST

Trapezoidal chisel insert for removal of escara and cleaning of ulcers.

SERRATED AND SHARP



#### ES020XT

Cylindrical insert for the removal of necrotic tissue and bacterial decontamination.

MICRO-SHARP

## **PARAMETERS**

	Code		Code	
	ES007	ST	ES020XT	
U		20		20
V		40		40
Р		100		100
<b>MAX POWER</b>		50		50

U: Suggested power

V: Suggested vibration

P: Recommended pump capacity

MAX POWER: Maximum power at which the insert can be used





## DR. FRANCESCO PAESANO

He graduated in 2013 from the **Faculty of Veterinary Medicine of the University of Pisa**, with an experimental thesis entitled "Partially Intravenous Anesthesia in the course of orthopedic procedures in wild avian species".

Afterwards, he does internships and visits at zoological parks, wildlife recovery centers and clinics specializing in exotic animal medicine in Spain, Portugal, United Kingdom, Indonesia.



From 2013 to 2016 he worked in **Anesthesiology** and **Medicine and Surgery of Exotic Animals** at the Vet Hospital, Florence.

From 2016 to 2018 he worked on General Medicine of Small Animals, Medicine and Surgery of Exotic Animals and Odontostomatology at the Global United Veterinary Clinic in Abu Dhabi, United Arab Emirates.

Speaker at National and International Congresses: ICARE (International Congress Avian Reptile and Exotics mammals) in 2015 and 2019.

In 2022 he received the title of "General Practitioner Certificate in Small Animal Dentistry and Oral Surgery" from the International School of Veterinary Postgraduate Studies.

Since 2018 he has been dealing exclusively with **Odontostomatology** and **Surgery of Exotic Animals**, sectors of which he was responsible at the Clinica Veterinaria Borghesiana in Rome until September 2022.

He participates as a lecturer in the "Practical Course of Dentistry" Unisvet and the Course of Dentistry for veterinary technicians Unisvet.

His main fields of interest are Oncological Surgery and Maxillo Facial Trauma and Piezo Surgery.

Since October 2022 he has collaborated with **VetHospital**, with the clinics of the Florentine Cluster of VetPartnes Italy, and with many other structures in Tuscany.

From May 2023 collaborates with the Centro Toscano Recupero Avifauna Wildlife of Empoli.





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