

Retrospective study of primate cases from the Veterinary Pathology Diagnostic Service of the UAB (2000-2022)

UAB
Universitat Autònoma
de Barcelona

Rebeca Hurtado Muñoz - June 2023

OBJECTIVES

- Review the **anatomopathological studies** conducted on primates, including necropsies and biopsies, carried out by the Veterinary Pathology Diagnostic Service of the UAB.
- Examine the **primary diagnosed diseases and causes of death** in the different studied primate families, as well as their respective frequencies.
- Assess the **methodology employed by the Service** for studying and retaining primate case information, and to propose potential improvements.

RESULTS

The study examined a total of 151 cases: 132 necropsies and 19 biopsies. Primarily focusing on zoo-captive primates.

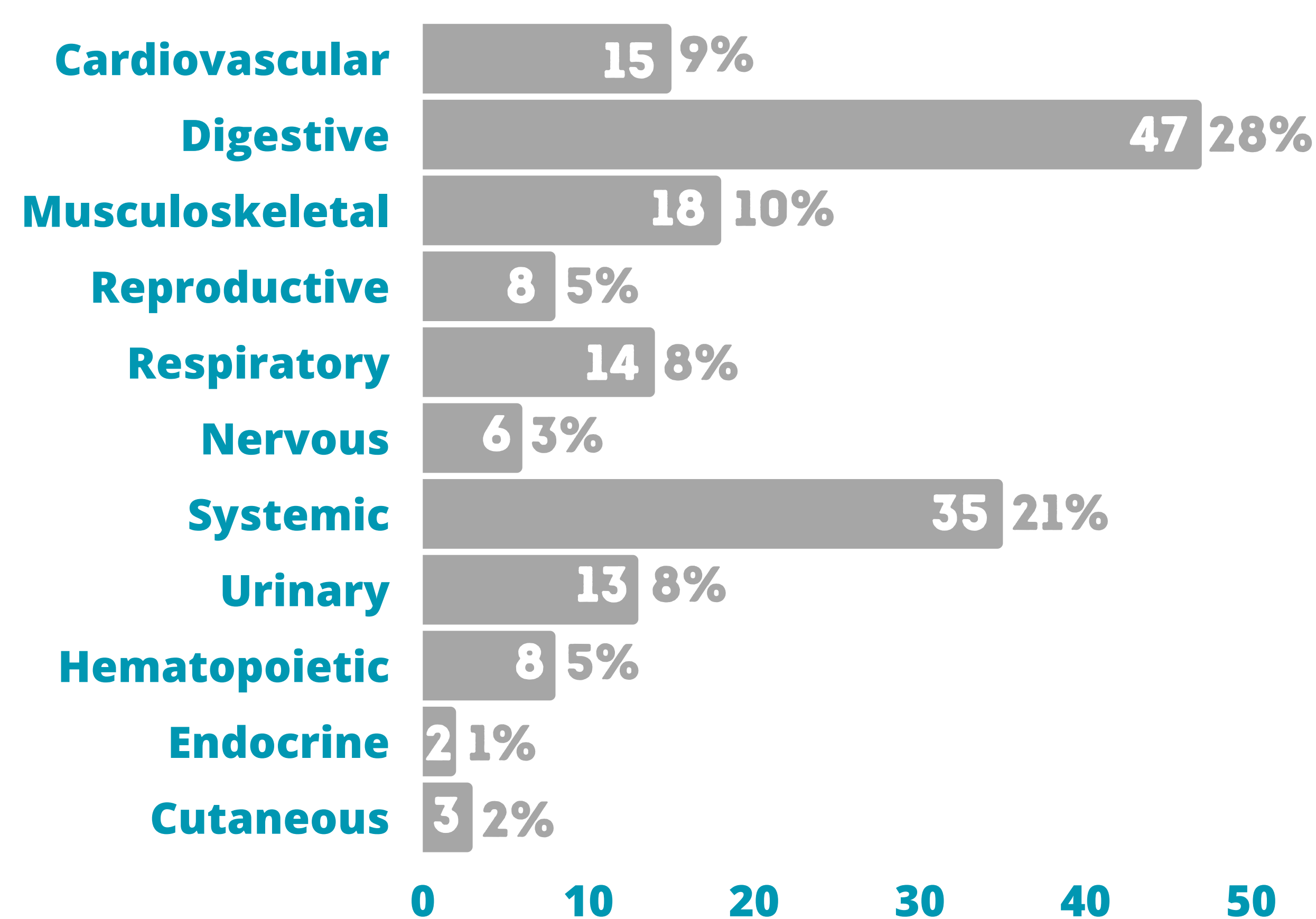


Figure 1. Frequency and percentage of diagnosed diseases categorized by anatomical systems.

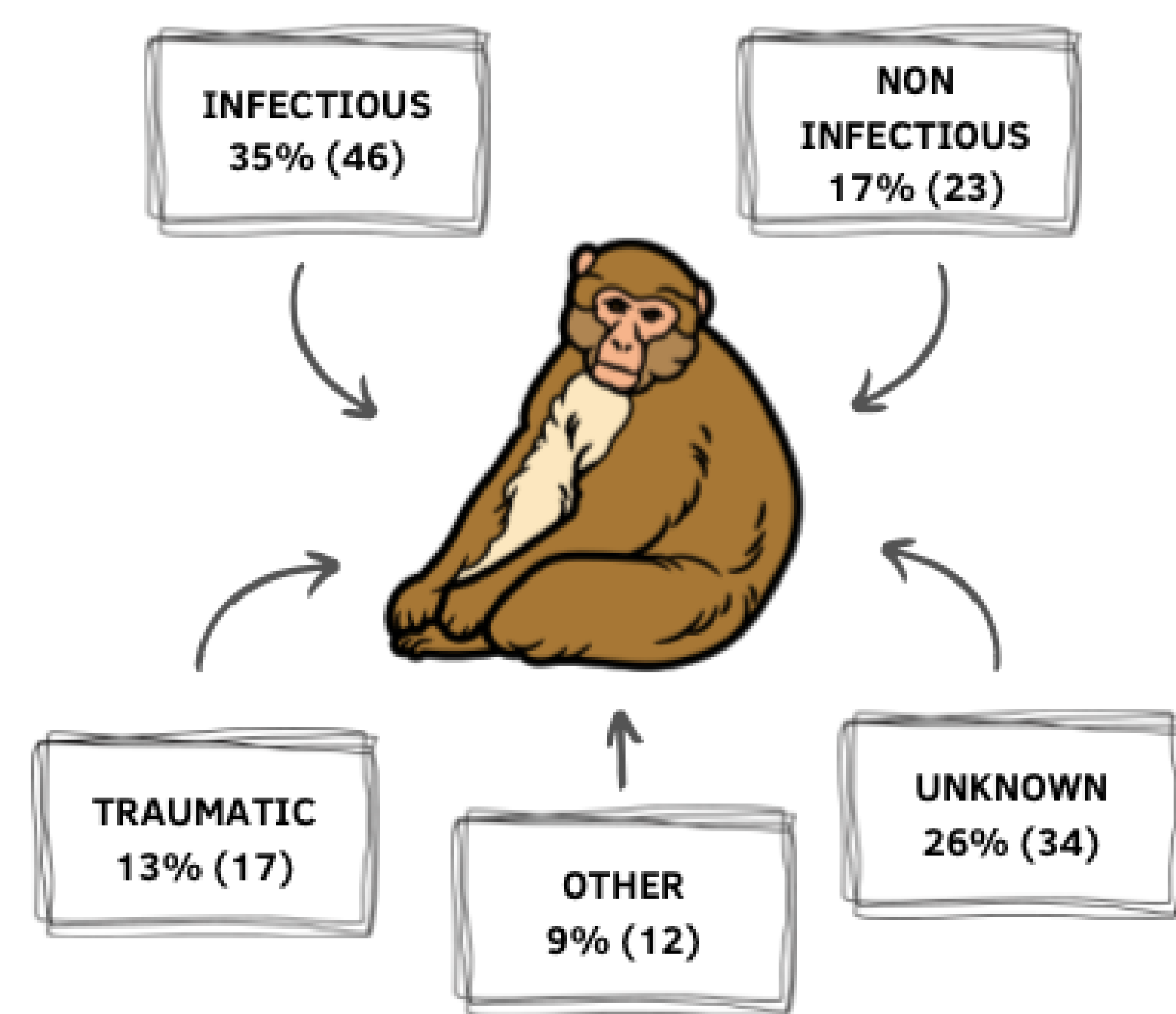


Figure 2. Frequency of causes of death grouped by general etiology.

DISCUSSION

- Significant **data gaps**: 17% unknown diagnostics, 26% unknown cause of death, limited agent characterization.
- The observed incidence of **trauma**-related deaths at 13% exceeds published data, considering that some rescue centers attribute only 7% of deaths to traumatic causes.
- **Idiopathic Myocardial Fibrosis (IMF)**, a leading cause of death in captive chimpanzees, often requires a comprehensive cardiac examination for accurate diagnosis, which suggests a potential underdiagnosis.
- **Marmoset Wasting Syndrome (MWS)**, which previously afflicted 60% of the *Callitrichidae* family and is now expected to impact 10%, has been observed in only 5% of the individuals in this study.
- The majority of **neoplasms** found were squamous cell carcinoma, commonly observed in the specified anatomical locations among these species. However, the described 50% of gastrointestinal neoplasms was not observed.

CONCLUSIONS

- The most frequent diagnoses were **digestive, systemic, and musculoskeletal** conditions, predominantly originating from **infectious and traumatic** sources. Enteritis emerged as the most diagnosed disease, while trauma emerged as the leading cause of death.
- The observed frequencies of pathologies **generally matched the expected frequencies**, but traumatic issues were more prevalent than anticipated. Respiratory problems, IMF, and MWS may have been underdiagnosed.
- The **significant number of undiagnosed cases** suggests a potential need to expand the utilization of laboratory and molecular diagnostic techniques and specific training of necropsy personnel when dealing with primate cases.