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Correlations of Arterial Phase CT Characteristics of Hepatocellular Carcinoma with Differentiation Degree and Expressions of PCNA and PTEN

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ABSTRACT The purpose of this study was to explore the correlations of the arterial-phase enhanced CT characteristics of hepatocellular carcinoma (HCC) with the differentiation degree and expressions of proliferating cell nuclear antigen (PCNA) and phosphatase and tensin homologue (PTEN). Seventy-nine HCC patients who underwent three-phase dynamic contrast-enhanced CT before surgery were selected to observe the arterial-phase characteristics. The degree of HCC tissue differentiation was evaluated by hematoxylin-eosin staining. PCNA and PTEN expressions were detected by immunohistochemistry. Spearman's correlation analysis was conducted. The tumour size and vascular enhancement characteristics were negatively correlated with HCC differentiation degree and PTEN expression, and positively correlated with PCNA expression. The capsule integrity was positively correlated with HCC differentiation degree and PTEN expression, and negatively correlated with PCNA expression. The arterial-phase CT characteristics of HCC reflect the differentiation degree and expressions of PCNA and PTEN.