

## Pancreatic Steatosis: Is it Related to Obesity, Diabetes Mellitus and Metabolic Syndrome?

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### Introduction

Obesity is associated with a large number of diseases such as hypertension, diabetes, heart disease, brain disease, sleep disorders, cancer, infertility, pain, skin infections, metabolic syndrome (MetS), gastric ulcers and gallstones [1-6].

The accumulation of fat in the pancreas has been referred to as fatty infiltration, fatty pancreas, fat non-alcoholic pancreatic disease and pancreatic steatosis. Fat accumulation in pancreatic islets causes a decrease of insulin secretion; in addition, a higher proportion of fat pancreas was associated with increased insulin levels in obese nondiabetic subjects. This may be due to accumulation of pancreatic fat. The pancreatic steatosis is easily detectable using ultrasound, computed tomography and magnetic resonance [7-13].

Several studies suggest the association of fat accumulation in the pancreas with obesity, diabetes and metabolic syndrome [14-19]. A large cohort study should be conducted to definitively determine the clinical significance of pancreatic steatosis, its correlation with MetS and diabetes. Potential treatments such as lifestyle modification, weight reduction, and medications should be investigated.

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