2020/8/5 文章摘要

老年性肺癌患者CT影像学分型与血清肿瘤特异性标志物的相关性

分析

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Title: Correlation between serum tumor specific markers and CT imaging classification in elderly

patients with lung cancer

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关键词: 老年; 肺癌; 肿瘤特异性标志物; CT; 影像学分型

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摘要: 目的:探讨分析老年性肺癌患者血清肿瘤特异性标志物与CT影像学分型的相关性。方法:选择我院收治的老年肺癌患者125例作为肺癌组,再选择肺部良性病变老年患者50例作为对照组,检测两组患者血清肿瘤特异性标志物糖链抗原199(CA199)、癌抗原125(CA125)、前列腺特异性抗原(PSA)、癌胚抗原(CEA)、神经元特异性烯醇化酶(NSE)水平,肺癌组患者进行CT影像学检查分型,分析不同CT影像学表现患者血清肿瘤特异性标志物水平变化。结果:肺癌组患者血清CA199、CA125、PSA、CEA、NSE水平均显著高于对照组(P<0.05);有坏死空洞征象老年肺癌患者血清CA199、CA125、PSA、CEA、NSE水平均显著高于无坏死空洞征象老年肺癌患者(P<0.05);有深分叶征象老年肺癌患者血清CA199、CA125、PSA、CEA、NSE水平均显著高于无深分叶征象老年肺癌患者

(P<0.05); 有毛刺征象老年肺癌患者血清CA199、CA125、PSA、CEA、NSE水平均显著高于无毛刺征象老年肺癌患者 (P<0.05)。结论: 老年性肺癌患者CT影像学特征中有无坏死空洞征象、深分叶征象以及毛刺征象与患者血清

肿瘤特异性标志物表达有关,联合使用CT影像学检查与血清肿瘤特异性标志物检查,更有利于疾病的准确诊断。

Abstract: Objective: To investigate the correlation between tumor specific markers and CT imaging classification in

elderly patients with lung cancer.Methods: 125 elderly patients with lung cancer in our hospital were selected as lung cancer group, and 50 elderly patients with benign lung diseases as control group.Tumor specific markers, such as sugar chain antigen 199 (CA199), cancer antigen 125 (CA125), prostate specific antigen (PSA), carcinoembryonic antigen (CEA), nerve-specific enolase (NSE) were detected in the two groups.The classification of CT imaging in patients with lung cancer was detected.The changes of serum tumor-

specific markers in patients with different CT imaging manifestations were analyzed.Results: The serum levels of CA199, CA125, PSA, CEA and NSE in lung cancer group were significantly higher than those in control group (P<0.05).The serum levels of CA199, CA125, PSA, CEA and NSE in elderly lung cancer patients with necrotic cavity were significantly higher than those in elderly lung cancer patients without necrotic cavity (P<0.05).The serum levels of CA199, CA125, PSA, CEA and NSE in elderly lung cancer patients with

deep lobulation were significantly higher than those without deep lobulation (P<0.05). The serum levels of CA199, CA125, PSA, CEA and NSE in elderly lung cancer patients with burr sign were significantly higher than those in elderly lung cancer patients without burr sign (P<0.05). Conclusion: The presence or absense of

necrotic cavity, deep lobulation and burr sign in the CT imaging features of elderly patients with lung cancer are associated with the expression of tumor-specific markers. Combination of CT imaging and tumor-specific

markers is conducive to accurate diagnosis.

参考文献/REFERENCES

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[1]ZHOU Zhou, WANG Daoqing.Diagnostic value of chest CT combined with tumor markers for early lung cancer in the elderly [J]. Chinese Journal of Geriatrics, 2018, 37 (5): 536-538. [周舟, 王道清.胸部CT联合肿瘤标志物对早期老年人肺癌的诊断价值 [J].中华老年医学杂志, 2018, 37 (5): 536-538.]

[2]ZHU Yalin, WANG Xiaolan, ZHOU Haizhong, et al. The value of 18F-FDG PET/CT imaging combined with serum tumor markers in the diagnosis of solitary pulmonary nodules [J]. Marker Immunoassay and Clinical Practice, 2018, 25 (3): 336-338. [朱亚林,王晓岚,周海中,等.18F-FDG PET/CT显像联合血清肿瘤标志物检测在肺单发结节诊断中的价值 [J].标记免疫分析与临床, 2018, 25 (3): 336-338.]

[3]MA Xianglong, ZHANG Dongming, NIU Hongying, et al.Feasibility analysis of low-dose CT combined with serum tumor markers for early diagnosis of lung cancer [J]. China Clinical Study, 2016, 29 (11): 1485-1487. [马向荣,张东明,牛宏英,等.低剂量CT联合血清肿瘤标志物对肺癌早期诊断的可行性分析 [J].中国临床研究, 2016, 29 (11): 1485-1487.]

[4]Shi S, Ji S, Qin Y, et al. Metabolic tumor burden is associated with major oncogenomic alterations and serum tumor markers in patients with resected pancreatic cancer [J]. Cancer Letters, 2015, 360 (2): 227-233.

[5]Nurland, YU Yingying, HAN Wenguang, et al.The relationship between CT signs of central lung squamous cell carcinoma and small cell lung cancer and serum tumor markers and the value of combined diagnosis [J]. Chinese Journal of CT and MRI, 2015, 13 (9): 57-61. [努尔兰, 余莹莹, 韩文广, 等.中央型肺鳞癌、小细胞肺癌CT征象与血清肿瘤标志物的关系及联合诊断的价值 [J].中国CT和MRI杂志, 2015, 13 (9): 57-61.]

[6]DUAN Xiaoyi, BAI Lu, LI Yan, et al.Maximum standardized uptake value of PET/CT and the relationship between tumor markers and prognosis of lung cancer [J]. Chinese Journal of Medical Imaging, 2015, 23 (8): 582-586. [段小艺,白璐,李艳,等.PET/CT最大标准化摄取值及肿瘤标志物与肺癌预后的关系 [J].中国医学影像学杂志,2015, 23 (8): 582-586.]

[7]ZHEN YS, MENG ZH, JIN Q, et al.Diagnostic value of 13 tumor markers combined with chest CT in peripheral lung cancer [J] .Hebei Medicine, 2014, 36 (24): 3747-3749. [甄永生, 蒙志宏, 靳强, 等.13种肿瘤标志物联合胸部 CT 在周围型肺癌的诊断价值 [J] .河北医药, 2014, 36 (24): 3747-3749.]

[8]ZHAI Songlin, YE Yuanhua, WANG Jie, et al.Diagnostic value of enhanced CT scan combined with tumor marker detection for non-small cell lung cancer [J]. Journal of Applied Cancer, 2018, 33 (5): 805-807. [翟松林,叶远花,王洁,等.增强CT扫描联合肿瘤标志物检测对非小细胞肺癌的诊断价值 [J].实用癌症杂志,2018, 33 (5): 805-807.]

[9]Rizzo S, Petrella F, Buscarino V, et al.CT radiogenomic characterization of EGFR, K-RAS, and ALK mutations in non-small cell lung cancer [J] .European Radiology, 2016, 26 (1): 32-42.

[10]WU Aijun, ZHANG Zhenxian. The value of preoperative multi-slice spiral CT enhanced scanning in the diagnosis of TNM staging and its relationship with the expression of tumor markers and proliferating molecules [J]. Journal of Hainan Medical College, 2016, 22 (23): 2928-2931. [吴爱军,张振显. 胃癌术前多层螺旋CT增强扫描对TNM分期的判断价值及其与肿瘤标志物、增殖分子表达的关系 [J]. 海南医学院学报, 2016, 22 (23): 2928-2931.]

[11] Tie J, Kinde I, Wang Y, et al. Circulating tumor DNA as an early marker of therapeutic response in patients with metastatic colorectal cancer [J]. Annals of Oncology, 2015, 26 (8): 1715-1722.

[12]LIU Xiaofei, LI Pengcheng, HE Baoming, et al. The diagnostic efficiency for solitary pulmonary nodules combined 18F-FDG PET/CT imaging with serum tumor markers [J] .Modern Oncology, 2017, 25 (8): 1230-1234. [刘晓飞,李鹏程,何宝明,等.18F-FDG PET/CT显像联合血清肿瘤标志物组合在孤立性肺结节诊断中的价值 [J] .现代肿瘤医学,2017,25 (8): 1230-1234.]

[13]Batth IS, Mitra A, Manier S, et al. Circulating tumor markers: harmonizing the yin and yang of CTCs and ctDNA for precision medicine [J] . Annals of Oncology, 2016, 28 (3): 468-477.

[14]ZOU JW, MIAO YY, LIU HB, et al.Correlation study of 18F-FDG PET-CT on lymph node metastasis in peripheral lung adenocarcinoma [J] .Journal of Medical Graduate Students, 2017, 30 (7): 746-752. [邹家威,缪莹莹,刘红兵,等.18F-FDG PET-CT对周围型肺腺癌淋巴结转移的相关性研究 [J] .医学研究生学报, 2017, 30 (7): 746-752.]

[15]Reiter MJ, Costello JE, Schwope RB, et al.Review of commonly used serum tumor markers and their relevance for image interpretation [J] .Journal of Computer Assisted Tomography, 2015, 39 (6): 825-828. [16]MA Jinyong.Analysis of combined diagnosis of tumor markers and CT scanning in patients with liver cancer [J] .Chinese Jurnal of CT and MRI, 2016, 14 (5): 89-91, 99. [马金勇.肝癌患者肿瘤标志物水平与CT扫描联合诊断分析 [J] .中国CT和MRI杂志, 2016, 14 (5): 89-91, 99.]

[17]LU Jan, LIU Lin, CHEN Zijin, et al.Changes of CEA and CYFRA21-1 before and after 125I seed implantation in advanced non-small cell lung cancer and evaluation of clinical efficacy [J] .Journal of Interventional Radiology, 2016, 25 (3): 234-238. [陆健,刘琳,陈志瑾,等.进展期非小细胞肺癌125I粒子植入前后CEA、CYFRA21-1变化与临床疗效评估 [J] .介入放射学杂志,2016, 25 (3): 234-238.]

[18]WANG J, LIN YY, LIN L, et al.Clinical value of multislice spiral CT combined with tumor markers in the differential diagnosis of carcinogenic and tuberculous pleural effusion [J]. Chinese Journal of CT and MRI, 2017, 15 (7): 27-29. [王家富,林耀云,林琳,等.多层螺旋CT联合肿瘤标志物在鉴别诊断癌性和结核性胸腔积液的临床价值研究 [J].中国CT和MRI杂志,2017, 15 (7): 27-29.]

[19]Liang M, Tang W, Xu DM, et al.Low-dose CT screening for lung cancer: Computer-aided detection of missed lung cancers [J] .Radiology, 2016, 281 (1): 279-288.

[20]GAO SL, DONG LY, WANG C, et al. Clinical significance of whole-body PET/CT tomography combined with

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tumor markers detection in the diagnosis and differential diagnosis of lung cancer [J] .Anhui Pharmaceutical, 2015, 19 (4): 702-705. [高世乐,董六一,王崇,等.全身 PET / CT 断层显像联合肿瘤标志物检测在肺癌诊断及鉴别诊断中的临床意义 [J] .安徽医药,2015,19 (4): 702-705.]

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