immunochromatographic-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. 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 Chlamydophila 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


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. 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

---

**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.
adenocarcinomas presenting as ground-glass opacities in chest CT, with very good prognosis after surgical resection (survival rates of 100% at 5 years after surgery) 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) 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

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).