Frequent and infrequent mycosis in small animal practice in Costa Rica

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Background and aims

VETERINARY MYCOLOGY NOWADAYS…

Individual cases vs. mass mortalities

Overdiagnosed vs. underdiagnosed

Public health concern

AIM

To present the results of ten years of work in veterinary mycology in dogs and cats in Costa Rica

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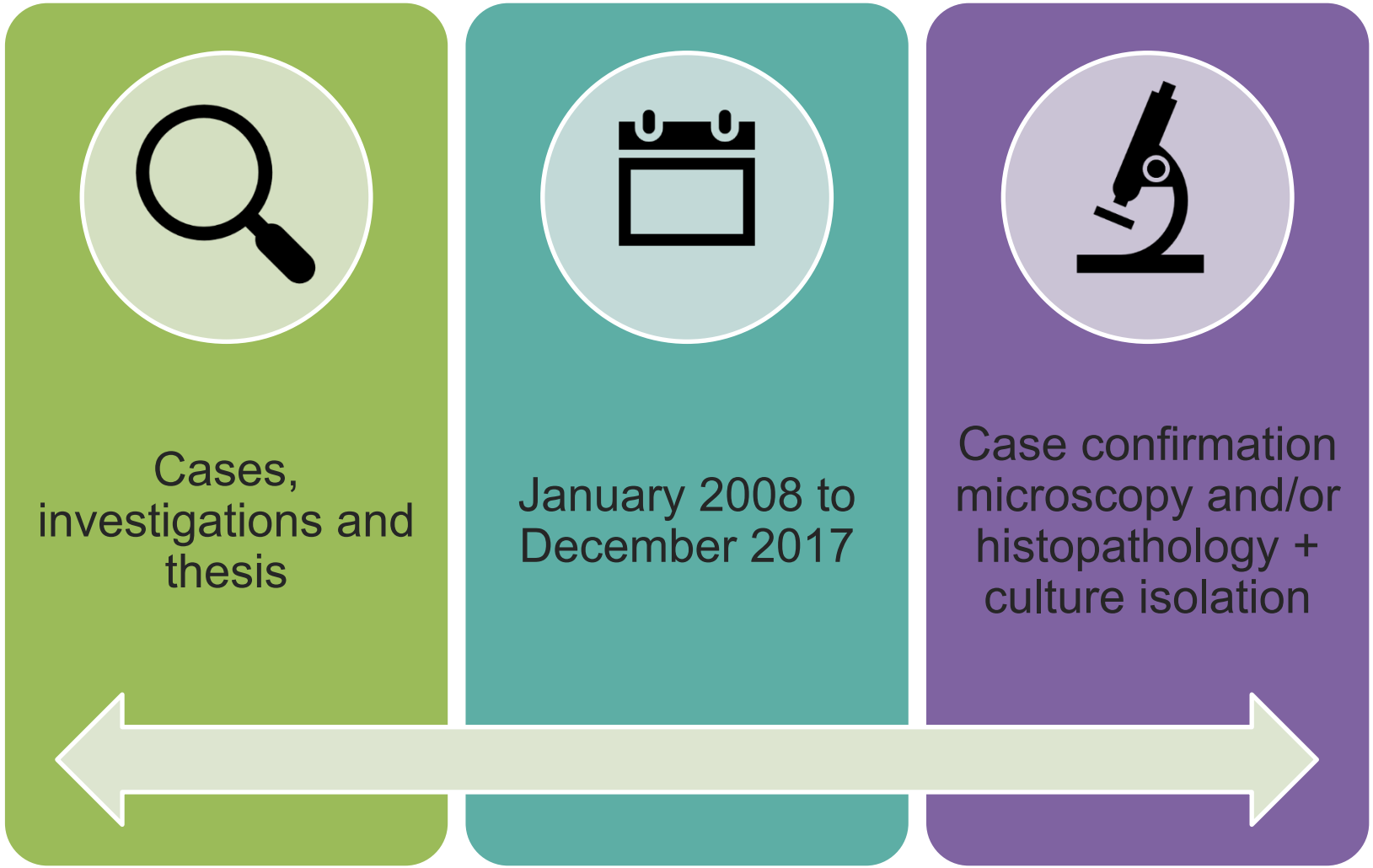
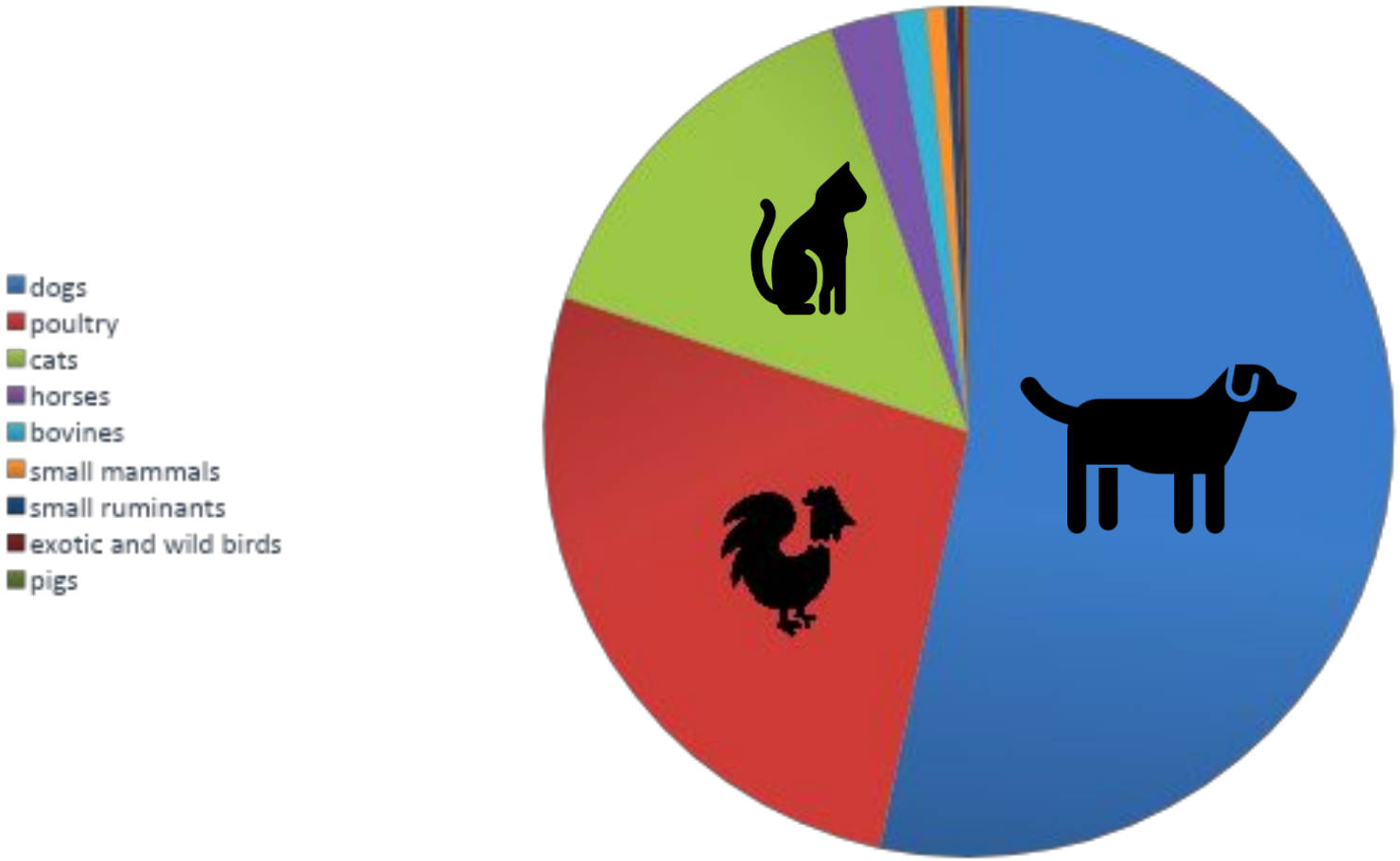
Methods


Cases, investigations and thesis
January 2008 to December 2017
Case confirmation microscopy and/or histopathology + culture isolation

Results

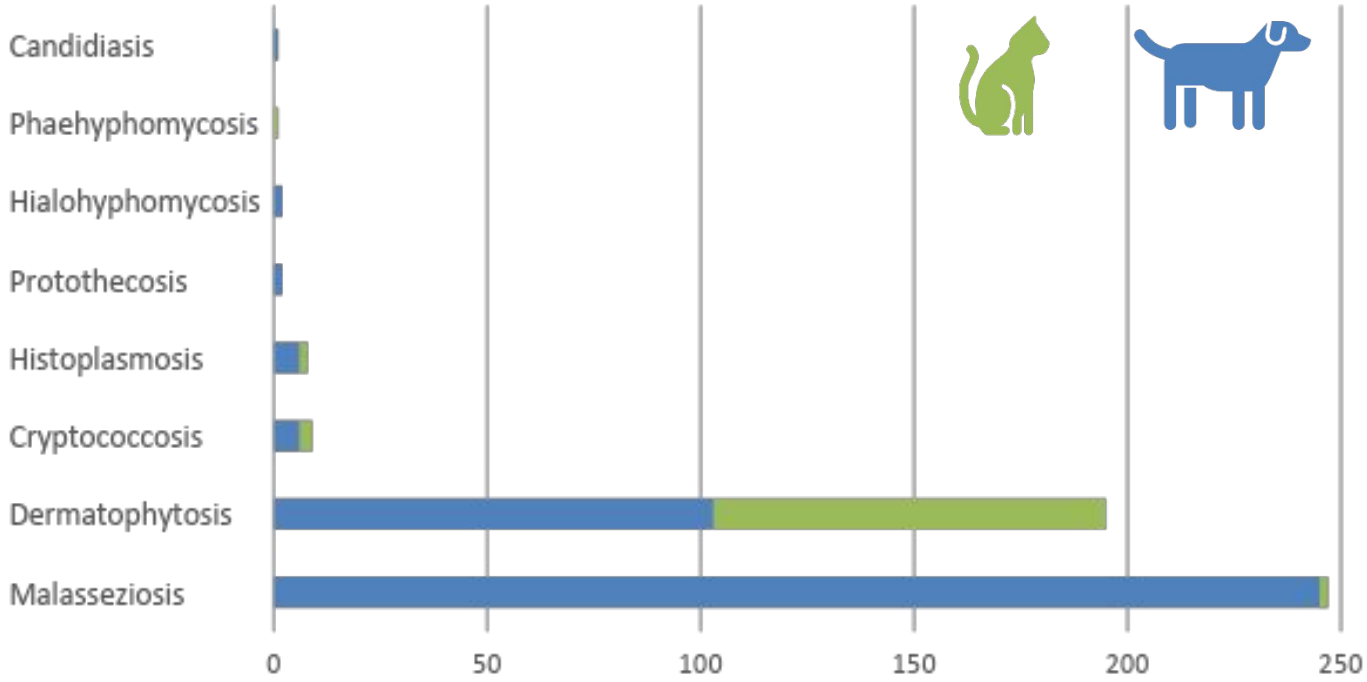


2469 animals
27.7 % confirmed cases

Distribution of confirmed cases of mycosis during 2008-2017 according to animal species

Results

1582 animals
29.4 % confirmed cases



Confirmed fungal infections in dogs and cats during 2008-2017

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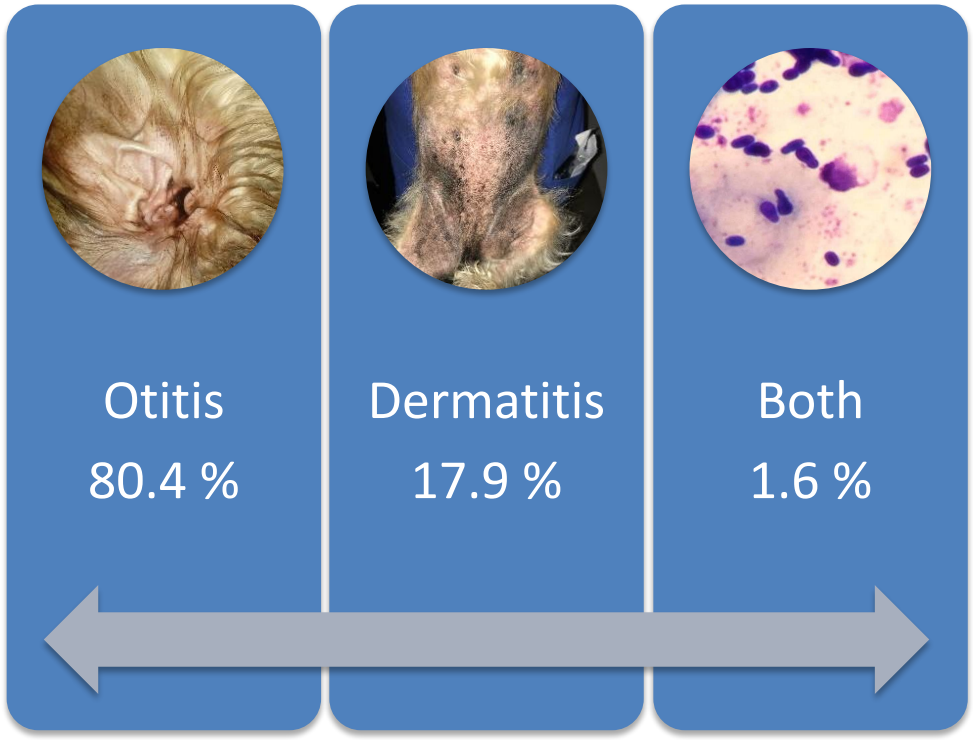
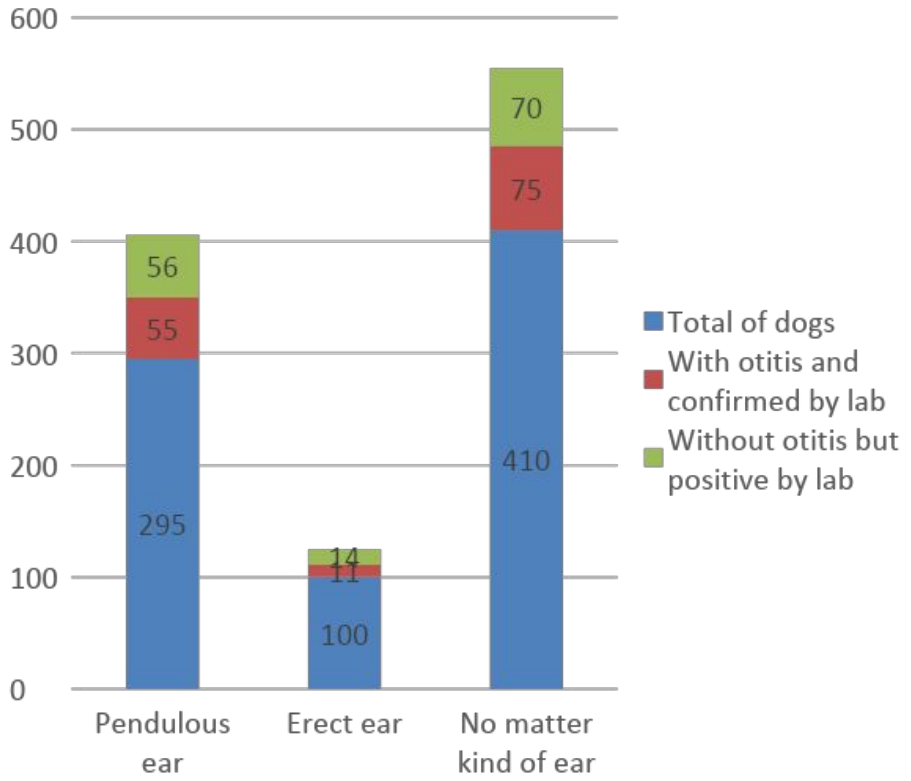
Malasseziosis



Canine Malasseziosis cases from 2008-2017

Malasseziosis

	Tests results	
Clinical condition	**Positive/ total (%)**	**Negative/ total (%)**
With otitis	77 / 143 (53,8)	66 / 143 (46,2)
Healthy ears	70 / 267 (26,2)	197 / 267 (73,8)
Total	147 / 410 (35,8)	263 / 410 (64,2)



- 410 dogs
- 143 with otitis
- 267 with healthy ears

Positive cases by laboratory according type of ear and clinical condition (Urbina et al. 2014)

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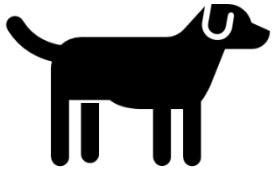
Dermatophytosis

Dermatophytosis rates in cats and dogs according regions

- Veterinary care (Heredia): **4.7%** (Arias, 2013)
- Without vet. care : **20%** (Acevedo, 2017)
- UNA Casuistry: **11.3%** (Calderón & Urbina, 2018)



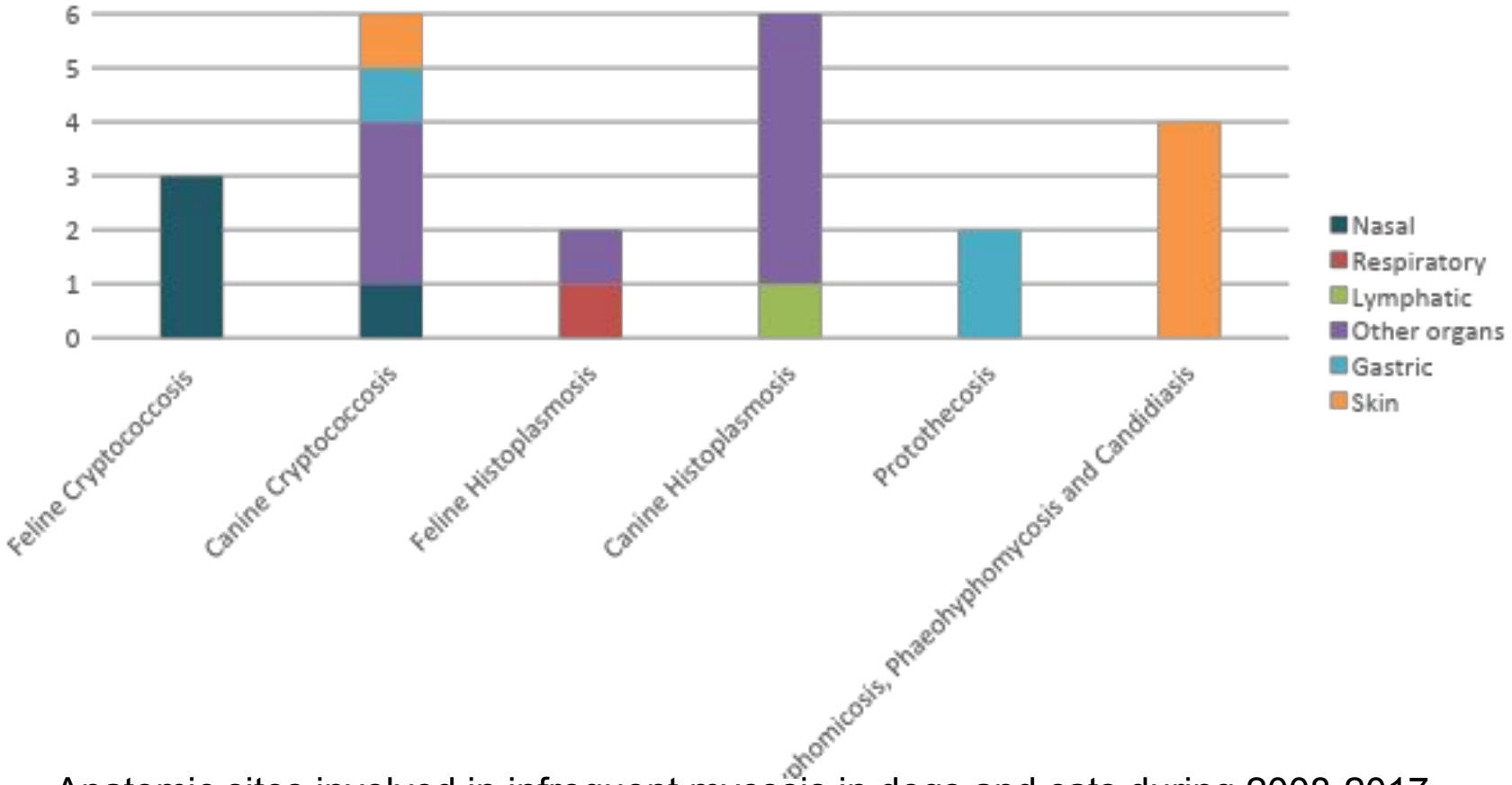
- Without vet. care: **17.1%** (Solís, 2017)
- UNA Casuistry: **32.5%** (Calderón & Urbina, 2018)

Dermatophytosis

	Vet. care Heredia (Arias, 2013)	UNA Casuistry (Calderón & Urbina, 2018)	Without vet care (Acevedo, 2017)	UNA Casuistry (Calderón & Urbina, 2018)	Without vet care (Solís, 2017)
Microsporum canis	16.7	42.8	-------	80.9	42.8
Nannizia gypsea	83.3	36.5	20	16.6	28.5
Trichophyton mentagrophytes	-------	17.4	70	1.2	4.7
Others	--------	3.2	10	1.2	23.8

Dermatophytes isolated from dogs and cats during 2008-2017

Infrequent mycosis



Anatomic sites involved in infrequent mycosis in dogs and cats during 2008-2017

Conclusions

- Malasseziosis and Dermatophytosis were the most frequent mycoses in dogs and cats
- Variations in frequency and species of dermatophytes were associated with different geographical areas, living conditions and veterinary services availability
- Systemic and deep mycosis could be underdiagnosed because they are clinically similar to other more frequent diseases

Thank you for your kind attention!

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