

肺癌术后房性心律失常的多因素分析

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Title: Multivariate analysis of atrial arrhythmia in post-operative lung cancer patients

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摘要: 目的: 探讨肺癌术后发生房性心律失常的危险因素及预防措施。方法: 回顾分析258例肺癌手术患者的临床资料, 统计术后房性心律失常发生的类型、时间及转归, 分析其与年龄、手术方式、左心房大小、NT-pro BNP等的关系。结果: 本研究中肺癌术后房性心律失常的总发生率为25.58%(66/258), 经多因素Logistic回归分析显示年龄、手术方式、术前肺功一秒率(FEV1%) < 70%、左心房大小、NT-pro BNP是术后房性心律失常的危险因素(P < 0.05)。结论: 年龄、FEV1%、左心房大小、手术方式、NT-pro BNP是肺癌术后房性心律失常的危险因素。通过采取积极有效的预防措施, 能有效预防该并发症及其后果的影响。

Abstract: Objective: To elucidate risk factors and preventive measures of postoperative atrial arrhythmia in lung cancer patients. Methods: Clinical data of 258 lung cancer patients who underwent surgical resection were retrospectively studied. The types, occurrence time and outcome of postoperative atrial arrhythmia were statistically analyzed, and relationship between atrial arrhythmia and clinical characteristics of patients was also studied. Results: Incidence rate of postoperative atrial arrhythmia in present group was 25.58% (66/258). Multivariate Logistic regression analysis showed that age, surgical method, preoperative FEV1% < 70%, left atrial size, and NT-pro BNP were risk factors for postoperative atrial arrhythmia (P < 0.05). Conclusion: Age, FEV1%, left atrial size, surgical modality, and NT-pro BNP are risk factors for atrial arrhythmia after lung cancer surgery. The complications can be prevented by effective measures.

参考文献/REFERENCES

- [1] Todorov H, Janssen I, Honndorf S, et al. Clinical significance and risk factors for new onset and recurring atrial fibrillation following cardiac surgery - a retrospective data analysis [J]. BMC Anesthesiol, 2017, 17(1):163.
- [2] Vaporciyan AA, Correa AM, Rice DC, et al. Risk factors associated with atrial fibrillation after non-cardiac thoracic surgery: analysis of 2588 patients [J]. J Thorac Cardiovasc Surg, 2004, 127(3):779-786.
- [3] Annessi V, Paci M, Ricchetti P, et al. Is age over 70 years a risk factor for pneumonectomy [J]. Asian Cardiovasc Thorac Ann, 2009, 17(1):272-277.
- [4] Zhang J, Luo BJ, Han F, et al. Risk factors for early postoperative atrial fibrillation after lung cancer surgery [J]. Chinese Journal of Lung Cancer, 2008, 11(4): 524-528. [张静, 洛宝建, 韩芬, 等. 肺癌术后早期并发房颤的危险因素分析 [J]. 中国肺癌杂志, 2008, 11(4): 524-528.]
- [5] Roselli E, Murthy SC, Rice TW, et al. Atrial fibrillation complicating lung cancer resection [J]. Journal of Thoracic & Cardiovascular Surgery, 2005, 130(2):438-444.
- [6] Gamer M, Routledge T, King JE, et al. New-onset atrial fibrillation after anatomic lung resection: Predictive factors, treatment and follow-up in a UK thoracic center [J]. Inter Act Cardiovasc Thorac Surg, 2017, 24(2):260-264.
- [7] ZHAO J, WU YL, WANG YD, et al. Multivariate analysis of risk factors for arrhythmia after lung cancer surgery [J]. Cancer Prevention and Treatment Research, 2004, 31(9):565-566. [赵健, 吴一龙, 王远东, 等. 肺癌术后心律失常危险因素的多因素分析 [J]. 肿瘤防治研究, 2004, 31(4):565-566.]
- [8] DAI W. Retrospective study on risk factors and prognosis of arrhythmia after lung cancer

- resection [D]. Chongqing: Chongqing Medical University, 2018:1-23. [戴伟.肺癌切除术后心律失常的危险因素及预后的回顾性研究 [D].重庆:重庆医科大学, 2018:1-23.]
- [9] Ivanovic J, Maziak DE, Ramzan S, et al. Incidence, severity and perioperative risk factors for atrial fibrillation following pulmonary resection [J]. *Interact Cardiovasc Thorac Surg*, 2014, 18(3):340-346.
- [10] Borsoi L, Kunze U, Kunze M, et al. Trends in mortality and mean age at death from lung cancer in Austria (1975-2007) [J]. *Cancer Epidemiol*, 2011, 35(2):120-125.
- [11] Steliga MA, Dresler CM. Epidemiology of lung cancer: smoking, second-hand smoke, and genetics [J]. *Surg Oncol Clin N Am*, 2011, 20(4):605-618.
- [12] JIANG LQ, GAO KX, ZHENG J, et al. Multivariate analysis of perioperative risk factors and postoperative arrhythmia in elderly patients with lung cancer [J]. *Chinese Journal of Gerontology*, 2015, 3(35): 1404-1406. [江吕泉, 高坤祥, 郑建, 等. 高龄肺癌围术期危险因素与术后心律失常的多因素分析 [J]. *中国老年学杂志*, 2015, 3(35): 1404-1406.]
- [13] Wu DH, Xu MY, Mao T, et al. Risk factors for intraoperative atrial fibrillation: a retrospective analysis of 10,563 lung operations in a single center [J]. *Ann Thorac Surg*, 2012, 94(1):193-197.
- [14] CHEN HZ, LI ZM. Internal medicine [M]. 3rd ed. Beijing: People's Health Publishing House, 2013:182-229. [陈灏珠, 李宗明. 内科学 [M]. 3版. 北京:人民卫生出版社, 2013:182-229.]
- [15] Ciszewski P, Tyczka J, Nadolski J, et al. Lower preoperative fluctuation of heart rate variability is an independent risk factor for postoperative atrial fibrillation in patients undergoing major pulmonary resection [J]. *Interact Cardiovasc Thorac Surg*, 2013, 17(4):680-686.
- [16] Anile M, Telha V, Diso D, et al. Left atrial size predicts the onset of atrial fibrillation after major pulmonary resections [J]. *Eur J Cardiothorac Surg*, 2012, 41(5):1094-1097.
- [17] QIN RS, NIU GL. Perioperative complications and risk factors of lung cancer patients [J]. *Journal of Clinical Pulmonary Medicine*, 2012, 17(6):1139-1140. [桑润生, 牛光领. 肺癌患者围手术期并发症及危险因素研究 [J]. *临床肺科杂志*, 2012, 17(6):1139-1140.]
- [18] FAN RJ, ZHANG ML, ZHANG WH. Case analysis of arrhythmia after lung cancer surgery [J]. *Journal of Harbin Medical University*, 2016, 50(2):121-123. [范瑞锦, 张美玲, 张文惠. 肺癌术后心律失常病例分析 [J]. *哈尔滨医科大学学报*, 2016, 50(2): 121-123.]
- [19] Kalman JM, Kumar S, Sanders P. Markers of collagen synthesis, atrial fibrosis, and the mechanisms underlying atrial fibrillation [J]. *J Am Coll Cardiol*, 2012, 60(18):1807-1808.
- [20] Cardinale D, Colombo A, Sandri MT, et al. Increased perioperative N-terminal pro-B-type natriuretic peptide levels predict atrial fibrillation after thoracic surgery for lung cancer [J]. *Circulation*, 2007, 115(11):1339-1444.

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