

**Recent Advances in Pancreatic Encephalopathy**Jacques De Reuck<sup>1\*</sup><sup>1</sup>Department of Pediatric Neurology, College of Medicine, Cukurova University, Turkey**\*Corresponding author**

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This article reviews the recent acquisitions since the review article on pancreatic encephalopathy was published in 2018 by the present author. As well new facts concerning aetiology, clinical aspects and treatment are presented.

**Keywords:** Pancreatic Encephalopathy- Pancreatitis Treatment - Additional Aetiology**Introduction**

Pancreatic encephalopathy is not a rare complication of acute pancreatitis. It is mainly due to obstructive gallbladder stones. The clinical presentation is similar to other metabolic encephalopathies. The diagnosis can be made by a severe increase of amylases in the blood. On NMR of the brain, patchy areas of demyelination and cortical micro-bleeds are observed. Early adequate volume resuscitation and compensation of the electrolyte disturbances is recommended. The present paper is an update of new publications following our previous review on pancreatic encephalopathy published in 2018 [1].

New facts concerning aetiology and treatment are presented. Also, an additional complication is described.

**Main body**

Hypertriglyceridemia is now considered as the third most common cause of acute pancreatitis in patients with an underlying disorder of lipoprotein metabolism [2].

Acinar cell injury and death are mediated in acute pancreatitis by disruption of the store-operated calcium entry channels and mitochondrial permeability transition pores [3].

Systemic organ failure is observed in approximately 20% of all cases of acute pancreatitis. Organ failure typically develops early in the course of the acute pancreatitis but also may develop later due to infected pancreas necrosis due to sepsis [4].

A case report of subarchnoid hemorrhage is presented as an additional complication in a patient with acute severe pancreatic encephalopathy [5]

The current initial management has to focus on fluid resuscitation, with some data to support Ringer's lactate over physiological saline. Prophylactic use of antibiotics is not recommended. Also urgent cholangiography in the absence of concomitant acute cholangitis should be avoided. Early oral feeding should be encouraged and the use of parenteral nutrition in pancreatitis discouraged. Cholecystectomy should be performed during the same admission of the biliary pancreatitis in order to prevent future relapses [6].

In a rat model etanercept attenuates caerulein-induced pancreatic encephalopathy at least in part via suppression of tumor necrosis factors signaling and mitigation of oxidative stress [7].

**Conclusions**

Only a few new facts have emerged from the recent literature. However, these recent publications mainly confirm the previous ones.

**Disclosure**

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