



# The Brazilian Journal of INFECTIOUS DISEASES

www.elsevier.com/locate/bjid



## Letter to the editor

# Odontogenic infections in the Internal Medicine Service

Dear Editor,

Most head and neck infections are due to odontogenic etiologies.<sup>1</sup> Complications may include locoregional collections and systemic dissemination, but scientific publications concerning the role of the Internal Medicine Service in diagnosis and treatment are lacking.

We present a retrospective review of medical records from June 2005 to May 2009 from a tertiary care hospital in Buenos Aires. The inclusion criterion was hospitalization for an odontogenic infection in adult patients with normal immune function. In the study period, 18 patients (44% males) were identified, and represented 0.1% of all admissions during the study period. Median age was 28 years and mean length of stay (LOS) was  $3.72 \pm 1.74$  days; both were significantly lower than the respective values for the entire admitted population. All patients were evaluated by a trained odontologist before admission. Trismus was the only symptom that was consistently present in all patients.

Localized collections were diagnosed by computed tomography in seven patients. In six cases, infection originated in the lower third molars (17<sup>th</sup> or 32<sup>nd</sup> tooth in the Universal Numbering System). Initial white blood cell (WBC) count was significantly correlated with LOS and need for surgical drainage. Hemocultures and abscess cultures were negative. All patients were treated with systemic corticosteroids and ampicillin-sulbactam, except for a subject with penicillin allergy history, who received clindamycin. No other complications or death were recorded. No tooth extraction was performed during hospitalization; all subjects underwent this procedure during outpatient follow-up.

An interdisciplinary approach should be considered because odontogenic infections may be associated with high morbidity rates.<sup>2</sup> Patients included in this study were significantly younger than the population admitted for all causes, which is consistent with previous research.<sup>3</sup> The most frequently involved teeth were the lower third molars, as previously cited. LOS was shorter than in other similar case studies<sup>2,3</sup> and correlated significantly with total WBC count at admission. However, we could not exclude bias due to corticoids administration before hospitalization, based on lack of data.

Neither hemocultures nor abscess cultures were useful tools for choosing or modifying antibiotic treatment.

Aminopenicillins may be considered the gold standard of treatment.<sup>4</sup> Lack of utility of microbial cultures is a relevant issue with potential impact in terms of healthcare resources. Conclusions should be confirmed in larger prospective studies at the tertiary care level.

## Conflict of interest

The author declares to have no conflict of interest.

## REFERENCES

1. Chow A. Infections of the oral cavity, neck and head. In: Mandell GL, Bennett JE, Dolin R, editors. Mandell, Douglas and Bennett's principles & practice of infectious diseases. 5th ed. New York: Churchill Livingstone; 2000.
2. Rodríguez Frausto M, Murillo Bravo LD, Solorio S, Hernández González MA, Villa Barajas R. Frecuencia de infección cervicofacial odontogena que requieren hospitalización. *Rev Med Inst Mex Seguro Soc.* 2011;49:137–40.
3. Flynn TR, Shanti RM, Levi MH, Adamo AK, Kraut RA, Trieger N. Severe odontogenic infections, part 1: prospective report. *J Oral Maxillofac Surg.* 2006;64:1093–103.
4. Al-Qamachi LH, Aga H, McMahon J, Leanord A, Hammersley N. Microbiology of odontogenic infections in deep neck spaces: a retrospective study. *Br J Oral Maxillofac Surg.* 2010;48:37–9.

Leonardo Gilardi\*

Programa de Guías de Práctica Clínica – Obra Social de Empleados de Comercio y Actividades Civiles (OSECAC), Buenos Aires, Argentina

\* Corresponding author at: Santa Fe 4990, 7<sup>th</sup> Floor, Aprt “H”, (C1425BHY) Ciudad Autónoma de Buenos Aires, Argentina.  
E-mail address: [revision.guias@yahoo.com.ar](mailto:revision.guias@yahoo.com.ar)

Received 25 May 2012

Accepted 10 July 2012

Available online 8 November 2012

1413-8670

© 2012 Elsevier Editora Ltda.

Este é um artigo Open Access sob a licença de [CC BY-NC-ND](https://creativecommons.org/licenses/by-nc-nd/4.0/)

<http://dx.doi.org/10.1016/j.bjid.2012.07.010>