

2008–2016). Distinct patterns in mortality trends were seen across systemic lupus erythematosus, necrotising vasculopathies, systemic sclerosis, and dermatomyositis. However, the average APC in the mortality rate from each of these disorders either increased or remained stable between 1996 and 2016 (Table 1 and Fig. 1).

In conclusion, this population-based study is the first to report on the mortality trends of the whole spectrum of systemic CTDs. Based on our results, future researches are warranted to investigate the reasons for the disconnect in mortality trends between systemic CTDs and non-CTD causes.

#### Authors' contributions

RR conceived and designed the study. All authors analysed the data, wrote the manuscript and approved the final version.

#### Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sector.

#### Patient consent for publication

Not applicable.

#### Ethics approval

Not required.

#### Data sharing statement

No additional data available.

#### Disclosure of interest

The authors declare that they have no competing interest.

#### Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at <https://doi.org/10.1016/j.jbspin.2019.03.010>.

#### References

- [1] Yen EY, Shaheen M, Woo JMP, et al. 46-year trends in systemic lupus erythematosus mortality in the United States, 1968 to 2013: a nationwide population-based study. *Ann Intern Med* 2017;167:777–85.
- [2] Elhai M, Meune C, Avouac J, et al. Trends in mortality in patients with systemic sclerosis over 40 years: a systematic review and meta-analysis of cohort studies. *Rheumatology (Oxford)* 2012;51:1017–26.
- [3] Santo AH, Souza JM, Pinheiro CE, et al. Trends in dermatomyositis- and polymyositis-related mortality in the state of São Paulo, Brazil, 1985–2007: multiple cause-of death analysis. *BMC Public Health* 2010;10:597.
- [4] World Health Organization. In: *International statistical classification of disease and related health problems: 10th revision*. Geneva, Switzerland: World Health Organization; 1992.
- [5] Kim HJ, Fay MP, Feuer EJ, et al. Permutation tests for joinpoint regression with application to cancer rates. *Stat Med* 2000;19:335–51.
- [6] Clegg LX, Hankey BF, Tiwari R, et al. Estimating average annual per cent change in trend analysis. *Stat Med* 2009;28:3670–82.

Rodrigo Rezende<sup>a,\*</sup>

Carol Vieira<sup>a</sup>

Ronaldo Gismondi<sup>a</sup>

Evandro Klumb<sup>b</sup>

<sup>a</sup> Departamento de Medicina Clínica, Universidade Federal Fluminense, Niterói, Rio de Janeiro, Brazil

<sup>b</sup> Disciplina de Reumatologia, Universidade do Estado do Rio de Janeiro, Rio de Janeiro, Brazil

\* Corresponding author. Hospital Universitário Antônio Pedro (HUAP – UFF), Departamento de Medicina Clínica (MMC), sexto andar do HUAP, Avenida Marquês do Paraná, 303, Centro, CEP 24.030-210 Niterói, RJ, Brasil.

E-mail address: [ropoubel@id.uff.br](mailto:ropoubel@id.uff.br) (R. Rezende)

<https://doi.org/10.1016/j.jbspin.2019.03.010>

1297-319X/ © 2019 Société française de rhumatologie. Published by Elsevier Masson SAS. All rights reserved.

#### There is no season for infectious spondylodiscitis



#### ARTICLE INFO

##### Keywords:

Spondylodiscitis

Seasonal distribution

The belief that osteoarticular infections are more common in summer is widely-held among rheumatologists. Studies have demonstrated that *Staphylococcus aureus* infections, especially manifesting as skin infections or bursitis, are apparently more common in summer [1,2]. For prosthesis infections and postoperative spinal infections, however, studies have produced conflicting results regarding seasonality [3–8]. One study involving 159 cases of septic arthritis in native joints reported no seasonal influence at all [9], yet there have been no studies so far of primary spondylodiscitis.

With this study, we sought to evaluate any potential seasonal distribution of primary infectious spondylodiscitis. To this end, we reviewed the records of patients admitted to our rheumatology department between 2000 and 2015 for spondylodiscitis. Cases of tuberculosis infection and iatrogenic inoculation were excluded from analysis. For each case, the month of admission was recorded, with the trimester linked to a season. The cohort included 100 men and 45 women of a mean age of  $66.2 \pm 14.8$  years. Spondylodiscitis presented in the forms of cervical ( $n = 15$ ), dorsal ( $n = 41$ ), and lumbar ( $n = 94$ ) involvement. The causative bacteria were identified by blood cultures or disco-vertebral biopsy in 113/145 cases (78%). The main bacteria were: *Staphylococcus* (57, including 29 *S. aureus*), *Streptococcus* (25), and Gram-negative bacilli (23). The number of spondylodiscitis cases varied from 8 to 18 depending on the month of admission, with a non-significant ( $P = 0.45$ ) difference in distribution. Seasonal distribution as evaluated by trimester was: 37 in winter (25.5%), 30 in spring (20.7%), 42 in summer (29%), and 36 in autumn (24.8%) (Fig. 1). There was no significant difference ( $P = 0.44$ ) nor did the distribution of documented bacterial or *Staphylococcus* infections reveal any seasonal trend.

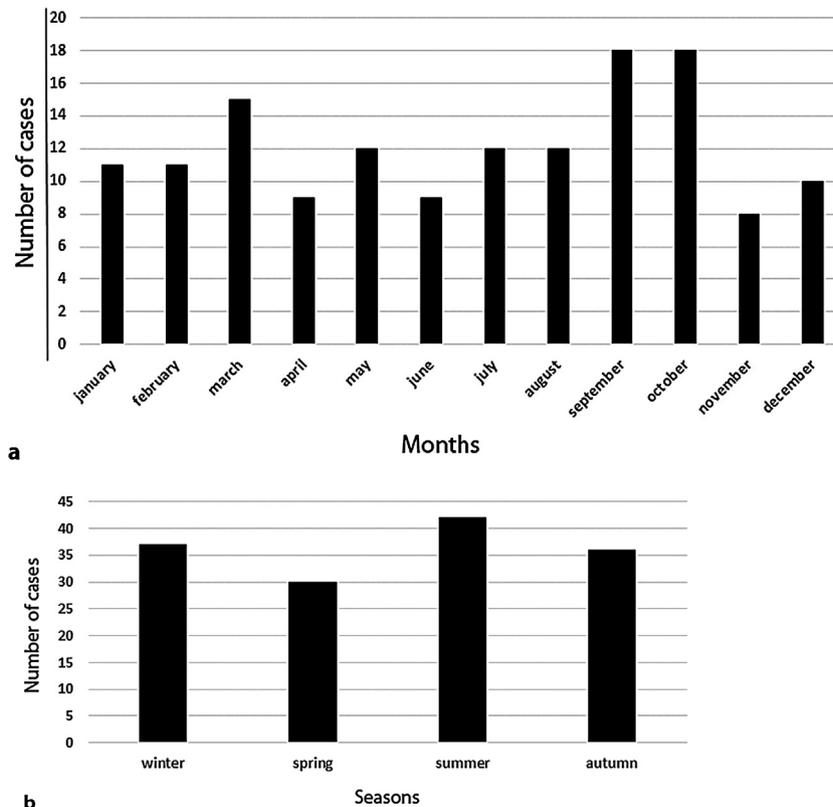


Fig. 1. Distribution of infectious spondylodiscitis according to month (a) or season of diagnosis (b).

Although our population was of small size, we have analyzed records covering 15 years, and found no seasonal trend in primary infectious spondylodiscitis cases.

#### Disclosure of interest

The authors declare that they have no competing interest.

#### References

- [1] Leekha S, Diekema DJ, Perencevich EN. Seasonality of staphylococcal infections. *Clin Microbiol Infect* 2012;18:927–33.
- [2] Cea-Pereiro JC, Garcia-Meijide J, Mera-Varela A, et al. A comparison between septic bursitis caused by *Staphylococcus aureus* and those caused by other organisms. *Clin Rheumatol* 2001;20:10–4.
- [3] Kane P, Chen C, Post Z, et al. Seasonality of infection rates after total joint arthroplasty. *Orthopedics* 2014;37:e182–6.
- [4] Anthony CA, Peterson RA, Sewell DK, et al. The seasonal variability of surgical site infections in knee and hip arthroplasty. *J Arthroplasty* 2018;33:510–4.
- [5] Rosas S, Ong AC, Buller LT, et al. Season of the year influences infection rates following total hip arthroplasty. *World J Orthop* 2017;8:895–901.
- [6] Banco SP, Vaccaro AR, Blam O, et al. Spine infections: variations in incidence during the academic year. *Spine* 2002;27:962–5.
- [7] Durkin MJ, Dicks KV, Baker AW, et al. Seasonal variation of common surgical site infections: does season matter? *Infect Control Hosp Epidemiol* 2015;36:1011–6.
- [8] Gruskay J, Smith J, Kepler CK, et al. The seasonality of postoperative infection in spine surgery. *J Neurosurg Spine* 2013;18:57–62.
- [9] Uçkay I, Betz M, Vaudaux P, et al. Is there a significant seasonality in the occurrence of osteoarticular infections? *Infect Dis (Lond)* 2015;47:252–4.

Jean-Jacques Dubost<sup>a,\*</sup>  
 Bruno Pereira<sup>b</sup>  
 Marion Couderc<sup>a</sup>  
 Martin Soubrier<sup>a</sup>

<sup>a</sup> Department of rheumatology, CHU de Clermont-Ferrand, 58, rue Montalembert, 63003 Clermont-Ferrand cedex 1, France

<sup>b</sup> Delegation to clinical research and innovation, CHU de Clermont-Ferrand, 58, rue Montalembert, 63003 Clermont-Ferrand cedex 1, France

\* Corresponding author.  
 E-mail address: [jjdubost@chu-clermontferrand.fr](mailto:jjdubost@chu-clermontferrand.fr) (J.-J. Dubost)

<https://doi.org/10.1016/j.jbspin.2019.04.001>

1297-319X/© 2019 Published by Elsevier Masson SAS on behalf of Société française de rhumatologie.

#### Screening for psoriatic arthritis: targeting phenotypes may improve case detection



Several questionnaires have been developed to screen for psoriatic arthritis (PsA) among subjects with psoriasis. PsA may present with either a spondyloarthritis-like phenotype [1] or a rheumatoid arthritis-like phenotype [2]. The Psoriasis and Arthritis Questionnaire (PAQ) [3], includes 2 questions related to back pain out of 10 in total. The Psoriatic Arthritis Screening and Evaluation (PASE) [4] tool has one question dedicated to back pain. The Psoriasis Epidemiology Screening Tool (PEST) [5] has no question specific to back pain. All have been validated as effective screening tools for PsA among subjects with psoriasis. Differences among these tools in the relative weights of questions targeting each phenotype may impact screening outcomes. Head-to-head comparative data remains limited [6–9].