Post-acute pancreatitis diabetes. A complication waiting for more recognition and understanding.

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Dear Editors,

We deeply appreciate the revision made to our manuscript by reviewers and editors of the journal and appreciate the valuable comments of reviewers. We hereby wish to answer to the reviewers' comments point by point. Modifications to the original text and added information are highlighted in yellow in the revised version.

REVIEWER 1

Recommendation: Please explain in detail whether acute pancreatitis that develops diabetes is different depending on the etiology (alcoholic, gallstone, hyperlipidemic, etc.). Please indicate the relationship between the site and extent of pancreatic necrosis and the onset of diabetes.

Answer: Previous studies have shown that the severity of AP, the extent of pancreatic necrosis, and the etiology of the disease are related to the magnitude of both exocrine and endocrine pancreatic dysfunction.

In a study with 109 patients with AP, the incidence of de novo diabetes was 34.7%. In patients with pancreatic necrosis demonstrated by contrasted CT scan, the incidence was higher (66.6%) than in those without necrosis (27.8%). However, no relationship was found between diabetes incidence and necrosis rate or location of lesion (head, body or tail of pancreas) (1) This may be explained because diabetes could be secondary, in addition to a destruction of beta cells of the pancreas, to insulin resistance. Also, because beta cells are located homogeneously in the different segments of the pancreas (1).

The etiology of AP as a risk factor for diabetes has not been clearly defined in detail. In the other side, it has been observed that AP due to excessive alcohol consumption may be associated with high incidence of exocrine pancreatic dysfunction (2).

These concepts and references were included in the manuscript as required by the reviewer and the manuscript was carefully revised concerning English language.

1. Garip G, Sarandöl E, Kaya E. Effects of disease severity and necrosis on pancreatic dysfunction after acute pancreatitis. World J Gastroenterol. 2013;19:8065-8070.

2. Zhi M, Zhu X, Lugea A, et al. Incidence of New Onset Diabetes Mellitus Secondary to Acute Pancreatitis: A Systematic Review and Meta-Analysis. Front Physiol. 2019; 10:637

REVIEWER 2

Recommendation: This is a well written review article which show published evidence on the incidence, risk factors, pathophysiology, clinical outcomes, clinical characteristics and preventive and corrective management of PAPD. It provides helpful guide of early detection and treatment to decrease the associated mortality and morbidity. Since the management is not yet standardized, the study- DREAM supported by The National Institute of Diabetes and Digestive and Kidney Diseases may provide more evidence in the future.

Answer: We deeply appreciate the reviewer's kindly favorable comments. We have done our best to get a good item. We are certain that it will be of interest to readers of the journal.