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**Islet cell dysfunction in patients with chronic pancreatitis**

Roy A *et al.* Islet cell dysfunction in patients with CP

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### Abstract

Chronic pancreatitis (CP) is characterised by progressive inflammation and fibrosis of the pancreas that eventually leads to pancreatic exocrine and endocrine insufficiency. The diabetes in the background of CP is very difficult to manage because of high glycaemic variability and concomitant malabsorption. Progressive beta cell loss leading to insulin deficiency is the cardinal mechanism behind diabetes development in CP. Alpha cell dysfunction leading to deranged glucagon secretion has been described in different studies using a variety of stimulus in CP. However, the emerging evidences are varied probably because of dependence on the study procedure, the study population as well as on the stage of the disease. The mechanism behind islet cell dysfunction in CP is multifactorial. The intra-islet alpha and beta cell regulation of each other is often lost. Moreover, the secretion of the incretin hormones

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**Author:** Amitabh Gautam    **Publish Year:** 2015

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Jan 29, 2015 · **Chronic pancreatitis** (CP) is a debilitating **disease** that leads to varying degrees of pancreatic endocrine and exocrine **dysfunction**. One of the most difficult symptoms of CP is severe abdominal pain, which is often challenging to control with available analgesics and therapies.

**Cited by:** 22

**Author:** Samuel J Kesseli, Kerrington A Smith, ...

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## [Total pancreatectomy with islet cell autologous ...](#)

<https://www.myamericannurse.com/treatment-for-patients-with-chronic-pancreatitis-pain>

Sep 24, 2019 · Total pancreatectomy with **islet cell autologous transplantation**: A **treatment modality** for **patients with chronic pancreatitis pain** ONE IN FIVE patients diagnosed with **acute pancreatitis** will develop **recurrent acute pancreatitis**, and one in three of them will develop **chronic pancreatitis (CP)**, which increases the risk for **pancreatic cancer**.

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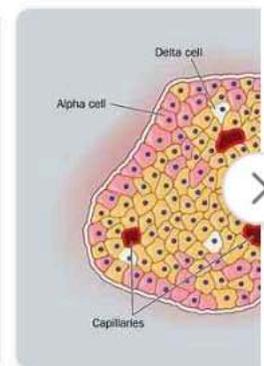
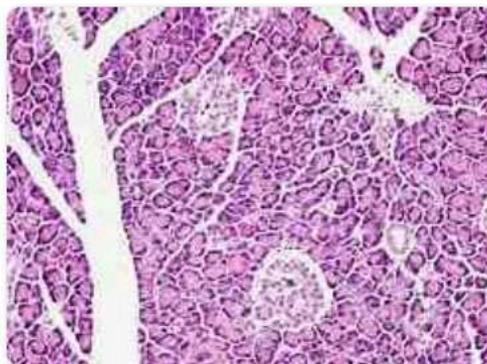
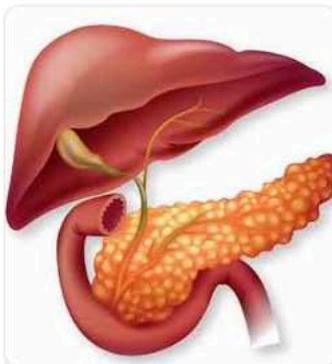
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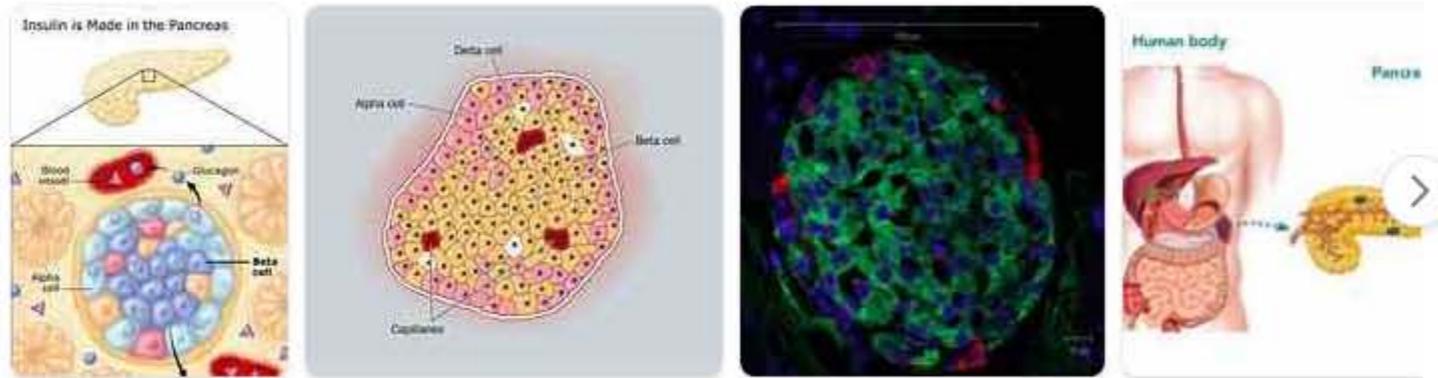
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**Loss** of beta **cell** function in **chronic pancreatitis** (CP) is due to fibrosis and atrophy of **islet cells** because of **chronic** inflammation. The beta **cell** function was significantly lower in the DM group in comparison to both the prediabetes and NGT groups in our study.

[Effect of Frey's procedure on islet cell function in ...](http://www.sciencedirect.com/science/article/pii/S1499387218301334)  
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Feedback

## Pancreatitis, Chronic

Medical condition

Chronic pancreatitis is a condition where the pancreas (a small organ located behind the stomach and below the ribcage) becomes permanently damaged from inflammation.

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### Symptoms

The most common symptom of chronic pancreatitis is repeated episodes of abdominal (tummy) pain. Eventually, there may also be digestion problems.

The pain usually develops in the middle or left side of the abdomen and can sometimes travel along...

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### Causes

Most cases of chronic pancreatitis are associated with drinking excessive amounts of alcohol over a long period of time.

However, in up to 3 out of 10 people with the condition, the cause can't be identified - known as idiopathic chronic...

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### Treatments

Treatment for chronic pancreatitis aims to help control the condition and reduce any symptoms.

#### Lifestyle changes

If you're diagnosed with chronic pancreatitis, some lifestyle changes will be recommended. These are described below.