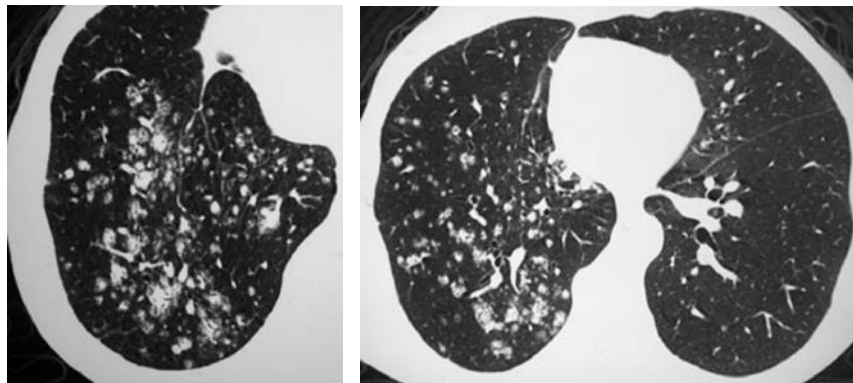


Radiological Diagnosis

Diagnosis of the case presented in the previous edition

J Bras Pneumol. 2006;32(6):603

Carcinoma Bronquioloalveolar



64-year-old patient with a 6-month history of emaciation, progressive dyspnea, adynamia and intermittent fever of 38 °C

Comments

Bronchiolo-alveolar carcinoma (BAC) is a type of adenocarcinoma that occurs in the terminal bronchiolo-alveolar regions of the pulmonary parenchyma and is characterized by distinct tall epithelial cells, columnar to cuboid in shape and covering the alveolar septa, which project themselves in the alveolar spaces in numerous branched papillary formations, without signs of stromal, pleural or vascular invasion. Tumor cells frequently contain abundant mucinous secretions. Although the degree of anaplasia is quite variable, most tumors are differentiated and tend to preserve the original architecture of the septal wall. It is possible to classify cases of BAC as one of two variants: mucinous and nonmucinous.

Curiously, from the histological point of view, the alterations are similar to a disease known as Jaagsiekte, which affects sheep in South Africa and is caused by a betaretrovirus. However, no such causal relationship has been established in humans.

More than half of all patients with BAC are asymptomatic, and this form of neoplasia presents

only a weak correlation with smoking. The most frequent symptoms are cough producing colorless sputum, episodes of dyspnea, weight loss, hemoptysis, and fever. Bronchorrhea is uncommon and, when present, is a late manifestation.

In terms of imaging, BAC has several presentations, manifesting as a solitary nodule, consolidations, areas of ground-glass opacity, or diffuse nodules. The patterns described above can also be accompanied by areas of pseudobullae with low attenuation and ectasia of the bronchi. These alterations can be focal or diffuse.

The characteristic finding of this case is the presence of areas called pseudocavitations or pseudobullous transparencies in the nodules. These areas probably represent air bronchograms and air bronchiolograms, which correspond to the pervious airways surrounded by the tumor. Although this characteristic is seen within the nodules, it can also be observed in the areas of ground-glass opacity. When this condition is present, a diagnosis of BAC should be considered in the differential diagnosis.

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