

論 文 要 旨

Distinguishing adrenal adenomas from non-adenomas on dynamic enhanced CT: A comparison of 5 and 10 min delays after intravenous contrast medium injection

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Aim: To evaluate the usefulness of several parameters of 5 min compared to 10 min delayed contrast-enhanced CT in distinguishing adenomas from non-adenomas.

Materials and Methods: The study population consisted of 94 patients (52 men and 42 women; mean age 62 years) with 103 adrenal lesions (75 adenomas and 28 non-adenomas). In each patient, unenhanced CT was followed by early, 5 and 10 min enhanced CT. Diagnostic parameters included delayed enhanced attenuation at 5 and 10 min, washout attenuation (WO) at 5 and 10 min, absolute percentage washout (APW) at 5 and 10 min, and relative percentage washout (RPW) at 5 and 10 min. The accuracy of each parameter for diagnosing adenomas from non-adenomas was calculated using receiver operating characteristic (ROC) analysis.

Results: Upon comparison between 5 and 10 min delayed contrast-enhanced CT for differentiating total adenomas or lipid-poor adenomas from non-adenomas, there was no significant difference in the area under the binomial ROC curve (A_z) values of delayed enhanced attenuation (total adenomas vs. non-adenomas, $p = 0.164$; lipid-poor adenomas vs. non-adenomas, $p = 0.178$), WO (total adenomas vs. non-adenomas, $p = 0.216$; lipid-poor adenomas vs. non-adenomas, $p = 0.230$), APW (total adenomas vs. non-adenomas, $p = 0.401$; lipid-poor adenomas vs. non-adenomas, $p = 0.870$), or RPW (total adenomas vs. non-adenomas, $p = 0.160$; lipid-poor adenomas vs. non-adenomas, $p = 0.780$).

Conclusion: Five minute contrast-enhanced CT was as useful as 10 min contrast-enhanced CT for differentiation of adrenal adenomas from non-adenomas.