



Fig. 1. Seasonal distribution of causative pathogens of community-acquired pneumonia.

Winter: December to February, Spring: March to May, Summer: June to August, Fall: September to November.

patients (35, 43 and 42% of isolates, respectively). They also mention the increasing importance of *Legionella pneumophila*, which accounts for 6, 8 and 8% of the cases classified as above, respectively. These figures are consistent with those published by Herrera-Lara et al.,¹ who reported that 8.6% of cases are caused by *L. pneumophila*. Here, in Toledo, the climate tends toward colder, wetter winters and warmer, wetter summers: the average winter temperature in Toledo in 2009–2011 was 7.20 °C compared to the mean 9.72 °C reported in the study of Herrera-Lara et al.,¹ and accumulated rainfall was 54.3 L compared to their 35.2 L; average summer temperatures were 26.23 °C vs 24.6 °C, and rainfall was 15.9 L vs 8.27 L, respectively. We have studied the incidence of CAP according to the seasonal pattern and differences in frequency between *S. pneumoniae* and *L. pneumophila*, using the databases of several studies on the management of CAP in the years 2009–2011.^{3,5} *S. pneumoniae* and *L. pneumophila* were systematically investigated in all patients with sepsis, admitted with pneumococcus and *L. pneumophila* serogroup 1 antigens in urine (membrane

immunochromatography-Binax NOW®). Blood and sputum cultures with direct seeding were requested for inpatients when possible (*Legionella*: direct immunofluorescence of *Legionella pneumophila* antigen), and 1698 CAP cases from ED were included (51% were admitted to hospital and etiologic diagnosis was obtained in 39.5%). The seasonal distribution compared with the study of Herrera-Lara et al.¹ was as follows: winter (38 vs 36.6%), spring (25 vs 20.2%), summer (8 vs 18.5%) and fall (31 vs 24.7%). Fig. 1 shows a similar distribution pattern for both in all seasons ($P=NS$). Other diagnoses, such as atypical bacteria (2.5% for *Mycoplasma pneumoniae* and *Chlamydomphila pneumoniae*) and viral infection (0.5%–1%), showed no seasonal differences, although their proportions are likely to be underestimated, as they were not studied systematically. In conclusion, CAP etiology is influenced not only by the climate and season, but also by geographical location and other factors.

References

- Herrera-Lara S, Fernández-Fabrellas E, Cervera-Juan A, Blanquer-Olias R. Do seasonal changes and climate influence the etiology of community acquired pneumonia? Arch Bronconeumol. 2013;49:140–5.
- Martínez Ortiz de Zárate M, González del Castillo J, Julián Jiménez A, Piñera Salmerón P, Llopis Roca F, Guardiola Tey JM, et al. Estudio INFURG-SEME: epidemiología de las infecciones en los servicios de urgencias hospitalarios y evolución durante la última década. Emergencias. 2013;25:368–78.
- Julián-Jiménez A, Palomo de los Reyes MJ, Parejo Miguez R, Lain-Terés N, Cuenca-Boy R, Lozano-Ancín A. Improved management of community-acquired pneumonia in the emergency department. Arch Bronconeumol. 2013;49:230–40.
- Torres A, Barberán J, Falguera M, Menéndez R, Molina J, Olaechea P, et al. Guía multidisciplinar para la valoración pronóstica, diagnóstico y tratamiento de la neumonía adquirida en la comunidad. Med Clin (Barc). 2013;140, e1–223.19.
- Julián-Jiménez A, Parejo Miguez R, Cuenca Boy R, Palomo de los Reyes MJ, Lain Terés N, Lozano Ancín A. Intervenciones para mejorar el manejo de la neumonía adquirida en la comunidad desde el servicio de urgencias. Emergencias. 2013;25:379–92.

Agustín Julián-Jiménez,* Manuel Flores Chacartegui, Ana Nieves Piqueras-Martínez
Servicio de Urgencias-Medicina Interna, Complejo Hospitalario de Toledo, Toledo, Spain

* Corresponding author.

E-mail addresses: agustinj@sescam.jccm.es, agustin.jj@wanadoo.es (A. Julián-Jiménez).

Bronchioloalveolar Carcinoma: Time for a New Term[☆]

Carcinoma broncoalveolar: un término a actualizar

To the Editor:

In the July issue of *Archivos de Bronconeumología*, Dr. Paraschiv and partners published a case in the Letters to the Editor section.¹ These authors describe a case of a male, 35-year smoker with a 35 pack-year history, consulting with symptoms of fatigue, cough and chest pain of 2-week duration. Chest X-ray revealed airspace involvement in the form of patchy consolidation with air bronchogram that was confirmed on a computed tomography (CT) scan

of the chest. The initial working diagnosis was an infectious process, although the lack of response to antibiotic therapy led to the clinical suspicion of malignancy. The patient died and definitive diagnosis of bronchioloalveolar carcinoma was established at necropsy. Although the unusual nature of this clinical case makes it interesting, we consider the final diagnosis of bronchioloalveolar carcinoma unclear.

The term “bronchioloalveolar carcinoma” has been used traditionally to describe lung adenocarcinomas presenting lepidic growth in the pathological specimen. Lepidic growth is the proliferation of neoplastic cells that line the surfaces of the alveolar walls, preserving lung architecture. The radiologic correlation of this type of tumor is usually the finding of ground-glass opacities or affected alveolar airspace areas that may be associated with consolidated and/or air bronchogram areas. From the clinical point of view, this type of tumor includes an amalgam of entities with completely different treatments and prognosis, ranging from

[☆] Please cite this article as: Sanz-Santos J, Andreo F, Ruiz-Manzano J. Carcinoma broncoalveolar: un término a actualizar. Arch Bronconeumol. 2014;50:157–158.

adenocarcinomas presenting as ground-glass opacities in chest CT,² with very good prognosis after surgical resection (survival rates of 100% at 5 years after surgery),³ to tumors, such as the one described in the clinical case that begins with extensive multilobar disease. Accordingly, the terminology “bronchioloalveolar carcinoma” is considered imprecise, since it encompasses tumors with very different clinical behaviors. For this reason, the recent classification of lung adenocarcinoma jointly published in February 2011 by the European Respiratory Society (ERS), the American Thoracic Society (ATS), and the International Association for the Study of Lung Cancer (IASLC)⁴ recommends forsaking the term “bronchioloalveolar carcinoma”. In this new classification of lung adenocarcinoma, five categories that were encompassed under the concept of bronchioloalveolar carcinoma are considered:

- 1) In situ adenocarcinoma.
- 2) Minimally invasive adenocarcinoma.
- 3) Predominantly lepidic adenocarcinoma (non-mucinous).
- 4) Predominantly invasive adenocarcinoma with non-mucinous lepidic component.
- 5) Invasive mucinous adenocarcinoma.

In conclusion, the diagnosis of bronchioloalveolar carcinoma should be avoided, as recommended by the new adenocarcinoma classification, and we should refer instead to any of the five specified categories.

Funding

None.

Acknowledgements

None.

References

1. Paraschiv B, Toma CL, Diacomu C. Carcinoma broncoalveolar en un paciente joven: caso clínico. Arch Bronconeumol. 2013;49:315–6.
2. Noguchi M, Morikawa A, Kawasaki M, Matsuno Y, Yamada T, Hirohashi S, et al. Small adenocarcinoma of the lung. Histologic characteristics and prognosis. Cancer. 1995;75:2844–52.
3. Aoki T, Tomoda Y, Watanabe H, Nakata H, Kasai T, Hashimoto H, et al. Peripheral lung adenocarcinoma: correlation of thin-section CT findings with histologic prognostic factors and survival. Radiology. 2001;3:803–9.
4. Travis WD, Brambilla E, Noguchi M, Nicholson AG, Geisinger KR, Yatabe Y, et al. International Association for the Study of Lung Cancer/American Thoracic Society/European Respiratory Society international multidisciplinary classification of lung adenocarcinoma. J Thorac Oncol. 2011;6:244–85.

José Sanz-Santos,* Felipe Andreo, Juan Ruiz-Manzano

Servicio de Neumología, Hospital Universitario Germans Trias i Pujol, Badalona, Barcelona, Spain

* Corresponding author.

E-mail address: 34057jss@comb.es (J. Sanz-Santos).