

窗宽值在评估表现为纯磨玻璃结节的肺腺癌侵袭性中的临床价值

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Title: The clinical value of window width in evaluating the invasiveness of lung adenocarcinoma manifesting as pure ground glass opacities

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摘要: 目的: 探讨窗宽值对表现为纯磨玻璃结节的肺腺癌侵袭性的预测价值。方法: 回顾性分析哈尔滨医科大学附属肿瘤医院2017年7月至2018年1月77例纯磨玻璃结节 CT 图像, 术后病理均为肺腺癌, 其中有18例浸润前病变和59例浸润性病变。肺窗窗位不变, 固定在-450 HU, 调节窗宽值, 利用ROC曲线来评估两组病变不可见的窗宽值的差异及最佳截断点。结果: 两组病灶不可见的窗宽值存在差异 ($Z = -3.900, P < 0.05$), ROC 曲线下面积为0.805, 敏感度为57.1%, 特异度为89.2%, 最佳窗宽截断点为341 HU。结论: 窗宽值对于表现为纯磨玻璃结节的肺腺癌侵袭性有一定预测价值。

Abstract: Objective: To explore the value of window width in prediction of the invasiveness of lung adenocarcinoma manifesting as pure ground glass opacities. Methods: The CT data of 77 patients with ground glass opacities, enrolled in Harbin Medical University Cancer Hospital from July 2017 to January 2018, were analyzed retrospectively. All patients' postoperative pathology were lung adenocarcinoma. Among 77 cases of lesions, 18 were preinvasive lesions, 59 were invasive adenocarcinoma. Fix the pulmonary window level (-450 HU). The window width was adjusted constantly until the lesions were invisible. The window width were evaluated in the difference and the best cut-off with the ROC curve in the two groups. Results: The window width of lesions between two groups was different ($Z = -3.900, P < 0.05$). Area under the ROC was 0.805, sensitivity was 57.1%, specificity was 89.2%, and 341 HU was the best cut-off of the window width. Conclusion: Window width may be useful for predicting the invasiveness of the pGGO of lung adenocarcinoma.

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