

# CHRONIC PANCREATITIS

Hirlan

Div. Gastroenterology, Dept .Internal Medicine

Dr. Kariadi Hospital / Medical Faculty,

Diponegoro University,

Semarang

# Introduction

CP is a continuing inflammatory disease of the pancreas, characterized by :  
progressive and irreversible  
morphological changes of the gland



permanent impairment of exocrine  
and endocrine function

CP is a very rare disease

The incidence rate is around :

4 – 10 cases/100.000 people/years

Recent data support an increasing incidence  
Indonesia ?

Etiology :

Alcohol ( major etiologic factor – Western countries )

Tropical pancreatitis

Rare hereditary pancreatitis

Unknown etiology

# Acute vs Chronic Pancreatitis

- clinical syndrome of acute attack can be seen in both acute and chronic pancreatitis



clinical classification of acute vs chronic  
have no diagnostic value

- From the point of view of etiology and pathology AP and CP are entirely different entities.

# Pathophysiology

## Stone theory :

primary abnormality is formation of protein plug due to congenital lack of lithostatine

## Necrosis-fibrosis theory :

fibrosis and ductal stricture due to local inflammation and necrosis

# Diagnosis

The diagnosis of primary chronic pancreas :

- Specific clinical feature
- calcification of the pancreas
- ductal changes

# Clinical finding

Typical pancreatic pain is the major symptom

- Spontaneous and post-prandial pain may reflect neuropathic pain disorders
- Location of pain usually epigastric radiating to the back
- frequency increase with year until almost persistent

Nausea and vomiting

- quite frequent
- sometimes associated with duodenal stenosis

Ascites and left side pleural effusion

- from leak of pancreatic secretion
- high protein concentration

Slight jaundice

- obstructive jaundice due to compression or stricture

Insufficiency of pancreatic exocrine and endocrine Function.

- Diabetes mellitus
- Malabsorption, steatorrhea
- Malnutrition



## Imaging study

detecting : pancreatic calcification  
pancreatic ductal changes



Plain foto AP and lateral view  
USG  
CT scan  
MRI / MRCP  
ERCP

MARKANAH.NY/63 TH, -

6089767

08-08-1946

C3D

RS Dr Kariadi Semarang

FLUOROSPOT

DR DEWI/DR VANDA

08-08-2009

11 06 27

R

kV: 96

mAs: 5.1

D: 100

H: 85 %

F: 30 %

C: 750

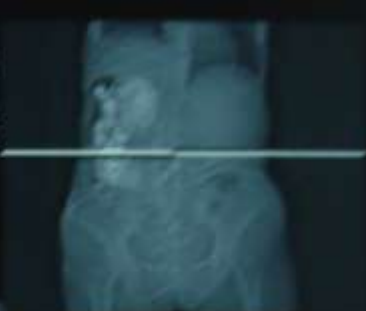
B: 300

28

Markamah, Ny/63  
93161 / 0809 / Adi

A Radiologi RS dr. Kariad...  
Emotion  
VA45A  
H-SP-CR

11-Aug-2009  
09:50:03.31  
4 IMA 21  
SPI 4  
SP -779.0

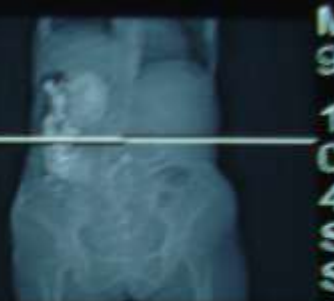




Markamah, Ny/63  
93161 / 0809 / Adi

11-Aug-2009  
09:50:02.78  
4 IMA 20  
SPI 4  
SP -769.0

A Radiologi RS dr. Kariad...  
Emotion  
VA45A  
H-SP-CR



## ERCP

- The most sensitive and specific test available for primary CP
- ERCP is an invasive procedure, its indication is primarily endoscopic therapy

## EUS

- Sensitive in detecting the typical patterns of CP
- Enables trans duodenal biopsies

Specific clinical feature

plus

Pancreatic calcification on  
Plain foto / USG



Sufficient for diagnosis  
and treatment

Specific clinical feature

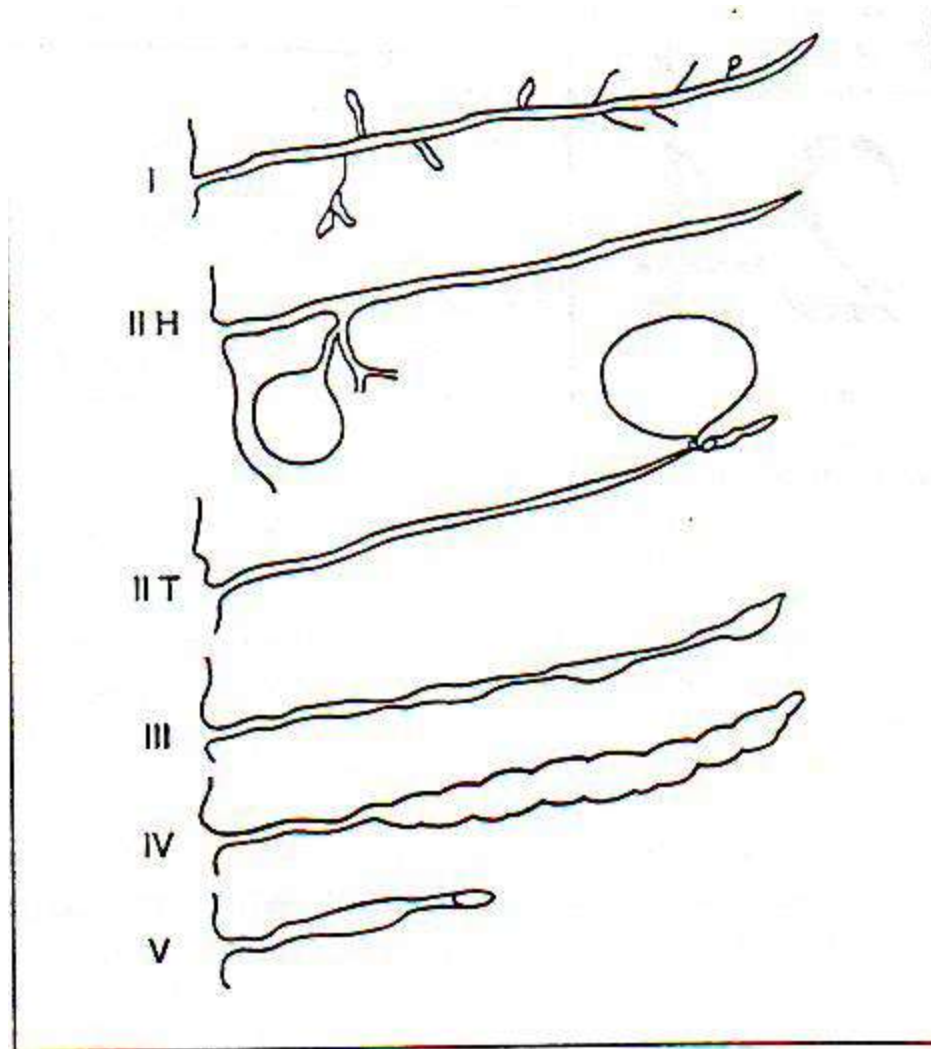
Plus

Pancreatic Ductal changes on  
CT scan/MRI/ERCP



Sufficient for diagnosis  
and treatment

# Ductal changes ( Cambridge clasification ) seen by CT Scan





# Management

- General measures
- Medical treatment
  - Pain control
  - complication
- Endoscopic therapy and Surgical treatment

Chronic Pancreatic pain  
(neuropathic pain)



Medical treatment



Simple analgesic  
Gabapentin  
Tricyclic antidepressant  
Tramadol / narcotic analgesic

Surgical or endoscopic treatment

## Surgical / endoscopic therapy

- Symptomatic CP with pancreatic duct obstruction , surgical or endoscopic drainage should be done
- Depending on patient preference, both are approach of choice to relief pain, although surgical drainage was more effective.

## Treatment conclusion

- Do not leave patients on narcotic analgesics
- Do not wait for burn- out of the pancreas
- Endoscopic or surgical treatment are the definite approach for symptomatic CP with pancreatic duct obstruction
- To control diabetes Mellitus, insulin substitution are almost always needed.

**Thank you**

Markamah, Ny/63  
93161 / 0809 / Adi

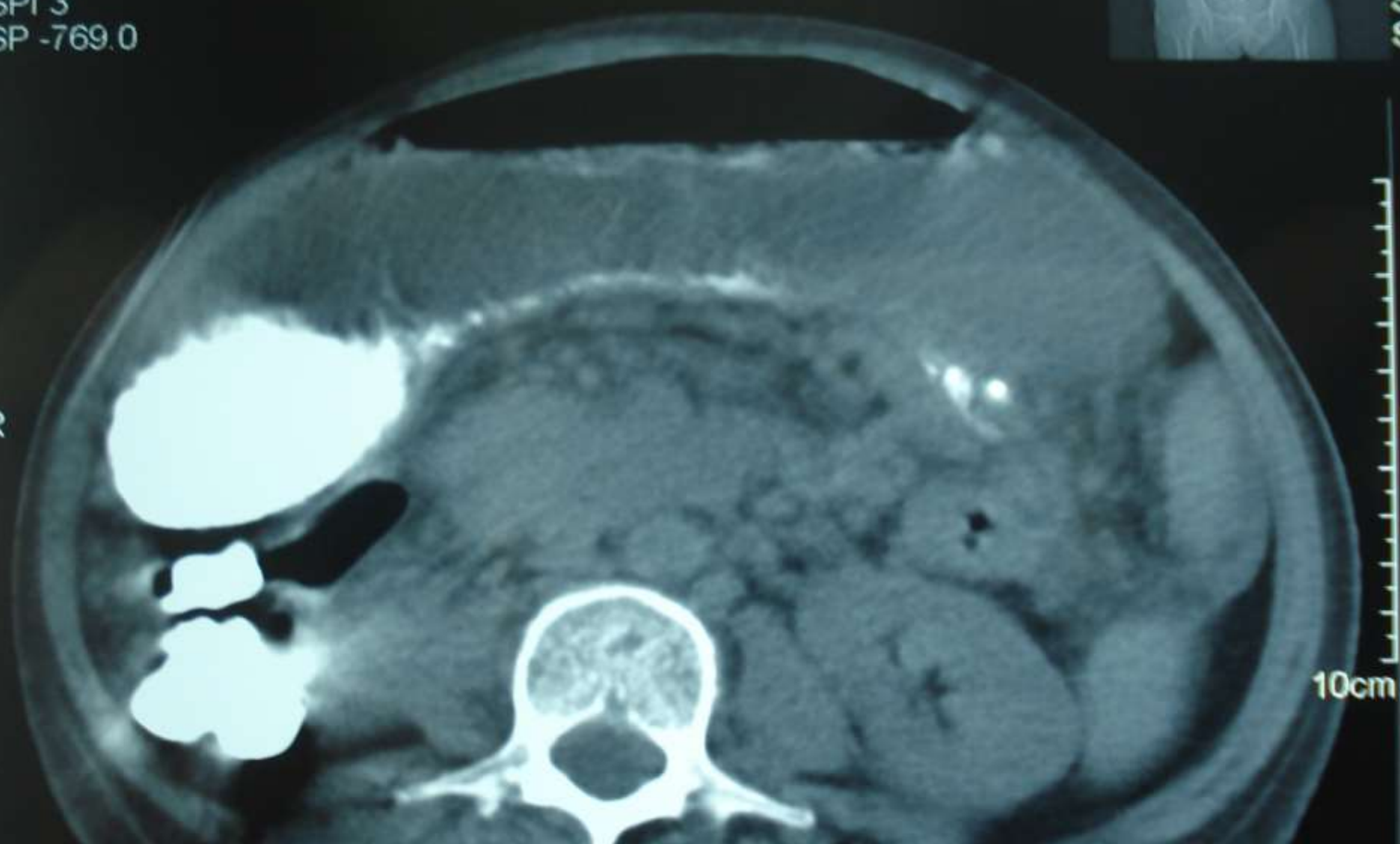
A Radiologi RS dr. Kariad...  
Emotion  
VA45A  
H-SP-CR



M  
9  
1  
0  
3  
5  
5

11-Aug-2009  
09:47:42.08  
3 IMA 20  
SPI 3  
SP -769.0

R



10cm