Scintigraphic Assessment of Hepatobiliary Functions in Healthy Miniature Pigs

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The objective of this study was to investigate hepatobiliary functions in healthy miniature pigs using ^{99m}Tc-DISIDA hepatobiliary scintigraphy. Five mCi dose of ^{99m}Tc-DISIDA was injected intravenously into 3 healthy adult miniature pigs and one hour dynamic images were obtained. Hepatobiliary scintigraphy in a miniature pig was evaluated for 5 variables. Cardiac washout occurred within 1 min in all miniature pigs. And radioactivities in gallbladder were not detected in two miniature pigs, initial radioactivity and Tmax of gallbladder were non-available to identify. Mean Tmax of liver was 8.67±2.08 min and initial small intestinal radioactivity was seen 9.67±2.52 min after ^{99m}Tc-DISIDA injection. Mean hepatic washout time was not detected in 60 min dynamic images. In conclusion, ^{99m}Tc-DISIDA hepatobiliary scintigraphy is the effective diagnostic method to evaluate hapatobiliary functions in miniature pigs. And additional study is needed to further confirm the reason of absence of radioactivities in gallbladder of two miniature pigs.

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