BRONHO-PULMONARY CANCER: MORFO-PATHOLOGICAL FORMES

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Keywords: *histopathological classification, benign tumors, malignant tumors*

Abstract: *The primitive bronchopulmonary cancer includes the cases of cancer that develops primitively from the bronchic glandular epithelium, next invading the pulmonary parenchyma. It is the most important and frequent form of pulmonary tumor representing more than 90% of the primitive malignant and benign tumors. The histological classification of the bronchopulmonary cancer is complex and extremely important from the point of view of the neoplasia evolution, the choice of the possibilities of treatment and of the prognosis.*

Cuvinte cheie: *clasificarea histopatologică, tumori benigne, tumori maligne*

Rezumat: *Cancerul bronhopulmonar primitiv include cazurile de cancer care se dezvoltă, în mod primitiv, de regulă din epiteliul glandular bronşic, invadând ulterior şi parenchimul pulmonar. Este cea mai importantă şi frecventă formă de tumoră pulmonară, reprezentând peste 90% din tumorile primitive maligne şi benigne. Clasificarea histologică a cancerului bronho-pulmonar este complexă şi este extrem de importantă din punctul de vedere al evoluției neoplaziei, a alegerii modalităților terapeutice şi a prognosticului.*

SCIENTIFICAL ARTICLE OF BIBLIOGRAPHIC SYNTHESIS

The primitive bronchopulmonary cancer includes the cases of cancer that develops primitively from the bronchic glandular epithelium next invading the pulmonary parenchyma. It is the most important and frequent form of pulmonary tumor representing more than 90% from the malignant and benign tumors. (1)

Some authors (especially the broncholog) consider that the correct name would be bronchogenoic or bronchogenetic cancer (Lemoine). Most use the name of pulmonary cancer or bronchopulmonary cancer that doesn't exclude the ideea of the predominant bronchogenetic origin reflecting even better the coaffection bronchic and parenchymal and is not incorrectly from the anatomical point of view because the bronchi are constitutive part of the lung. Like wise correct is the name of carcinoma. (1)

Rarely met and mistaken for the consumption in the antiquity and with other consumptive lung diseases, was the lung cancer observed for the first time without being individualized in the antiquity, in the XVI-th century, by Paracelsus and by Agricola as *male metallorum*, at the miners from Schneeberg (1531) and from St. Joachimstal (1556). The diagnosis was established retrospectively later by Hesse and Härting (1879). Meantime Bayle (1810) described it under the name of cancerous consumption, considering it the sixth form of consumption. The worth of being individualized as a nosologic entity under the name of "the lung's encephaloid" is attributed few years later to Laennec. Stokes (1837) establishes the diagnosis procedure. Walsche (1843) gives it the first the name of lung cancer.Wolf (1895) points out the association with the tuberculosis. Waldayer mentions, the first, the epithelial origin of the cancerous tumor. (1)

Until the end of the XIX century are studied minutely, its clinical aspects (Jaccoud, Darolles, Marchiafanas) and morph- pathological ones (Virchow, Ménetrier). In the first decades of the XX century are specified the radiologic aspects of the disease in its manifest stadium, correlated with the morphologic ones (Letulle, Huguenin, Delarue). Later, by introducing new methods of bronchoscopic investigation, citodiagnosis, biopsic, funcţional respiratory ones becomes possible the diagnosis of the disease in a precocious phase, still operable (Adler, Lemoine).

Exeresis surgery developed and perfected on a large scale after 1946 (Overholt, Bjôrk, Derra, Cărpinişan) and offers, for the first time, the posibility of a terapeutical solution of the cases, with the condition of realising an early sistematic diagnosis.

Morphopathological aspects of the bronchopulmonary cancer:

The morphopathological aspects of the bronchiopulmonary cancer are extremly varied raported to: the size of the tumor;.the localization on a central or peripherical bronchia; degree of intratoracic and extratoracic extension and especially with; the histological type.

The statement of those elements is of a maximal importance for choosing the exploratory methods, establishing the optimal modalities of treatment and of the prognosis (3). From a morphopathological point of view two elements are essential: the localization of the tumor central or peripherical from the beginning; histological type.

The histological classification of the bronchopulmonary cancer is complex and extremely important from the point of view of the evolution of the neoplasia, of choosing the therapeutic possibilities and of the prognosis. Lung tumors have been classified by OMS, classification that was redacted in 1981 and 1999 (13, 15). Pulmonary tumors are composed from more different histological types with a varied degree of malignity, from complete benign to an extremely aggressively.

The next classification is redacted by OMS (From Travis

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Article received on 17.02.2010 and accepted for publication on 25.02.2010
ACTA MEDICA TRANSILVANICA September 2010; 2(3)210-211

WD, Colby TV, Corrin B, et al. *WHO histological typing of lung and pleural tumors*, 3rd ed. Geneva: World Health Organization, 1999):

Epithelial tumors:

I. Benign

1. Papilloma: a. with squamous cells (exofitic, inverted); b. glandular, c. glandular and mixt squamous;
2. Adenoma: alveolar; papillar; of the salivary gland type (mucouse, pleomorph); Mucinous Cyst adenoma.

II. *Pre -invasive lesions*: squamous dysplasia, carcinoma in situ, atypical hyperplasia adenomatous, diffuse idiopathic hyperplasia with neuro endocrine cells;

III. Malign:

1. Carcinoma with squamous: a. papillar; b. with clear cells; c. with small cells; d. Basaloid;
2. Carcinoma with small cells: a. carcinoma with mixt cells ;
3. Adenocarcinoma; a. Acinar; b. papillar; c. bronchioloalveolar: nonmucinous, mucinous, mixt: nonmucinous and mucinous or type of intermediate cells; d. solid with mucine; e.with mixt subtypes, variants: adenocarcinoma with well differentiated fetal cells, adenocarcinoma with mucinous cells(colloidal), cystadenocarcinom mucinous;
4. Carcinoma with large cells: a. carcinomawith neuro endocrine large cells; b. carcinoma combined with large neuro endocrine cells; c. basaloid carcinoma ; d. carcinoma limfo epithelial-like; e. carcinoma with clear cells; f. carcinoma with large cells with rhabdoid phenotype;
5. Adenosquamous Carcinoma;
6. Carcinoma with pleomorph elements, sarcomatoid or sarcomatous;
7. Carcinoma with giant cells or fusiform: a. pleomorph: with fusiform cells or large cells; b.carcinosarcoma; c.pulmonary blastoma ;
8. . Carcinoid tumors: typical and atypical; I
9. Carcinomas of the salivary glands type: mucoepidermoid, adenoid cystic;
10. Unclassified

Tumors of soft tissue: Tumors localized fibrous, epitheloid hemangioendothelioma, pleuropulmonary blastoma, chondroma, pleural fibrous calcified pseudotumor, congenital peribronchial myofibroblastic tumor, diffuse pulmonary lymphangiomatosis, desmoplastic round cells tumor;

Mesothelial tumors: *Benign* – adenomatoid tumor, *Malignant* mesotheliom, Sarcomatoid mesotheliom (desmoplastic, biphasic);

Divers tumors:

1. Hamartoma,
2. Sclerosing hemangioma,
3. Tumor with clear cells,
4. Tumor with germinative cells (mature teratoma, immature teratoma, tumor with other cells),
5. Thymoma,
6. Melanoma malignant

Limphoproliferations: 1.Interstitial lymphoid pneumonia, 2.Nodular lymphoid hyperplasia, 3. Lymphoma with B cells type marginal area with a low degree of associated lymphoid tissue (MALT), 4.Lymphoid granulomatosis

Secondary tumors

Unclassified tumors

Tumoral type lesions: 1. Tumor, 2. meningothelioma multiple nodules, 3. Histiocytosis with Langerhans cells, 4.Inflammatory pseudotumors (mioinflamator), 5.Organized localized pneumonia, 6.Amyloid tumor (nodular amyloid), 7.Hyalinizing granuloma, 8.Lymphangioleiomyomatosis, 9.Micronodular pneumocystic hyperplasia, 10.Endometriosis, 11. Inflammatory bronchial polyp

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