

The Tangible Effect of Pancrelipase

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The pancreas is one of the most important glands in the human body, it has both exocrine and endocrine functions. The exocrine function is represented by secretion of variety of hormones that help the body to digest carbohydrates, fats and proteins.

In addition, the pancreas plays a vital role to control blood sugar and regulate body metabolism through an endocrine function mediated by many hormones primarily insulin and glucagon [1].

Regrettably, the pancreas may be affected by different conditions such as pancreatic trauma, cystic fibrosis, pancreatic cancer, pancreatitis or even surgical removal of the pancreas, all these conditions can impair the pancreatic exocrine function and associated with deleterious sequelae of fatigue and vitamin A, D, E, K deficiencies. In 2009, The United States Food and Drug Administration (FDA) approved pancreatic enzyme replacement therapy (pancrelipase) for treatment of pancreatic exocrine insufficiency. Pancrelipase is an interesting combination of amylase, lipase and protease enzymes that facilitate the digestive process of the body and decrease the incidence of steatorrhea, malabsorption and weight loss [2].

Pancrelipase is administered as enteric coated preparations or with proton pump inhibitors to prevent its inactivation by the gastric HCL, it is not absorbed after its oral administration and acts locally on the GIT where the alkaline medium of the duodenum facilitates the release of its digestive enzymatic components to exert their action. The drug does not undergo metabolism and it is excreted in feces [3].

Generally, pancrelipase is associated with mild adverse effects like headache, stomatitis, abdominal pain and flatulence. Although the risk of fibrosing colonopathy is uncommon but it is serious. Concurrent administration of pancrelipase with other drugs may diminish its effectiveness therefore interactions with other drugs should be taken in consideration [4]. Due to the difference in pancreatic enzymes content, pancrelipase products should not be used interchangeably [5]. Adequate studies are not conducted to confirm pancrelipase safety during pregnancy and the drug is classified as category c. Data about its use during breast feeding are not conclusive [3].

Finally, Supplementation with Pancrelipase has a tangible effect in patients diagnosed with pancreatic exocrine insufficiency and represents a jumping step in enzyme replacement therapy.

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