Radiographic Factors Predictive of Malignant Adrenal Masses in Pathological Proven Setting


Abstract

Objective: Adrenal masses are one of important clinical radiographic issues particularly whether causes are malignant in origin or not. As there were several radiographic findings such as size, enhancement, or contour, a previous study found that size may be a factor to differentiate adenoma from non adenoma adrenal mass. The present study aimed to determine if which radiographic findings are highly suggestive for malignant adrenal mass.

Materials and Methods: This was a retrospective, analytical study. We enrolled adult patients who had adrenal mass by computed tomography (CT) with pathological findings of adrenal masses. Factors associated with adrenal malignancy were evaluated by logistic regression analysis.

Results: There were 32 patients met the study criteria. Of those, 13 patients (40.63%) were in malignant group. The malignant group had older age (52.23 vs. 29.32 years; p=0.018). By multivariate logistic regression analysis, only irregular contour was independently associated with malignant adrenal mass with adjusted odds ratio of 40.500 (p=0.034).

Conclusion: Irregular adrenal contour was suggestive for malignant adrenal mass with pathological proven setting.

Keywords: Age; Contour; Margin; Predictors