

Entendendo a esporotricose e seu agente causador

CONCEITOS, HISTÓRICO, O COMPLEXO DE ESPÉCIES *SPOROTHRIX SCHENCKII* E A
EPIDEMIOLOGIA MUNDIAL

DR. RODRIGO DE ALMEIDA PAES

INSTITUTO NACIONAL DE INFECTOLOGIA EVANDRO CHAGAS - FIOCRUZ

Esporotricose

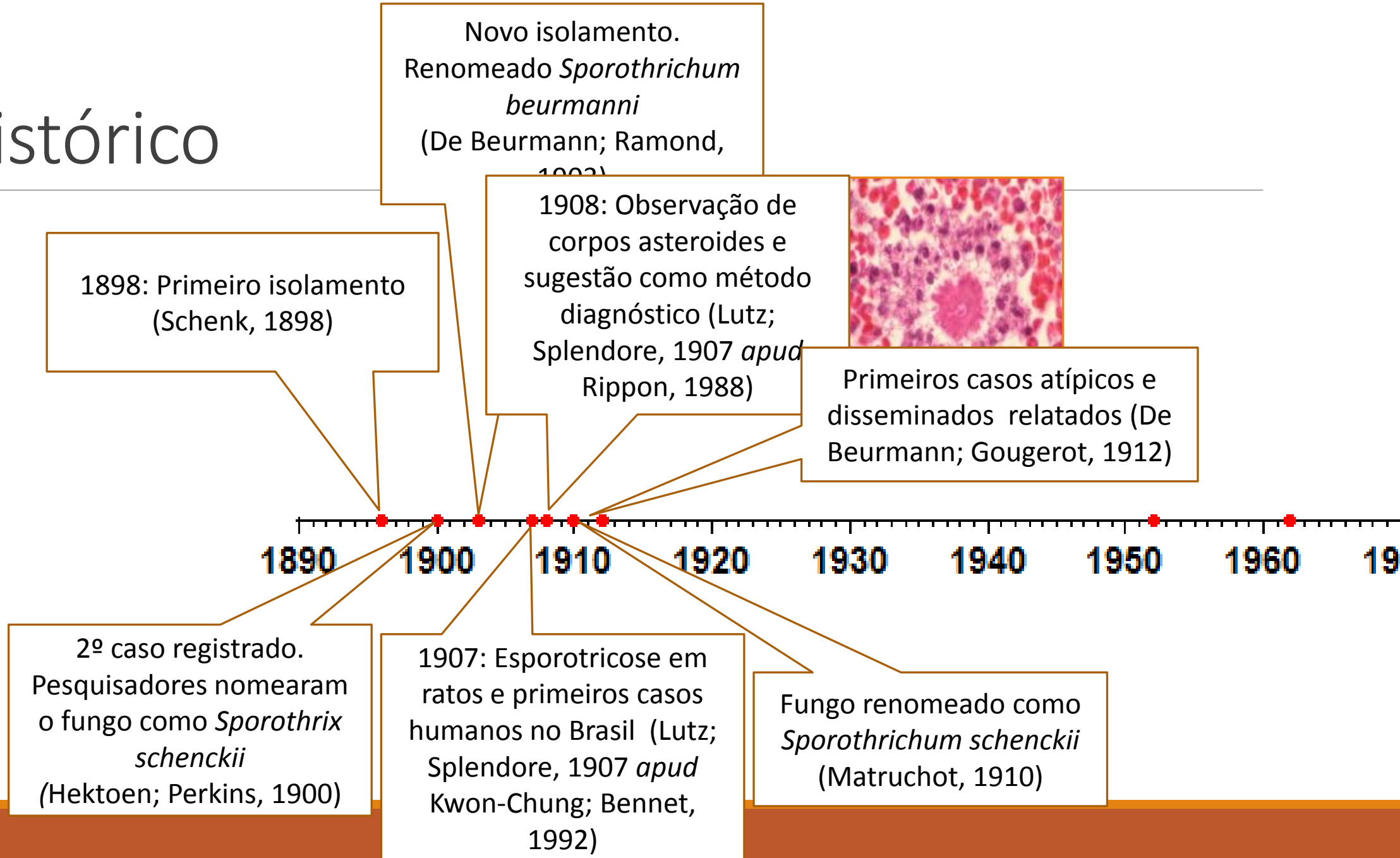
Micose subcutânea mais frequente na América Latina

Amplo espectro clínico

Distribuição mundial



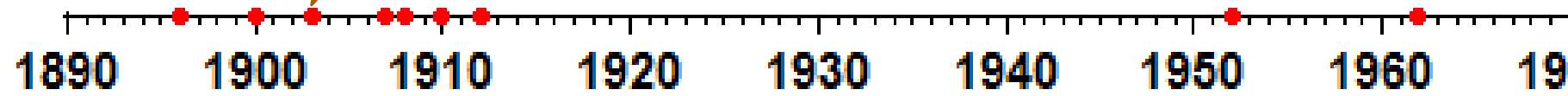
Histórico



Histórico

Primeiro relato de caso de esporotricose humana causada por contato com felino doente (Singer; Muncie, 1952)

Primeiro caso registrado de esporotricose felina (Freitas *et al.*, 1956)



Histórico

Início da epidemia no estado do Rio de Janeiro (Barros *et al.*, 2001)

Revisão na taxonomia fúngica
-
Divisão *Ascomycota*
Classe *Pyrenomycetes*
Ordem *Ophiostomatales*
Família *Ophiostomataceae*
(Guarro, 2012)

Correção na classificação do fungo, que volta a se chamar *Sporothrix schenckii* (Carmichael, 1962)

Descoberta do complexo *Sporothrix schenckii* e de suas espécies (Marimon *et al.*, 2006, 2007, 2008)

S. schenckii
S. globosa
S. luriei
S. mexicana
S. brasiliensis
S. pallida



Morfologia e fisiologia

Sporothrix schenckii sensu lato (s.l.) são fungos dimórficos

Macromorfologia:

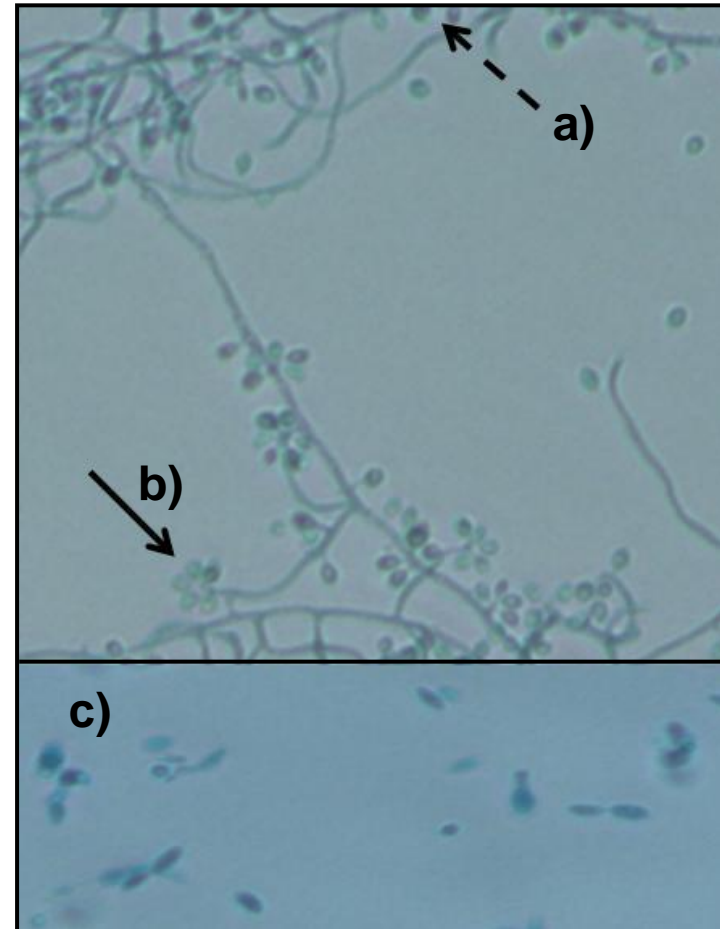
- Em natureza ou a 25°C (a, b)
- Em parasitismo ou a 37°C (c)



Morfologia e fisiologia

Micromorfologia:

- Em natureza ou a 25°C (a, b)
- Em parasitismo ou a 37°C (c)



Sporothrix schenckii: variabilidade genética



Mycopathologia 142: 115–118, 1998.
© 1998 Kluwer Academic Publishers. Printed in the Netherlands.

Ishizaki et. al

Mitochondrial DNA analysis of *Sporothrix schenckii* in North and South America

Mycologia, 95(3), 2003, pp. 434–441.

© 2003 by The Mycological Society of America, Lawrence, KS 66044-8897

De Beer et. al

Phylogeny of the *Ophiostoma stenoceras*–*Sporothrix schenckii* complex

Jpn. J. Med. Mycol.
Vol. 45, 165–175, 2004
ISSN 0916–4804

Watanabe et. al

RFLP Analysis of the Internal Transcribed Spacer Regions of *Sporothrix schenckii*

JOURNAL OF CLINICAL MICROBIOLOGY, Mar. 2005, p. 1348–1352
0095-1137/05/\$08.00+0 doi:10.1128/JCM.43.3.1348-1352.2005
Copyright © 2005, American Society for Microbiology. All Rights Reserved.

Neyra et. al

Vol. 43, No. 3

Epidemiology of Human Sporotrichosis Investigated by Amplified Fragment Length Polymorphism

Genotyping of *Sporothrix schenckii* by analysis of ribosomal DNA regions Zhang et. al

© 2006 Blackwell Publishing Ltd • *Mycoses*, 49, 305–310

Complexo *Sporothrix schenckii*

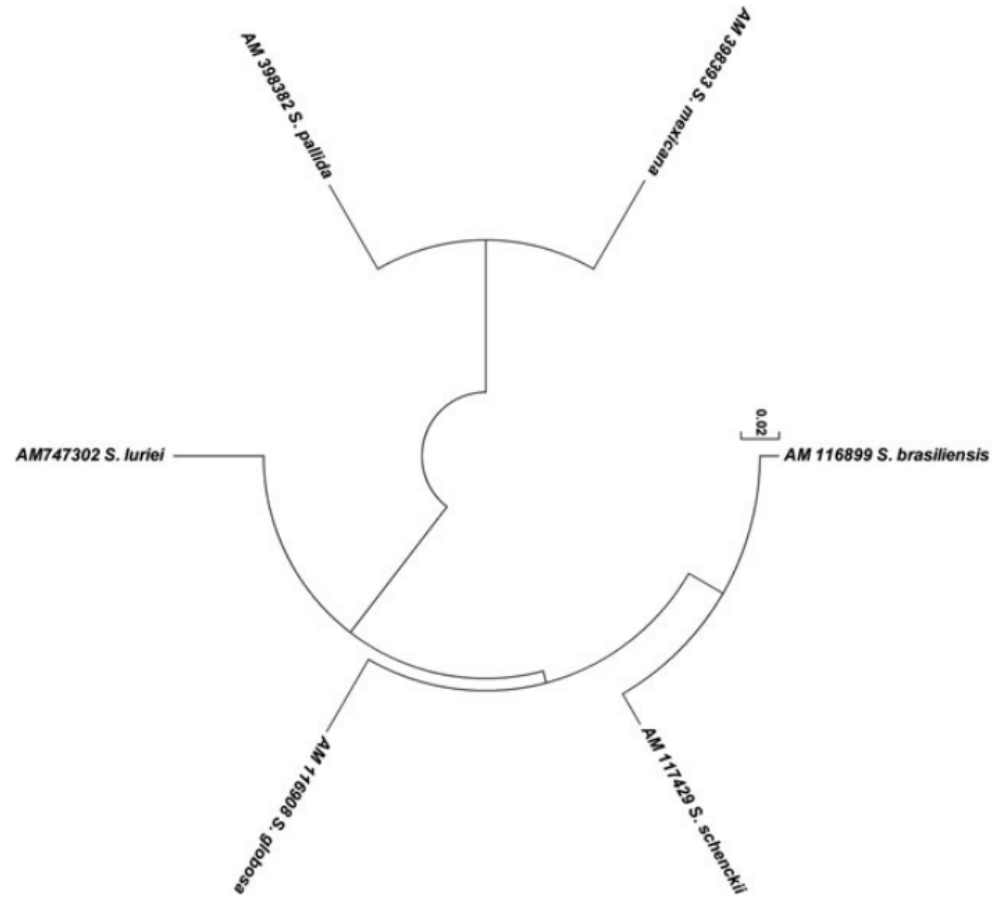
JOURNAL OF CLINICAL MICROBIOLOGY, Oct. 2007, p. 3198–3206
0095-1137/07/\$08.00+0 doi:10.1128/JCM.00808-07
Copyright © 2007, American Society for Microbiology. All Rights Reserved.

Vol. 45, No. 10

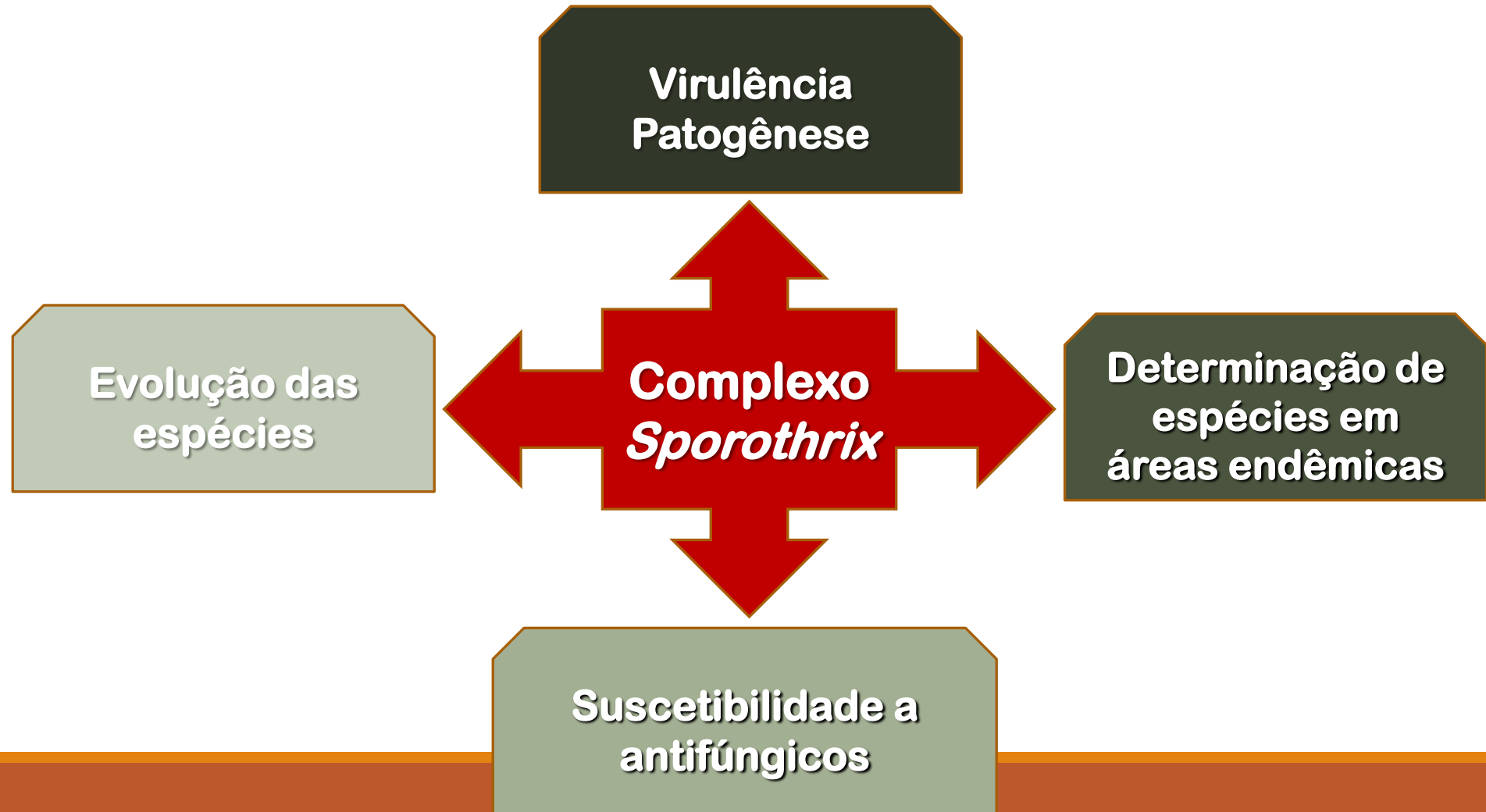
Sporothrix brasiliensis, *S. globosa*, and *S. mexicana*, Three New *Sporothrix* Species of Clinical Interest[∇]

Rita Marimon,¹ Josep Cano,¹ Josepa Gené,^{1*} Deanna A. Sutton,²
Masako Kawasaki,³ and Josep Guarro¹

Complexo *Sporothrix schenckii*



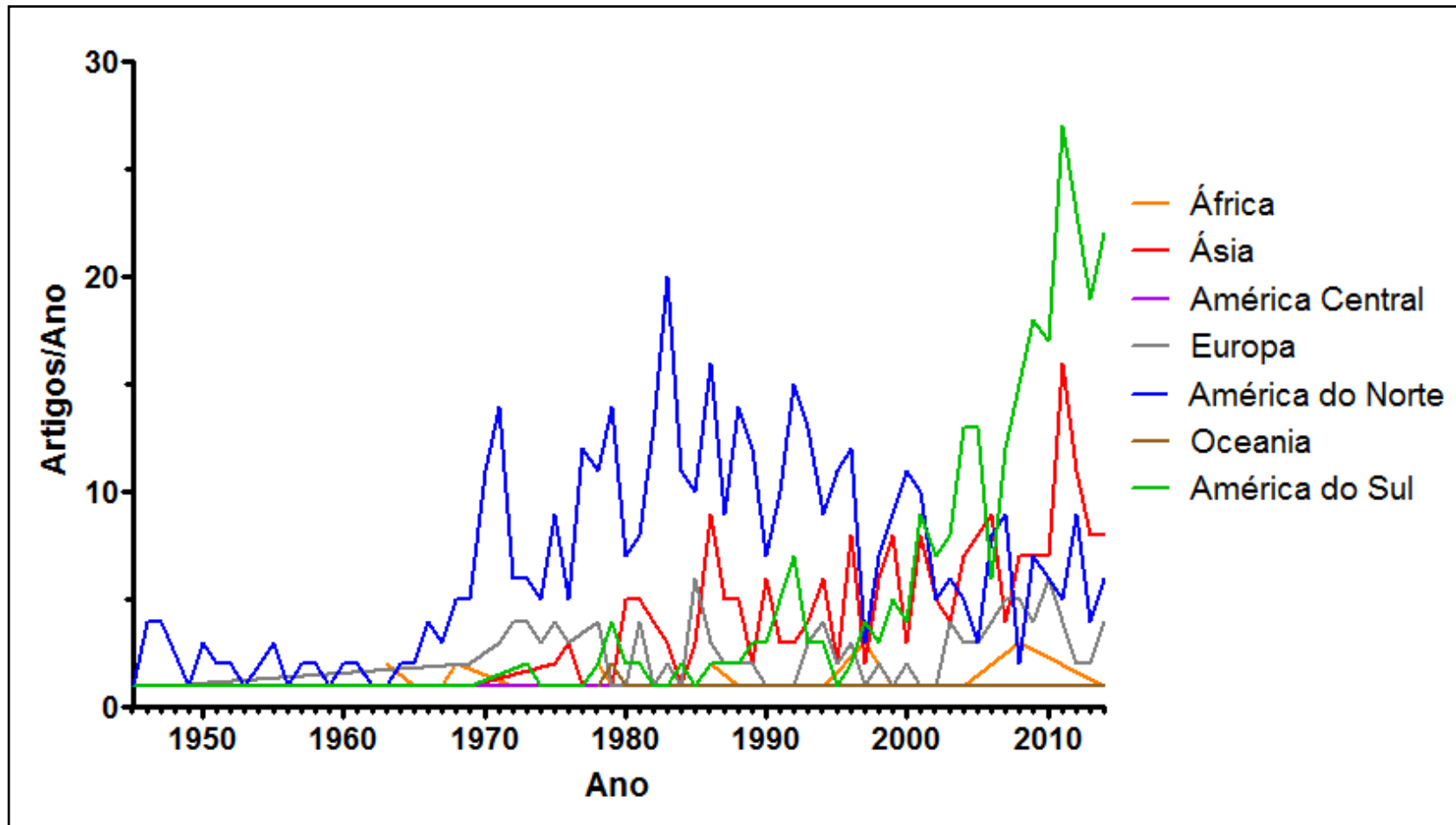
Complexo *Sporothrix schenckii*: importância



Epidemiologia



Publicações sobre esporotricose



ORIGINAL ARTICLE

Report of 457 sporotrichosis cases from Jilin province, northeast China, a serious endemic region

Y. Song, S.-S. Li,* S.-X. Zhong, Y.-Y. Liu, L. Yao, S.-S. Huo

Department of Dermatology and Venereology, First Hospital of Jilin University, Changchun, Jilin, China

*Correspondence: S.-S. Li. E-mail: shansalee@163.com

DISPATCHES

Outbreak of Sporotrichosis, Western Australia

Kynan T. Feeney,* Ian H. Arthur,†
Amanda J. Whittle,‡ Shelley A. Altman,†
and David J. Speers†

CLINICAL OBSERVATION

Spook House Sporotrichosis

A Point-Source Outbreak of Sporotrichosis Associated With Hay Bale Props in a Halloween Haunted House

LTC David P. Dooley, MC, USA; MAJ Pamela S. Bostic, MC, USA; Miriam L. Beckius, MPH

Control of fungus with a disinfectant

Sporothrix (Sporotrichum) schenckii in a Nursery Barn Containing Sphagnum

E. S. McDONOUGH, Ph.D., ANN L. LEWIS, M.S., and MORRIS MEISTER, M.D.

Sporotrichosis Among Miners on the Witwatersrand Gold Mines.*

BY L. F. DANGERFIELD, M.B., B.CH., D.P.H., D.T.M. & H. (W.W.RAND.), *Medical Officer, Non-European Hospital, Robinson Deep Gold Mine*; and JAMES GEAR, M.B., B.CH., D.P.H. (W.W.RAND.), D.T.M. & H., *DIPL. BACT. (LOND.), South African Institute for Medical Research, Johannesburg.*

Epidemiologia – no Brasil

Zoonotic Sporotrichosis in Rio de Janeiro, Brazil: A Protracted Epidemic yet to Be Curbed

Dayvison Francis Saraiva Freitas,¹
Antonio Carlos F. do Valle,¹ Rodrigo de
Almeida Paes,² Francisco I. Bastos,³ and
Maria Clara G. Galhardo¹

¹Laboratório de Pesquisa Clínica em Dermatologia Infecciosa and ²Laboratório de Micologia, Instituto de Pesquisa Clínica Evandro Chagas, and ³Instituto de Comunicação e Informação Científica e Tecnológica, Fundação Oswaldo Cruz, Rio de Janeiro, Brazil

Clinical Infectious Diseases 2010;50:453

© 2010 by the Infectious Diseases Society of America. All rights reserved. 1058-4838/2010/5003-0026\$15.00
DOI: 10.1086/649891



Revista da Sociedade Brasileira de Medicina Tropical 43(5):523-525, set-out, 2010



Article/Artigo

Sporothrix schenckii associated with armadillo hunting in Southern Brazil: epidemiological and antifungal susceptibility profiles

Sporothrix schenckii relacionado à caça ao tatu no Sul do Brasil: aspectos epidemiológicos e suscetibilidade dos isolados aos antifúngicos

Sydney Hartz Alves¹, Cecilia Schubert Boettcher², Daniele Carvalho de Oliveira¹, Giordano Rafael Tronco-Alves^{3,4}, Maria Aparecida Sgaria², Paulo Thadeu², Loiva Therezinha Oliveira⁴ and Janio Morais Santurio¹



mycoses

Diagnosis, Therapy and Prophylaxis of Fungal Diseases

Original article



Human sporotrichosis beyond the epidemic front reveals classical transmission types in Espírito Santo, Brazil

Mariceli L. de Araujo,¹ Anderson M. Rodrigues,² Geisa F. Fernandes,² Zoilo P. de Camargo² and G. Sybren de Hoog³

¹Department of Pathology, Federal University of Espírito Santo (UFES), Vitória, Brazil, ²Department of Microbiology, Immunology and Parasitology, Cell Biology Division, Federal University of São Paulo (UNIFESP), São Paulo, Brazil and ³Centraalbureau voor Schimmelcultures, KNAW Fungal Biodiversity Centre, Utrecht, The Netherlands



Distribuição das espécies de *Sporothrix*

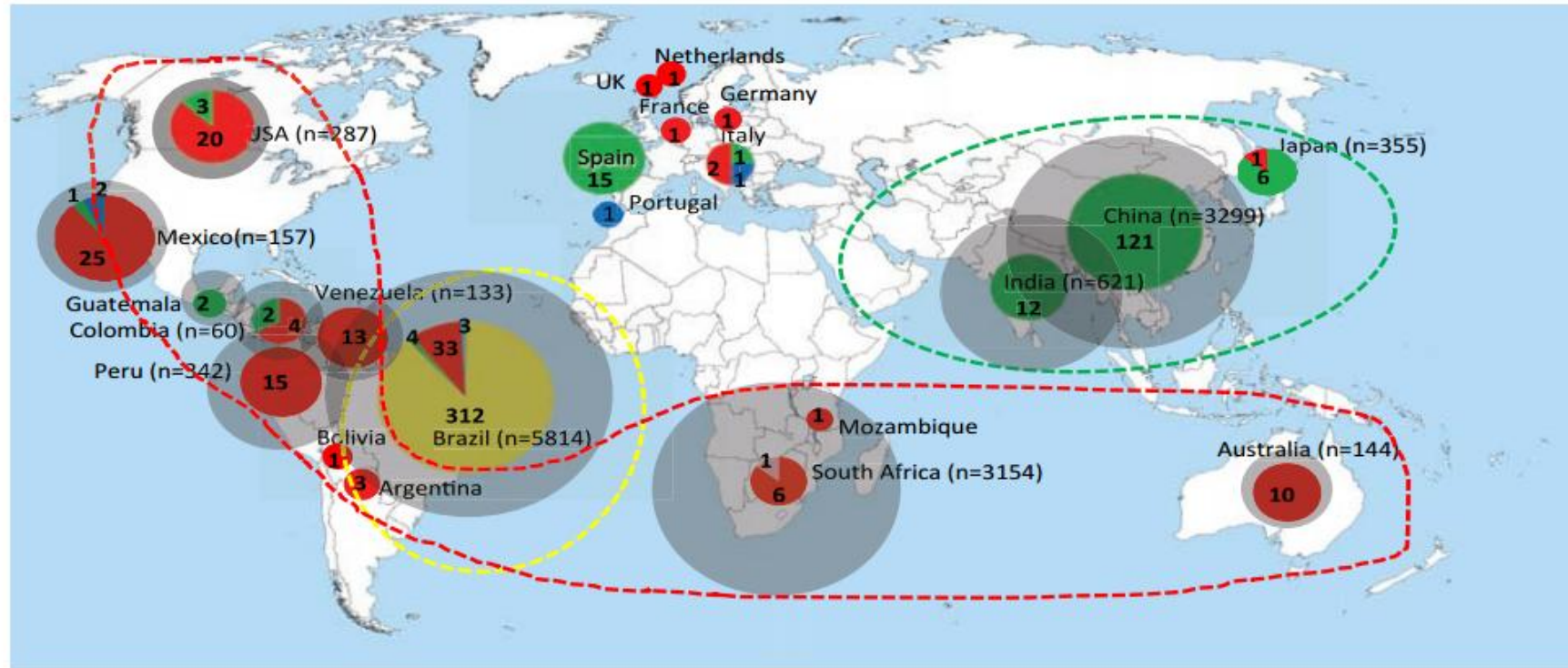


Fig. 1 Geographic distribution of sporotrichosis caused by *S. brasiliensis*, *S. schenckii*, and *S. globosa* according to case reports published over 70 years, compared with sequenced isolates and with expression of statistical probabilities that the prevalent endemic species was concerned in historical publications without sequence data. Samples were categorised as sequenced and non-sequenced specimens. The sizes of circumferences are roughly proportional to the numbers of cases / strains included. Numbers reported within the pies denote the number of strains examined. Main endemic areas indicated by dotted lines.

- *S. schenckii*
- *S. brasiliensis*
- *S. globosa*
- *S. mexicana*
- *S. luriei*

Conclusão

Esporotricose: micose endêmica, negligenciada

Conhecimento sobre esporotricose e seu agente → demasiadamente pequeno

Gênero *Sporothrix*: variedade genética → diferenças na patogênese e na clínica

Obrigado!



rodrigo.paes@ini.fiocruz.br