

淋巴结转移率在T3期胃癌预后中的临床意义 (附347例)

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Title: The value of metastatic lymph node ratio in 347 patients with T3 gastric cancer

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摘要: 目的: 探讨T3期胃癌患者淋巴结转移率的影响因素及淋巴结转移率对于预后生存的临床意义。方法: 回顾性分析2007年1月至2010年12月期间哈尔滨医科大学肿瘤医院347例接受手术治疗的T3期胃癌患者的临床病理资料, 通过 χ^2 检验分析淋巴结转移率与相关临床病理因素之间的关系; Logistic回归分析淋巴结转移率的影响因素; 利用Kaplan-Meier法绘制生存曲线图以及Log-rank检验比较不同组间患者生存率的差异; 采用Cox比例风险回归模型对患者预后进行分析。结果: 与淋巴结转移率 $\leq 28.66\%$ 组相比, 淋巴结转移率 $> 28.66\%$ 组患者肿瘤病理分型较差 [93.3%(127/136) vs 76.8%(162/211), $P=0.000$], 肿瘤位于全胃的比例较高 [12.5%(17/136) vs 3.8%(8/211), $P=0.002$], 肿瘤直径较大 [49.3%(67/136) vs 27.5%(58/211), $P=0.000$], 血清CEA浓度较高 [33.1%(45/136) vs 22.7%(48/211), $P=0.034$], 远处器官发生转移的几率较大 [11.0%(15/136) vs 2.4%(5/211), $P=0.001$]。Logistic回归分析表明: 肿瘤位置(全胃)、肿瘤直径(> 6.1 cm)、病理分化类型(分化较差)、血清CEA水平(> 5 ng/ml)、血清白蛋白浓度(≤ 40 g/L)是导致淋巴结转移率较高的危险因素(均 $P < 0.05$)。随访期间内有233例(67.1%)患者因肿瘤进展死亡; 术后5年生存率为33.1%。单因素分析表明: 年龄 ≤ 60 岁、根治性手术、肿瘤单发、淋巴结转移率 $\leq 28.66\%$ 、M0、肿瘤直径 ≤ 6.1 cm、血清CA19-9 ≤ 37 U/ml的T3期胃癌患者预后较好(均 $P < 0.05$), 而淋巴结的清扫数目并不影响患者的预后生存($P=0.089$); 多因素分析显示: 年龄 [HR(95%CI): 1.487(1.139-1.941), $P=0.004$]、手术 [HR(95%CI): 1.741(1.205-2.515), $P=0.003$]、淋巴结转移率 [HR(95%CI): 3.053(2.293-4.065), $P=0.000$]、是否发生远处转移 [HR(95%CI): 1.766(1.043-2.991), $P=0.034$] 是T3期胃癌患者的预后独立危险因素。结论: 淋巴结转移率是影响T3期胃癌患者预后的独立危险因素, 而肿瘤位置、病理分化类型、肿瘤直径、血清CEA浓度、远处器官发生转移是淋巴结转移率的影响因素。因此, 对于T3期的胃癌患者, 术前可以通过相关血液、影像检查, 对患者的淋巴结转移率及预后进行准确而有效的评估。

Abstract: Objective: To make certain the influencing factors of metastatic lymph node ratio and its' clinical significance in patients with T3 gastric cancer. Methods: The clinicopathological data of 347 patients with T3 gastric cancer who were underwent surgery were retrospectively analyzed in Harbin Medical University Cancer Hospital from January 2007 to December 2010. The relationships between lymph nodes metastasis ratio and related clinicopathologic factors were analyzed by Chi-square test and Logistic regression analysis. Survival analysis was analyzed by Kaplan-Meier method and Log-rank test compare the survival rate difference between the two groups. The prognosis were analyzed by Cox proportional hazards regression model. Results: Chi-square test showed that: Compared with the $MLN \leq 28.66\%$'s group, the $MLN > 28.66\%$'s histological type was more worse [93.3%(127/136) vs 76.8%(162/211), $P=0.000$], higher proportion of tumours in total stomach [12.5%(17/136) vs 3.8%(8/211), $P=0.002$], tumor diameter was larger [49.3%(67/136) vs 27.5%(58/211), $P=0.000$], high serum CEA level [33.1%(45/136) vs 22.7%(48/211), $P=0.034$], easily happened distant metastasis [11.0%(15/136) vs 2.4%(5/211), $P=0.001$]. Logistic regression analysis showed that: Tumor location (total gastric), tumor diameter (> 6.1 cm), differentiation type (poor), serum CEA level (> 5 ng/ml), serum

albumin level(≤ 40 g/L) were risk factors leading to high rates of metastatic lymph node ratio. During the follow-up, there were 233(67.1%) cases died of tumor progression in the gastric stump cancer's group and the 5-year survival rate was 33.1%. Univariate analysis showed that the patients had a better prognosis: Age ≤ 60 years old, radical operation, tumor location(fundus/body/antrum), LNR $\leq 28.66\%$, M0, tumor diameter ≤ 6.1 cm, CA19-9 ≤ 37 U/ml(all $P < 0.05$), but the number of lymph node dissection not influenced the prognosis of patients($P = 0.089$). Multivariate analysis showed that: Age [HR(95%CI): 1.487(1.139-1.941), $P = 0.004$], surgery [HR(95%CI): 1.741(1.205-2.515), $P = 0.003$], MLNR [HR(95%CI): 3.053(2.293-4.065), $P = 0.000$], M0/M1 [HR(95%CI): 1.766(1.043-2.991), $P = 0.034$] were independent risk factors of the patients with T3 gastric cancer. Conclusion: Metastatic lymph node ratio was independent risk factors for prognosis in patients with T3 gastric cancer and there were correlation between metastatic lymph node and ratio histological type, tumor diameter, tumor location, serum CEA concentration, distant metastasis. We can assess the ratio of lymph nodes metastasis of patients by some indexes, so that we can evaluate the prognosis of patients with T3 gastric cancer.

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