

Myocardial fatty acid metabolism in diabetic mice with ^{125}I -BMIPP

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In patients with diabetes mellitus, the existence of diabetic cardiomyopathy was substantiated. This study was undertaken to evaluate the myocardial fatty acid metabolism of diabetic mice ($n = 21$) and controls ($n = 21$) in ^{125}I -BMIPP in fasted and unfasted states. ^{125}I -BMIPP of 370 kBq was given and thirty minutes later, animals from both groups were killed. Samples of hearts, liver and other organs were removed, weighed and then counted in a scintillation counter. The percent injected dose/g of hearts of diabetic mice was significantly reduced compared to controls in unfasted ($p < 0.05$) and fasted ($p < 0.01$) groups. These findings may reflect impaired fatty acid utilization of the hearts in diabetic mice compared to controls.

Key words: mouse, diabetes mellitus, fatty acid metabolism, diabetic cardiomyopathy, ^{125}I -BMIPP