# Chronic pancreatitis

## Definition

Chronic pancreatitis means an inflammation of the pancreas that alters its normal structure and functions. It can lead to permanent damage, with pain and malabsorption as the most prevalent symptoms.

# Epidemiology

The incidence is estimated to be 5-10/100.000 but the disease is likely to be highly underdiagnosed.

#### Clinical Features, natural history and prognosis

Patients usually present with persistent or intermittent abdominal pain. The pain is typically localized in the upper part of the stomach, and can project to the back. The pain often comes on after a meal and may in many patients be neuropathic (nerve-like) in nature. Local complications in the pancreas are pseudocysts, duodenal stenosis (narrowing) and peptic ulcer, which can also result in pain. Other symptoms include diarrhoea due to poor absorption of the fats in food (steatorrhoea). Considerable weight loss is evident in a high percentage of patients, and can continue to be a health problem as the condition progresses. Weight loss can also be attributed to a reduction in food intake in patients with severe abdominal pain. Diabetes classified as type III is a common complication after several years and is characterised as lack of a variety of hormones apart from insulin.

The disease is progressive with a 10-year mortality rate of 30%, and a 20-year mortality rate of 55%. The risk of developing pancreatic cancer is approximately 4% at 20 years.

#### Aetiology and Pathophysiology

It is most frequently caused by alcohol, but can also be related to other toxins, hereditary and autoimmune factors, as well as due to obstruction of the pancreatic duct by e.g., gallstones. Some cases are classified as idiopathic (of unknown cause).

#### **Diagnosis/Differential Diagnosis**

Diagnosis is based on symptoms and tests on pancreatic structure and function. Imaging (X-ray and/or scans) and tests for enzyme secretion are the most important investigations.

#### Therapy

The different treatment modalities for management of chronic pancreatitis are medical, endoscopical and surgical. Alcohol and smoking should be avoided. The abdominal pain can be



very severe and often requires strong analgesics and adjuvants as well as non-pharmacological pain treatment. Enzyme therapy, dietary advice and regulation is used to treat malabsorption, and if diabetes develops it frequently requires both oral anti-diabetics and insulin. Local complications are treated with endoscopy or surgery. Selected patients may require surgical resection, drainage procedures or shock wave lithotripsy.

## References

Witt H, Apte MV, Keim V, Wilson JS. Chronic pancreatitis: challenges and advances in pathogenesis, genetics, diagnosis, and therapy. Gastroenterology 2007;132(4):1557-73.

Pasricha PJ. Unraveling the mystery of pain in chronic pancreatitis. Nat Rev GastroenterolHepatol 2012;9(3):140-51

#### **Internet Resources**

http://en.wikipedia.org/wiki/Chronic\_pancreatitis http://emedicine.medscape.com/article/181554-overview

