v. 2, n. 57, 2022

International Journal of Health Science

MUCOEPIDERMOID LUNG CARCINOMA: DIAGNOSTIC REVIEW

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Abstract Mucoepidermoid carcinoma is a rare cause of primary bronchial lung malignancy. These tumors are more common in young people. The diagnosis is preferably made with Fibronchoscopy and the standard treatment for the main types of salivary gland cancer is surgical resection combined with adjuvant therapy in order to reduce failure rates. The rarity of the diagnosis and the few studies in the world literature affect the systemic therapeutic approach of these patients, constituting a challenge for the medical community.
Keywords: Carcinoma, mucoepidermoid and pulmonary.

INTRODUÇTION

Mucoepidermoid Carcinomas (MEC) usually develop from the salivary, parotid and submaxillary glands. Mucoepidermoid Carcinomas of the Lung (MPC) are rare (0.1% to 0.2% of all lung tumors) and typically develop from the trachea or main bronchi[1].

These tumors are more common in young people and are characterized by the combination of different types of cells: mucus-secreting glandular cells, squamous cells and intermediate cells[1,2]. The diagnosis is preferably made with Fibronchoscopy and the standard treatment for the main types of salivary gland cancer is surgical resection combined with adjuvant therapy in order to reduce failure rates[4]. The rarity of the diagnosis and the few studies in the world literature affect the systemic therapeutic approach of these patients, constituting a challenge for the medical community.

OBJECTIVE

To seek information about the mucoepidermoid carcinoma of the bronchial tree, with emphasis on the differential diagnoses and its pulmonary manifestations, which, despite being rare and insidious, can be aggressive, with serious compromises to patients.

METHODOLOGY

This study is a literature review that used articles in Portuguese, English or Spanish, available in Pubmed, Scielo, Lilacs and BMC Medicine databases. The criteria of choice were the clinical, pathophysiological and etiological correlations between mucoepidermoid carcinoma and lung cancer. The descriptors used were: carcinoma, mucoepidermoid and pulmonary.

DISCUSSION

CMP is a tumor with a low malignancy potential, an incidence of 0.1% to 0.2% of all lung tumors[2,3].

Given the predominantly bronchial location, the usual form of the disease is correlated with bronchial obstruction and atelectasis, with symptoms such as cough, expectoration, hemoptysis, wheezing and chest pain; chest tightness and fever associated with obstructive pneumonia 1,2. To smoke is not considered a major risk factor[5]

CMPs are characterized by the mixture of mucus-producing cells, with squamous epithelial cells, glandular cells and intermediate cells[6].

They are classified as low or high grade according to histological differentiation, namely cell atypia, mitotic activity, local invasion and necrosis[4,7]. These tumors can also be classified into three grades: well differentiated, moderately differentiated, and poorly differentiated[8].

Histologic type is an important prognostic indicator, with high-grade PMCs having an increased risk of metastasis, tumor recurrence, and death. Low-grade PMCs mostly have mucus-secreting cells and glandular elements, while high-grade PMCs consist of clusters of squamous and intermediate cells, with sparse populations of mucus-secreting cells. Low-

grade CMPs are distinguished from high-grade CMPs by the absence of cellular atypia, including nuclear pleomorphisms, and by the absence of significant cell mitosis and cell necrosis[1].

Radiological examinations reveal central lesions that appear as solitary masses or nodules, with or without teleobstructive pneumonia, as shown in figures 1 and 2 (ANDRADE, Cristiano Feijó et al 2022). Calcification foci can be found in half of the cases on chest computed tomography. As the growth is preferentially endoluminal, fiberoptic bronchoscopy is diagnostic in most cases[9].

The treatment of mucoepidermoid carcinomas is essentially surgical; low-grade ones can be completely removed with cost-effective resections and, more commonly, lobectomies. The type of resection will depend on the location of the tumor[11]. Bronchotomy with local excision and reconstruction by bronchoplasty, when possible, has excellent results, with a five-year survival rate of up to 80%[10]. On the other hand, high-grade mucoepidermoid carcinomas must be treated similarly to bronchial carcinomas, with wide margins and mediastinal lymph node dissection.

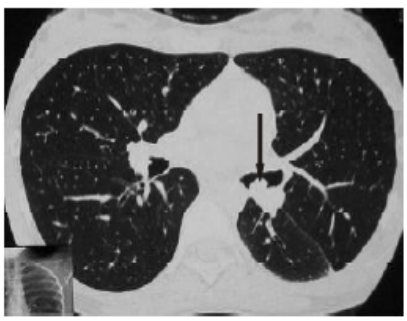

Figure 1- Endoluminal lesion on the left (arrow)

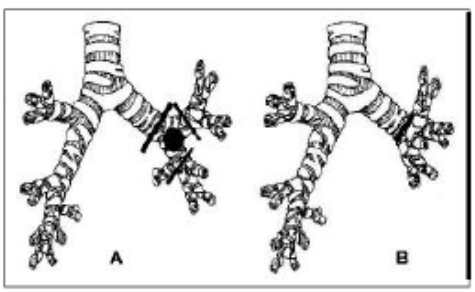

Figure 2 – A) Schematic representation of tumor involving the secondary hull; B) bronchoplasty with neocarena

Source: ANDRADE, Cristiano Feijó et al. Mucoepidermoid Carcinoma. J Pneumol, v. 28, n. 6, p. 342-344, 2002.

FINAL CONSIDERATIONS

Although rare, mucoepidermoid carcinoma is capable of taking an aggressive form. Thus, the relevance of this tumor is notorious, which can be a hidden cause of symptoms compatible with those of common diseases, such as asthma. It is concluded that CEM can be satisfactorily diagnosed and treated using conventional methods. It is worth mentioning the importance of deepening the study of this disease, in view of the limited variety of works in the literature.

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