"إن قدر سورية أن تصيبها الملمات.. ولكن قدرها أيضا أن تكون عزيزة قوية مقاومة ومنتصرة"

UNIPHARMA

UNIPHARMA 2nd Symposium for Gastroenterology

Sept 14 – 16, 2023 Golden Beach - Latakia

Endoscopy in Acute Pancreatitis

الدكتور فائز صندوق
أخصائي الجهاز الهضمي
المستشفى السوري التخصصي
دمشق - سوريا

الدكتورة راما الصالح
مشفى المجتهد
EBM

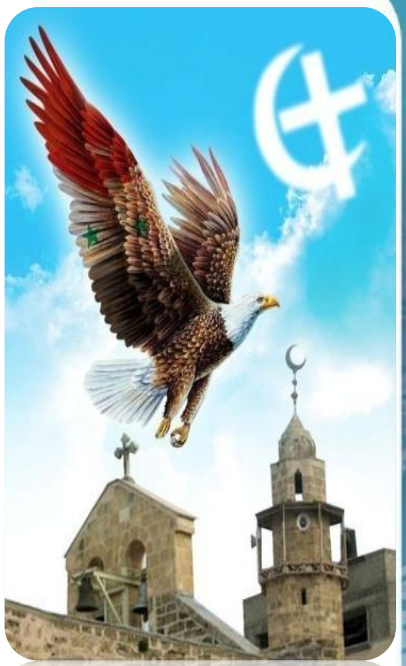
Fayez Sandouk

MD FRCP

Chairman Young Clinicians Program in Africo Middleast Association of

Gastro-Enterology

YCP in AMAGE



1)

Chronic Pancreatitis Endoscopic Management

27th International Congress of Pakistan Society of Gastroenterology and G.I.Endoscopy

Rawalpindi 19th-22nd March, 2011

Fayez Sandouk MD FRCP

- Chairman GI Scientific Council Syrian Ministry of health
- Chairman YCP in AMAGE,
- Coordinator OMED /WEO Outreach DVD Program

2)

Chronic Pancreatitis
Medical & Endoscopic Management

29.Th Conference of PSG

Lahor , Pakistan 2013

Fayez Sandouk MD FRCP

- Chairman YCP in AMAGE,
- Coordinator OMED /WEO Outreach DVD Program

3)

Chronic Pancreatitis Endoscopic Management

مؤتمر نقابة أطباء سوريا

الدوري الأول

3-5 آذار 2016

مشفى الأسد الجامعي

دمشق – سوريا

د. فائز صندوق

Fayez Sandouk MD FRCP

- Chairman YCP in AMAGE,
- Coordinator OMED /WEO Outreach DVD Program

4)

Chronic Pancreatitis Endoscopic Management

3.rd International Conference of Kurdistan Gastroenterology & Hepatology Society

May 5-6, 2016

Fayez Sandouk MD FRCP

Chairman YCP in AMAGE

Chronic Pancreatitis

Etiology

1. Biliary
2. Alcoholic
3. Malformation: Divisum
4. Hereditary
5. Metabolic : Triglycerids, Hypercalcemia, PTH
6. Idiopathic 5%

Acute Pancreatitis

Etiology (2021)

1. Biliary
2. Alcoholic
3. Malformation: Divisum
4. Hereditary
5. Metabolic : Triglycerids, Hypercalcemia, PTH
6. Immune IgG4
7. Idiopathic 4%

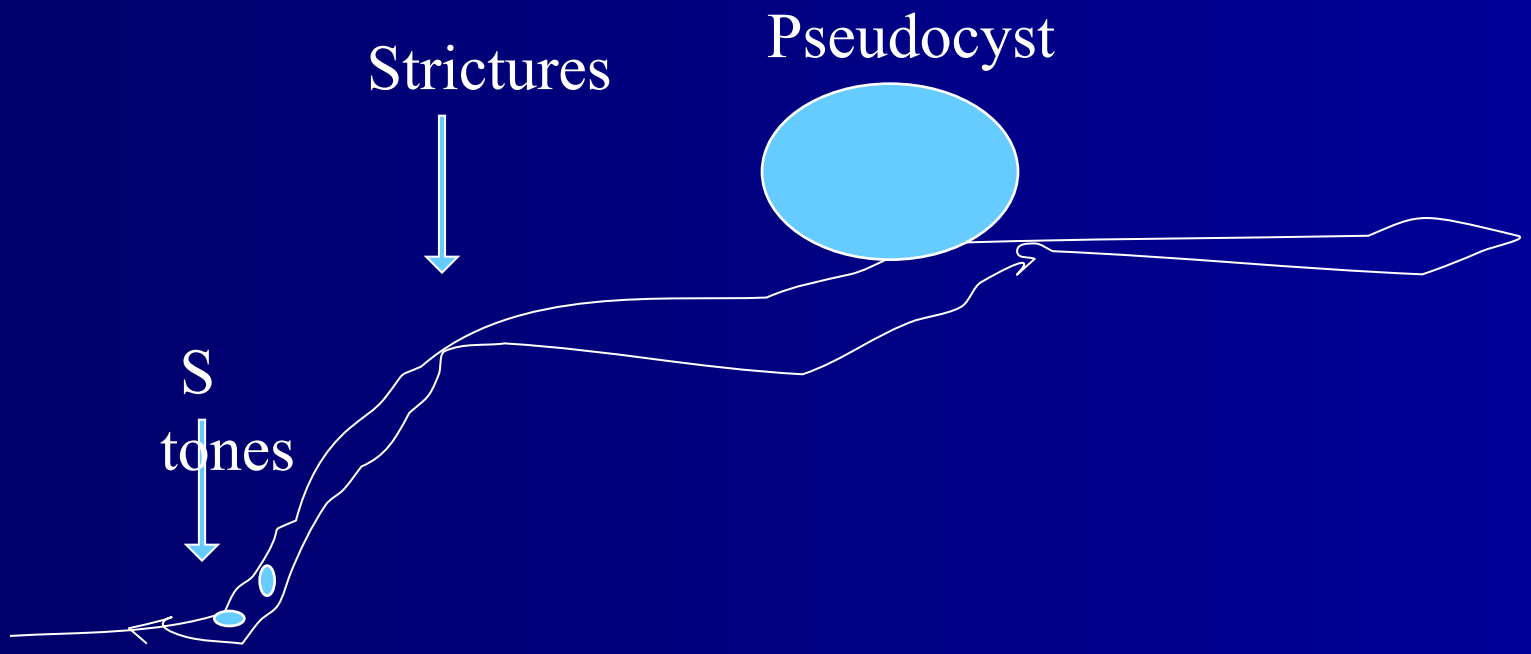
Chronic Pancreatitis

Endoscopic Help

1. **PAIN**
2. **Obstructive Jaundice**
3. **Pseudocyst**

Chronic Pancreatitis

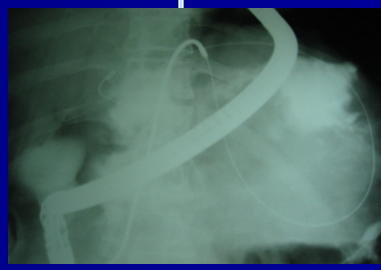
PAIN:
Endoscopic Help

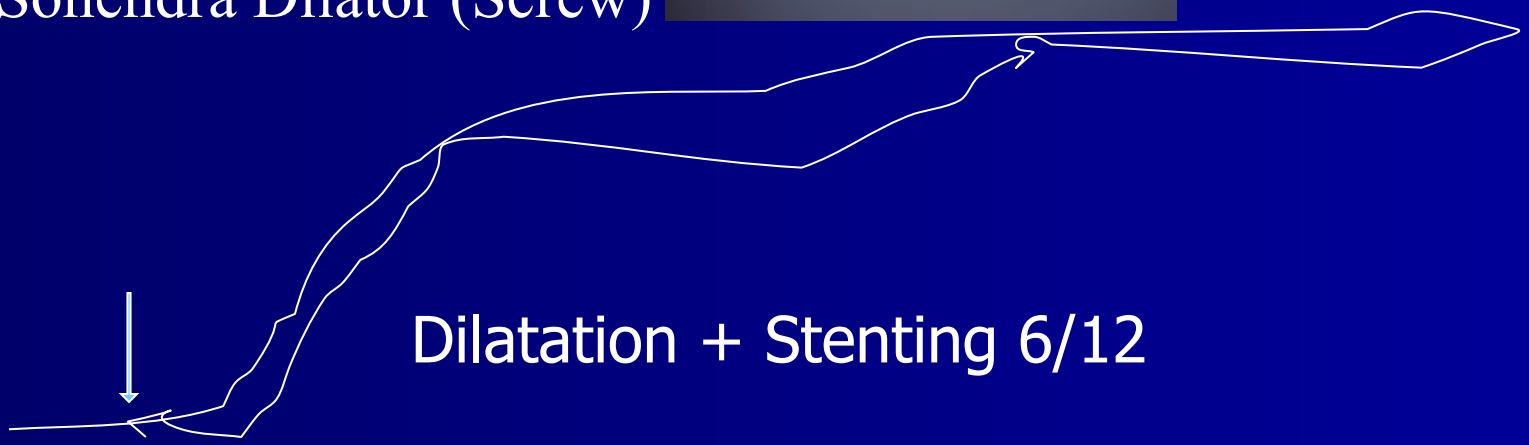


Chronic Pancreatitis

Strictures:

* Very tight,
* Sohendra Dilator (Screw)





Dilatation + Stenting 6/12

Panc. EST alone : 65% Improvement

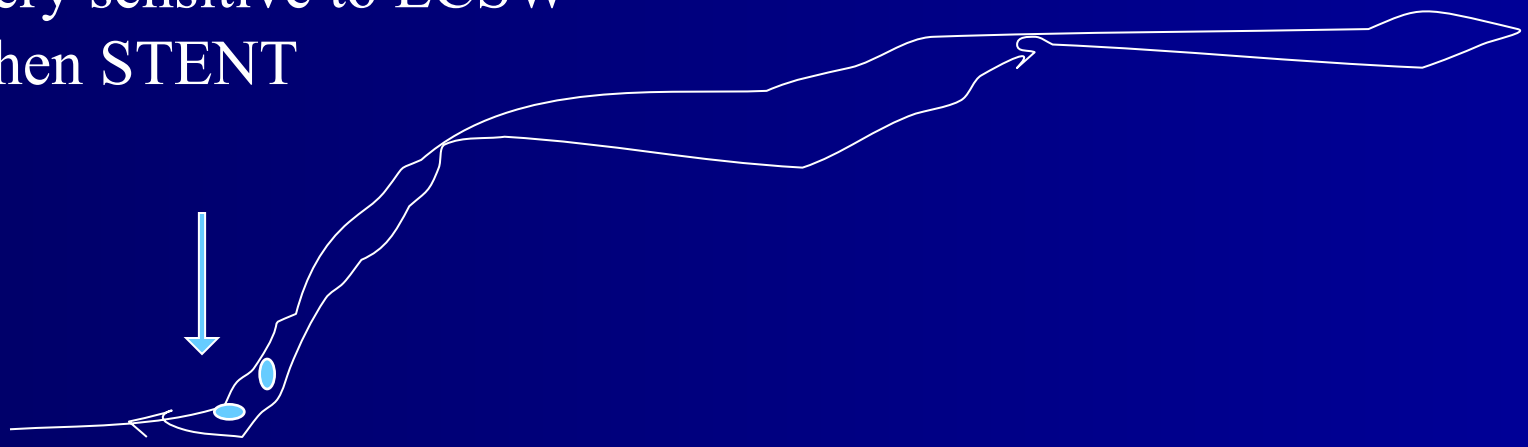
Ref. Elton et al. Gatrointest Endosc 1998; 47: 240-49

Chronic Pancreatitis

Stones

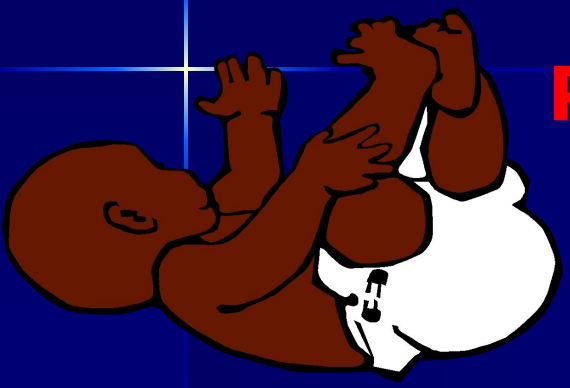
* Panc. EST, Dilatation, then Basket or Balloon Removal

- Very sensitive to ECSW
- Then STENT



Ref. Elton et al. Gatrointest Endosc 1998; 47: 240-49

Pseudocysts: Endoscopic Rx



Pancreatic Pseudocyst

Body
Through the Stomach:
Side view Scope

Tail
Through the Stomach
Forward Scope

Head
Through the Duodenum:
side view Scope

Through Ampulla

Acute Pancreatitis

Endoscopic Help

1). **Proven Biliary** *(5 remarks)*

2). **Complications:** *(Psseudocyst , Abscess , Fistulas after Cholecystectomy or Trauma).*

3). **Treat the Cause** *(Pancreas Divisum)*

4). **Severe Pancreatitis** *(Mild , Moderate , **Severe)***

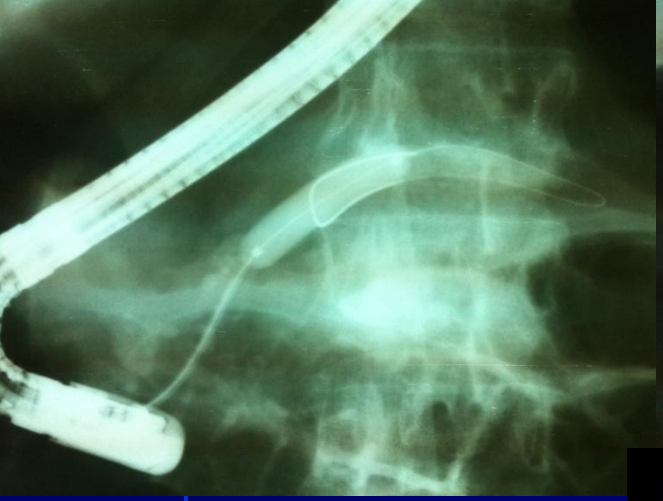
Endoscopy in Acute Pancreatitis

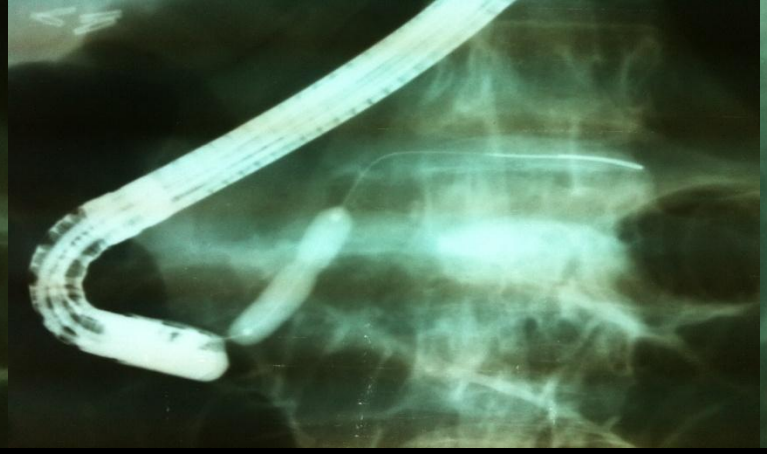
WISDOM OF THE DAY

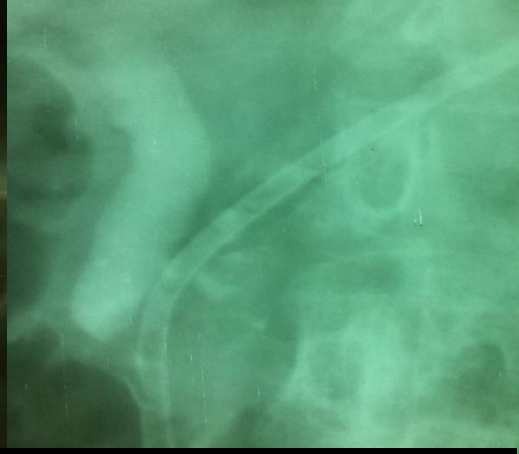
Management Lesson

Never start a project unless all resources are available

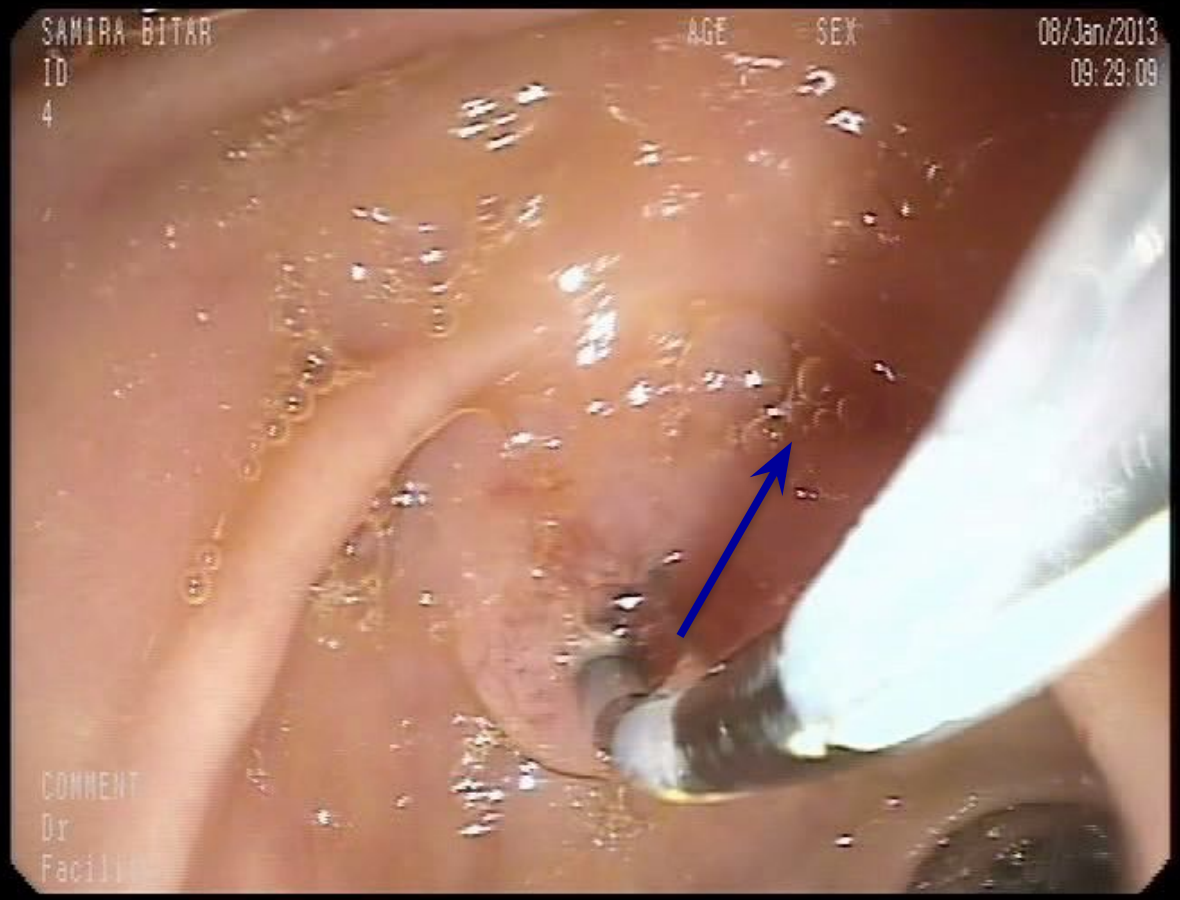
لا تبدأ المشروع إلا إذا توفرت جميع الموارد







CUT Currency ONLY
PLEASE
@ 1-2 O'CLOCK



Acute Pancreatitis

Endoscopic Help

1). Proven Biliary *(5 remarks):*

3/5

1. Pain
2. Dilated CBD (More than 7mm)
3. Elevated LFT *(SGPT , SGOT)*
4. Elevated Biliary *(Bilirubin , Gamma GT)*
5. Elevated Pancreatic *(Amylase , Lipase)*

Acute Pancreatitis

Endoscopic Help

2). Severe Pancreatitis *(Mild , Moderate , Severe)*

ONLY in Severe or Necrotizing Pancreatitis

SEVERE:

1. تعريف
2.
3.

OLD: Within 72 hours

NOW: Within 24 hours

Lower Complication
Less Hospitalization
Less Costs

Acute Pancreatitis

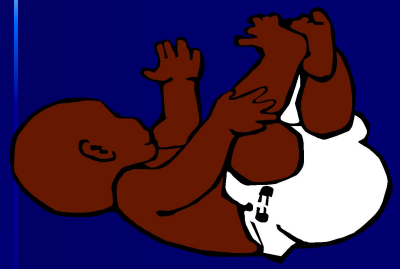
Endoscopic Help

3). Complications:

1. Pseudocyst
2. Abscess
3. Biliary 0r Pancreatic Fsitulas

Pseudocysts: Endoscopic Rx

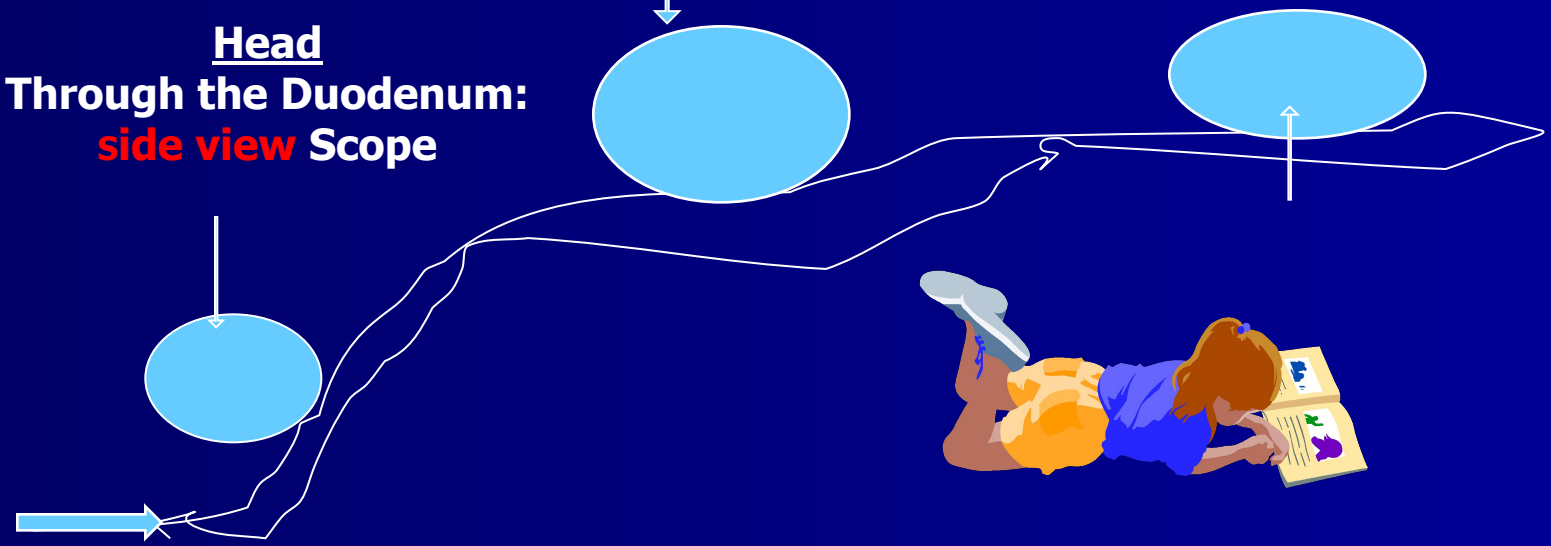
Pancreatic Pseudocyst



Body
Through the Stomach:
Side view Scope

Tail
Through the Stomach
Forward Scope

Head
Through the Duodenum:
side view Scope



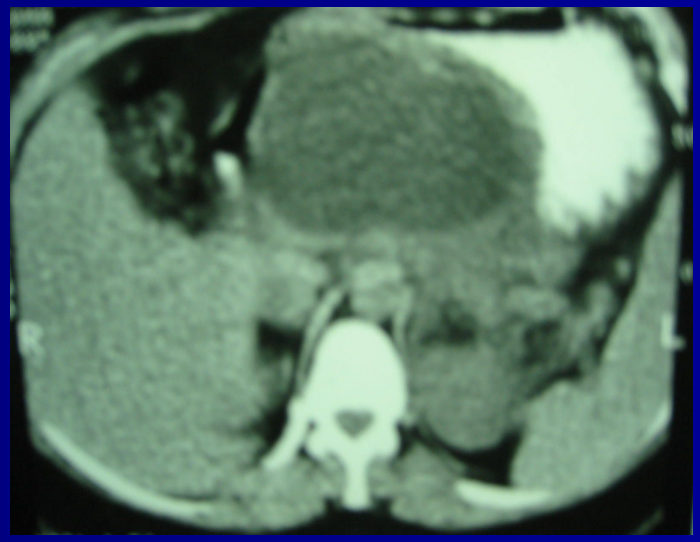
Through Ampulla

Pseudocysts: Endoscopic Rx

Pancreatic Pseudocyst

7-8% of Chronic Pancreatitis

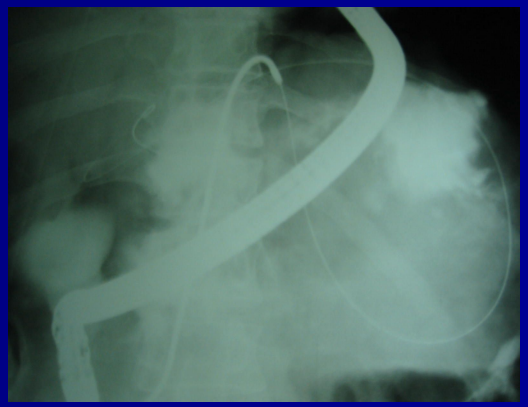
<u>Same Surgical Strategy</u>
After 6 weeks
Deal with Strictures



Pseudocysts: Endoscopic Rx

Trans Papillary:

- **Communication with the main Panc. Duct**
- **Downstream Ductal Strictures**
- **Sohendra Dilater**
- **+ Stent 6 months**
- **Safest**



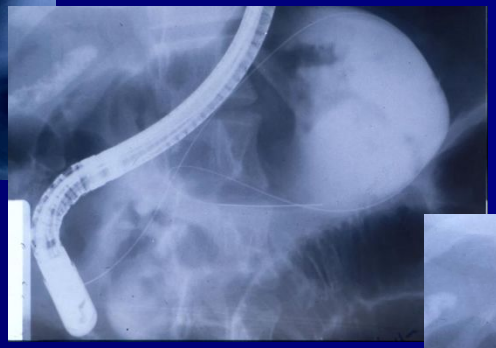
Success	*82 %*
Complication	*7 %*
Recurrence	*16 %*

Ref. Cremer et al. Gatrointest Endosc 1989; 35: 1-9.
Ref. Howell et al. Gastrointest Endosc 1998; 8: 142-62

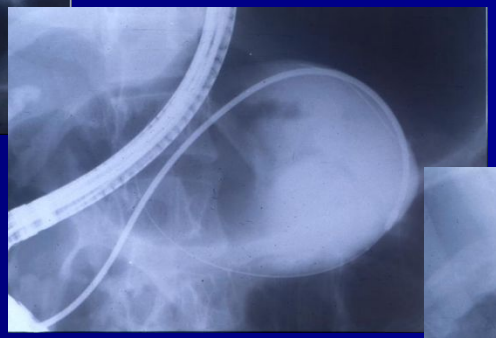
Pseudocysts: Endoscopic Rx

Trans Papillary:

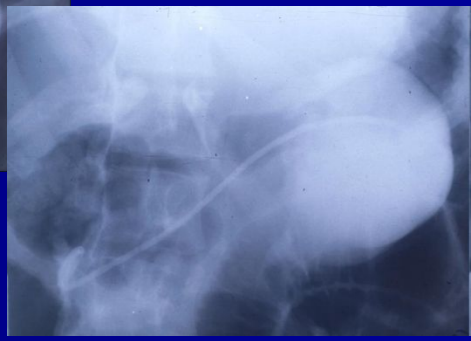
Looped in GW



Sohendra



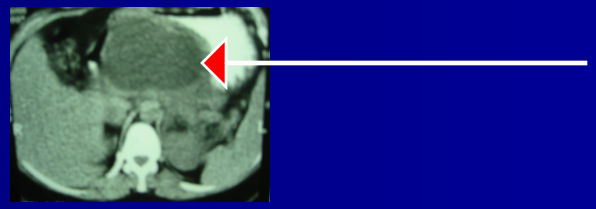
Stent

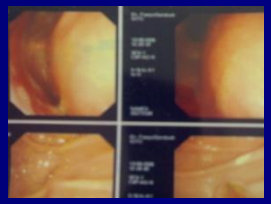


Pseudocysts: Endoscopic Rx

Through Stomach & Duodenum:

- **Perpendicular Needle Knife (Cystostome)**
- **Wall less than 5 mm**
- **Bulging or EUS**
- **+ Stents**





Success: *70 - 95 %*
Complication: *5 - 19 %*
Recurrence *9 % (FU 46 months)*

Ref. Cremer et al. Gatrointest Endosc 1989; 35: 1-9.
Ref. Howell et al. Gastrointest Endosc 1998; 8: 142-62

Pseudocysts: Endoscopic Rx

EUS:

With NO Bulging + Stent or Naso Cystic Tube

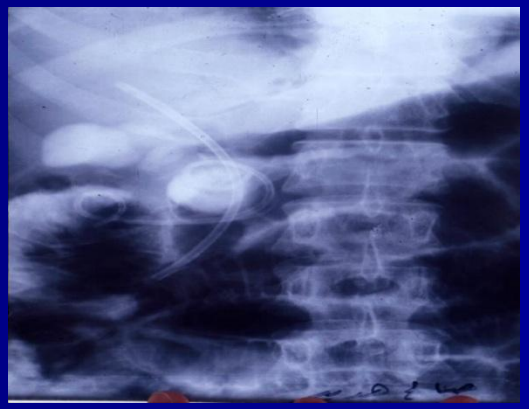
Success 100%
Recurrence in 6/12

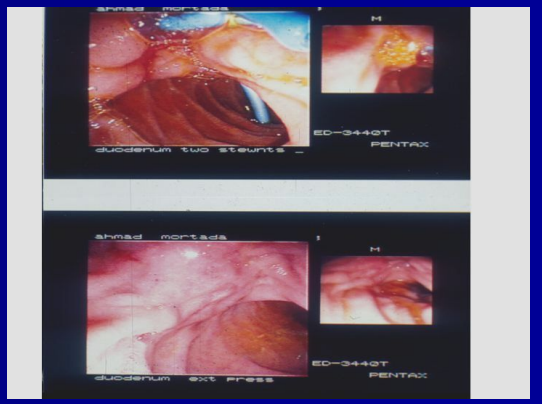
Ref. Giovannini. Gastrointest Endosc 1998; 48: 200-203

Pseudocysts: Endoscopic Rx

Stents

- **One Pigtail Stent**
  Ref. Cremer et al. Gatrointest Endosc 1989; 35: 1-9.
- **Two Pigtail Stents**
  Ref. Monkemuller Gastrointest Endosc 1998; 48: 195-200.
- **Incision + - Stent**
  Ref. EUS Supplement Gastrointest Endosc 52 N6 Dec. 2000 S23
- **Puncture + Balloon Dilatation + Stenting**





Pseudocysts: Endoscopic Rx

"Pseudocysts Multiple stenting"

A case:

1. Head of pancreas Pseudocyst
2. Bulbar compression

3. PD Cannulation: Connection to Cyst in the head
4. Sohendra Dilation for stricture

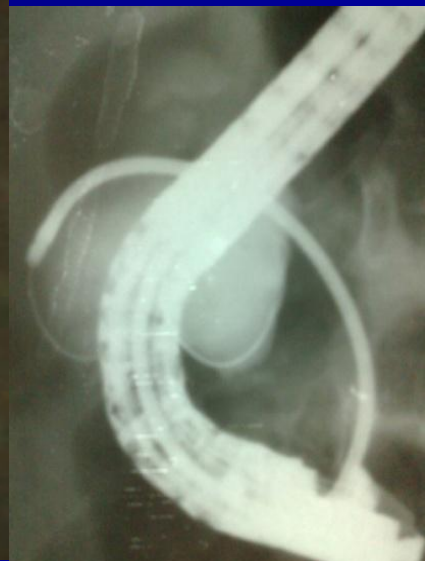
5. **Stent through Ampulla**
6. **Stent through Bulb**

Pseudocysts: Endoscopic Rx

"Pseudocysts Multiple stenting"

2. Sohedra

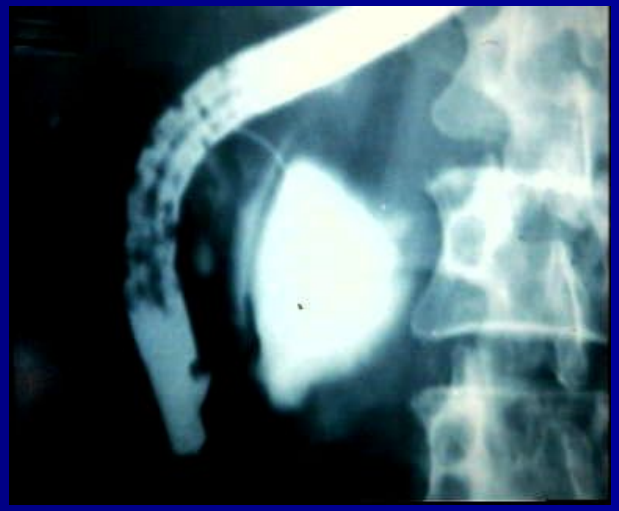
3. PD Stent



Pseudocysts: Endoscopic Rx

Biliary Compression

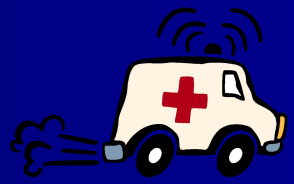
Drain Pseudocyst First
Might Spontaneous Relieve



Pseudocysts: Endoscopic Rx

CRITICISM: The Cavity is Full of Debris

- Recurrence 10 %
- Infection 13 %



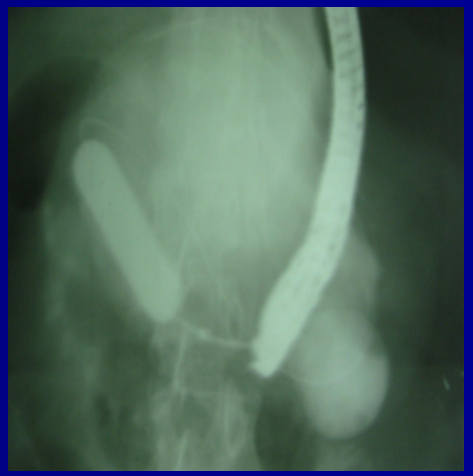
Kohler et al. Br. J Surg 1987; 74: 813-15
Moron et al. Ann R Coll Surg Engl 1994; 76: 54-58
Willing et al. Am J Surg 1992; 58: 199-205

Pseudocysts: Endoscopic Rx

The Technique 2003
" Puncture-Dilation "

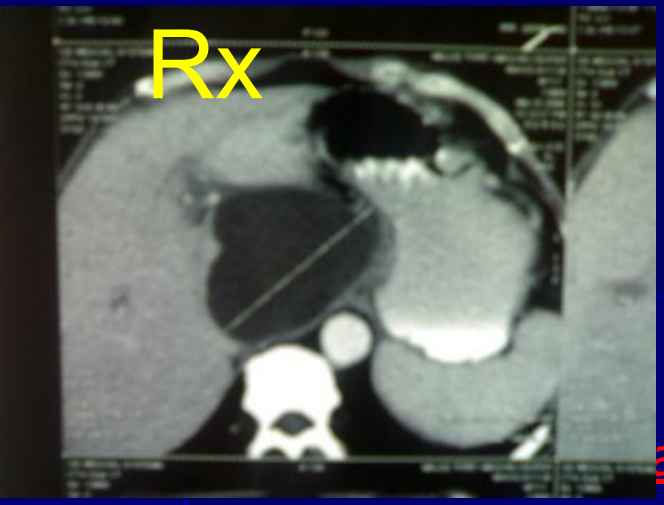
1. Puncture
2. Guide Wire
3. Balloon Dilation

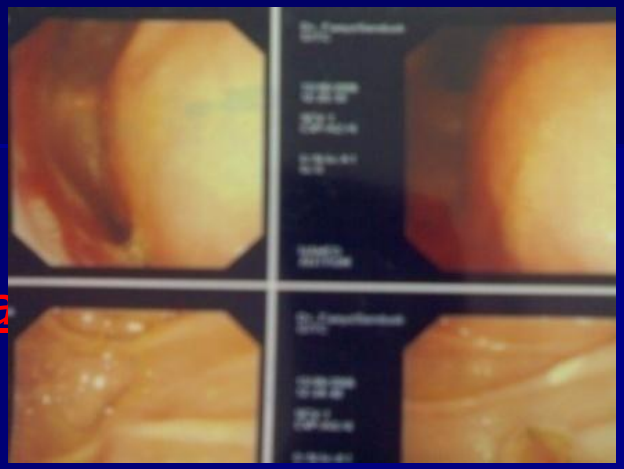
4. Scope INSIDE the Cavity
5. Cleaning Debris & Washing
   "Necresectomy" !

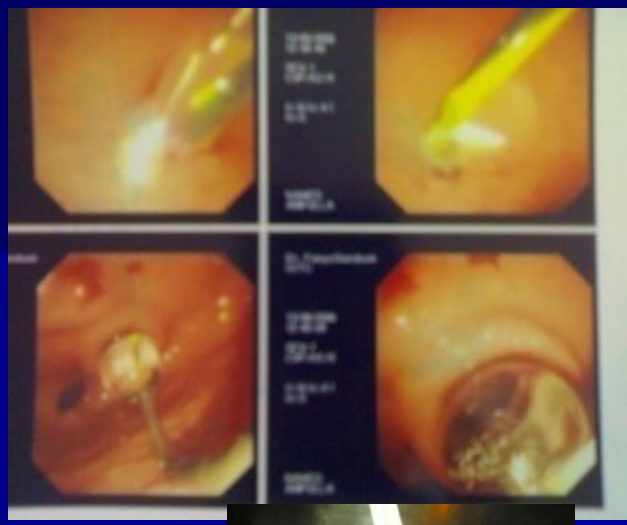


Kohler et al. Br. J Surg 1987; 74: 813-15
Moron et al. Ann R Coll Surg Engl 1994; 76: 54-58
Willing et al. Am J Surg 1992; 58: 199-205

Balloons in Pseudocysts: Endoscopic Rx







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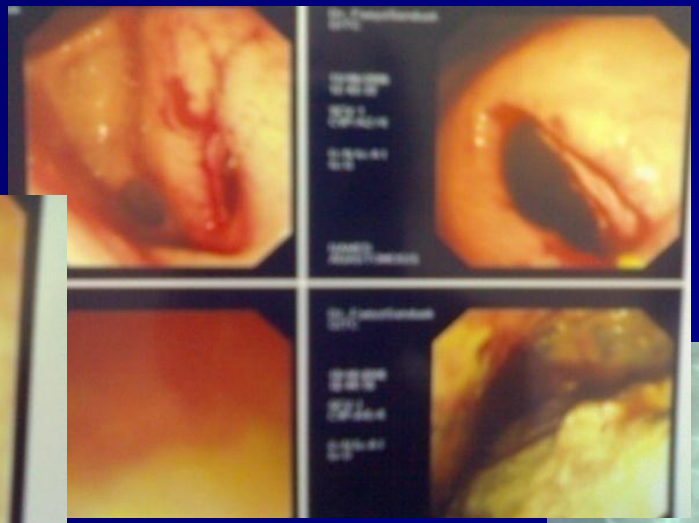
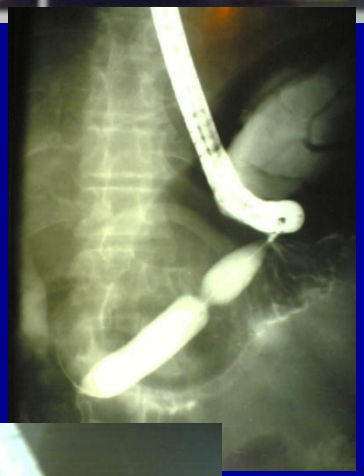
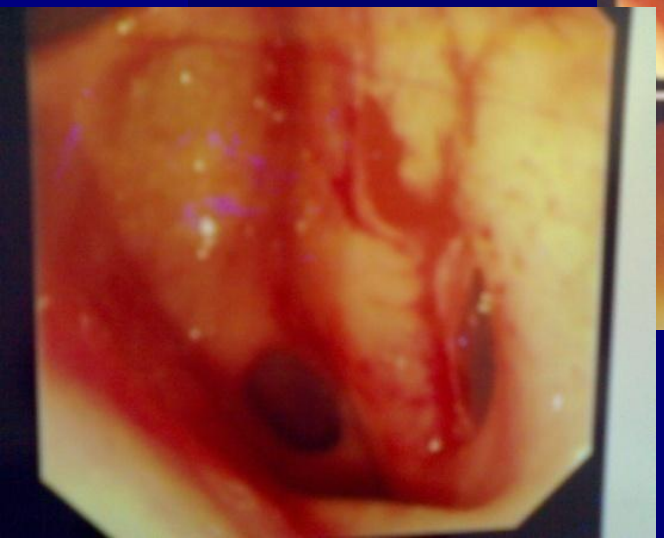
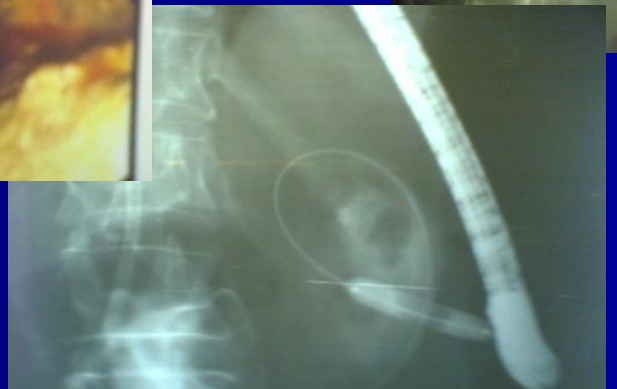








Pseudocysts: Endoscopic Rx

Complications 7%

1. Infection
2. Bleeding
3. Perforation
4. Leak

Gastrointest Endosc 1985;31:322–328.
Br J Surg 1997;84:1638–1645.
Gastrointest Endosc 2000;52:23–27.
Surg Clin North Am 2001;81:391–397.

Acute Pancreatitis

Endoscopic Help

4). Treat the Cause

1. Stones
2. Pancrease Divisum

Acute Pancreatitis
Case Presentation

80 YO lady

TWO WEEKS:

Persistent abdominal pain Radiating to both sides, Vomiting, Low grade Fever

US:

Distended & Tender Gall Bladder + Stones

LAB:

Slightly High WBC (12500 75%) , SGPT 67, SGOT, Gamma GT double, Bilirubin Normal, Amylase & Lipase Double).

Advised to:

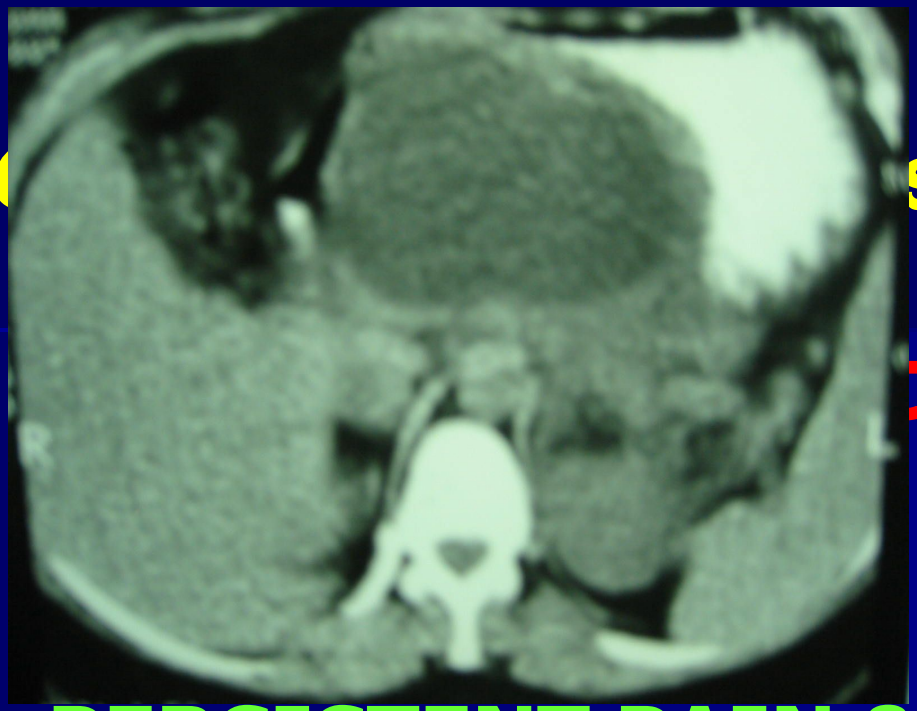
Have ERCP , Then Cholecystectomy next day.

His referral refused :

Conservative Rx. Wait as for the Pancreatitis

A s

tion



Worse, PERSISTENT PAIN & Tenderness:

1. Septic Shock , Very High Amylase & WBC
2. Big Cystic Lesion 9 cm , Head and Body of Pancreas, Pressing the posterior gastric wall
3. Big, distended GB with stones
4. Little Free Ascitic Fluid in Peritoneum

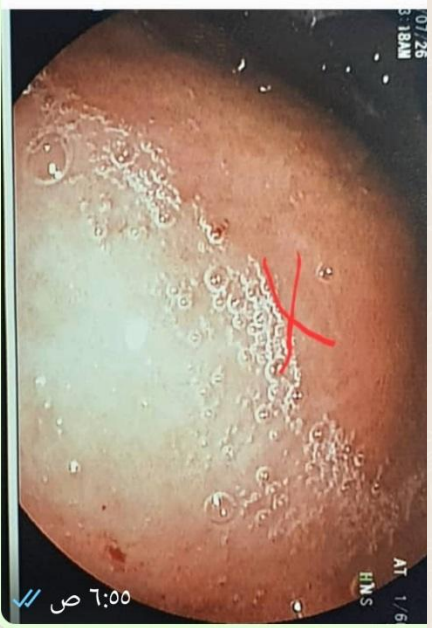
Acute Pancreatitis

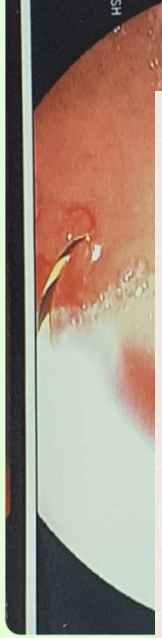
Case Presentation

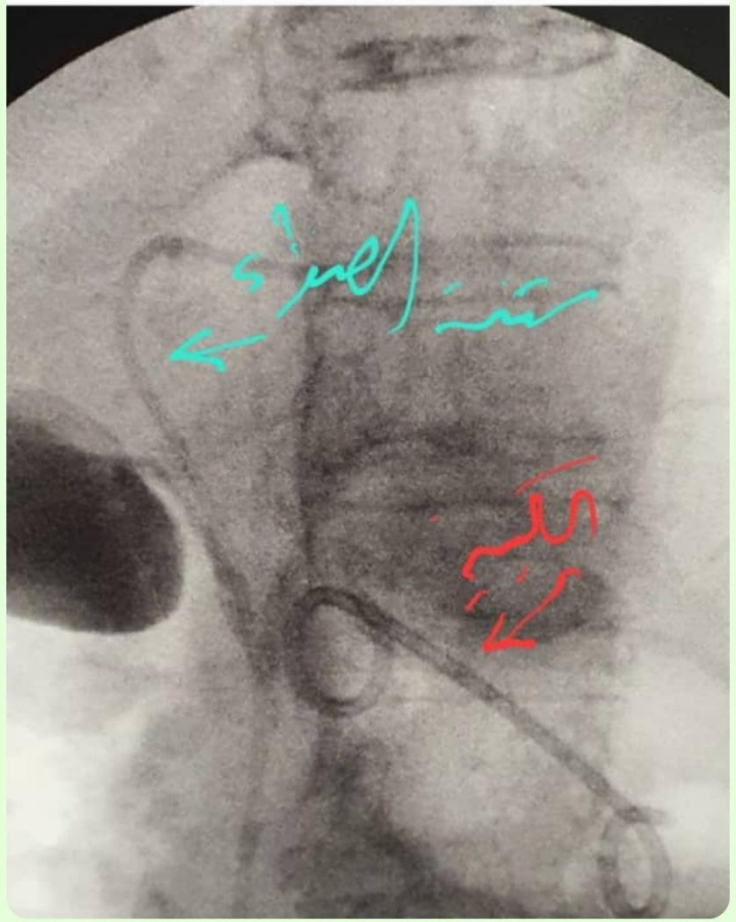
80 YO lady

After 10 days

Emergency ERCP

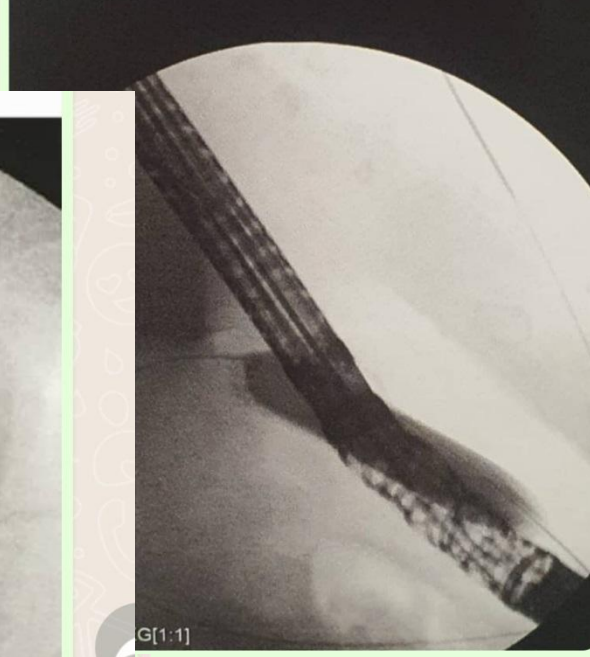






الزرقاء الصفراوية... والحمراء
بين المعدة وجوف ةلكيسة

٧:٠٧ ص



توسيع البالون

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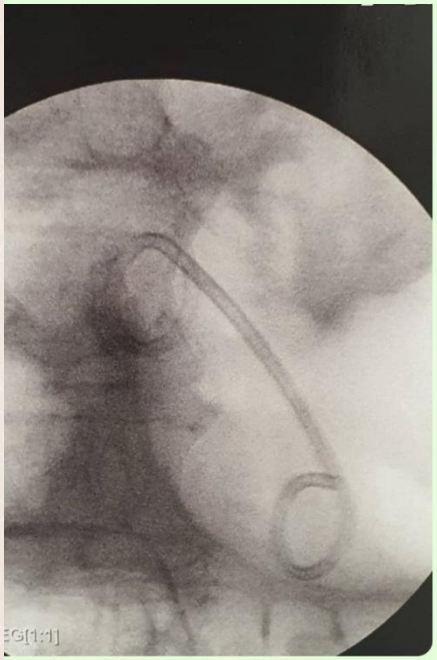
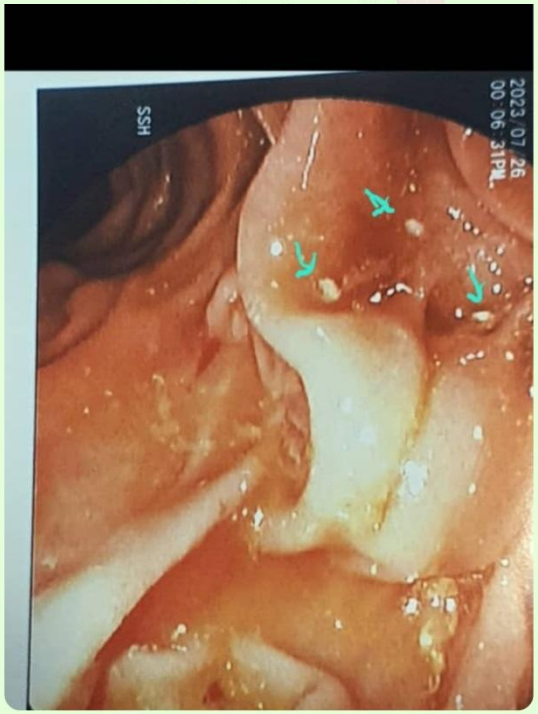


الستنت بين الكيسة والالمعد



هذه جزء من الحصيات الناعمة

الشجرة الصفراوية مع الس

Acute Pancreatitis

Case Presentation

80 YO lady

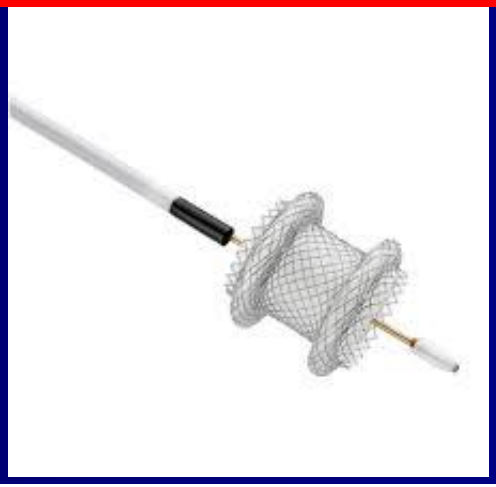
Went home in TWO Days

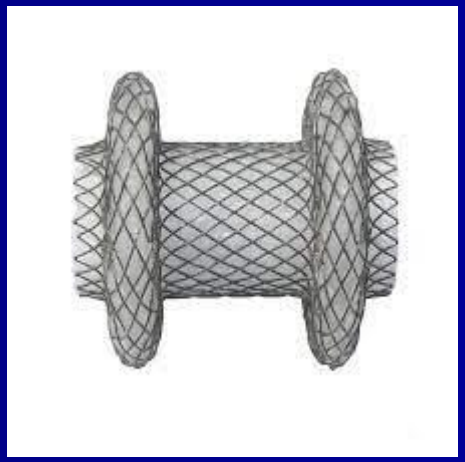
1. **In six weeks : to remove GB**
2. **Then Remove stents**

AXIOS Metallic SEMS

The best and safest for Pancreatic Pseudocyst or Abscess

VERY EXPENSIVE





Stents for Translumiinal Drain

Pseudocysts: Endoscopic Rx

" History"

- Three Cases Movie

1. Cold Abscess : Nasocystic tube
2. Pseudocyst **Cold** case: Dilation – washing
3. **Acute** Abscess : Previous Stent
   Then Dilation – washing

Pseudocysts: Endoscopic Rx

" History"

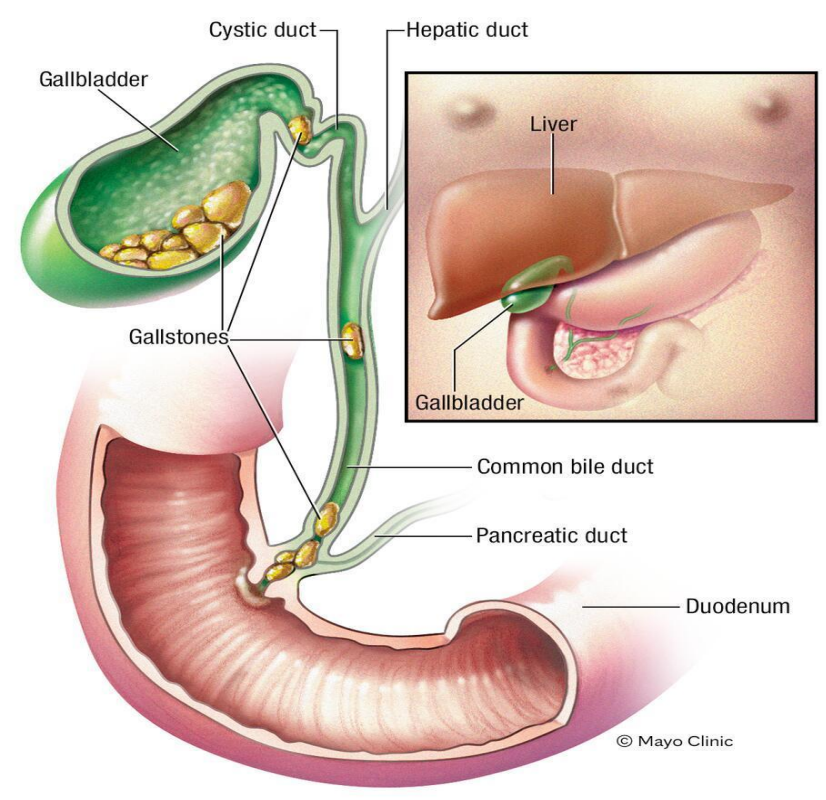
Cases 3

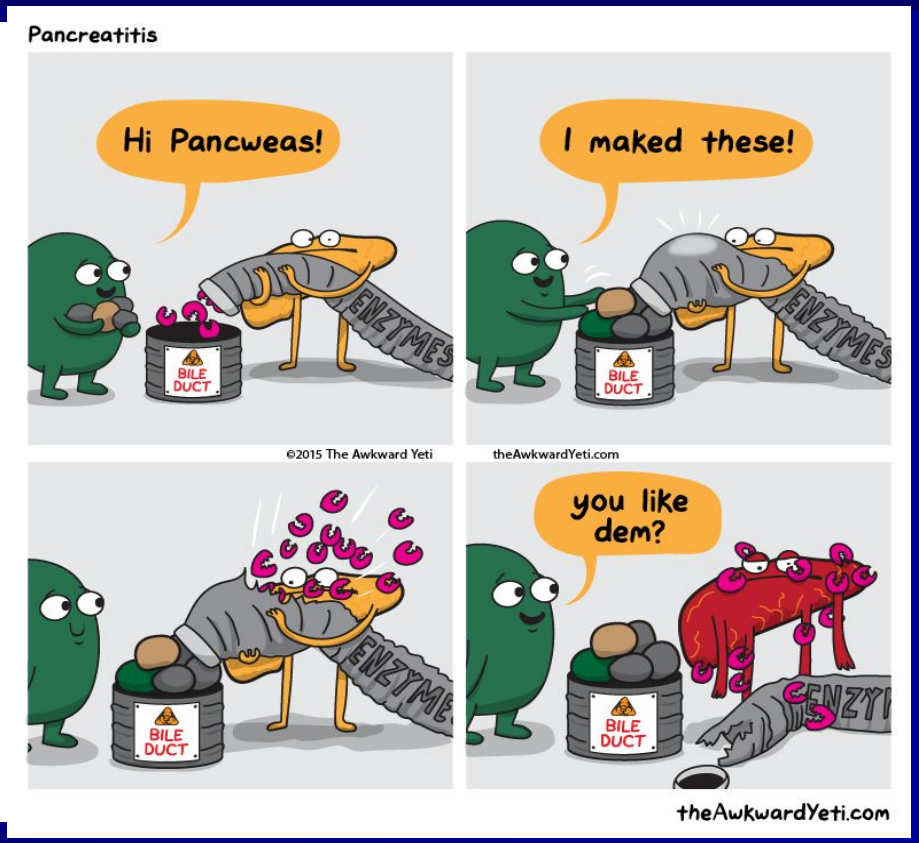
Endoscopic Help

EBM Updates

Dr. Rama Al-Saleh

What is gallstone pancreatitis?





Assesment of disease severity

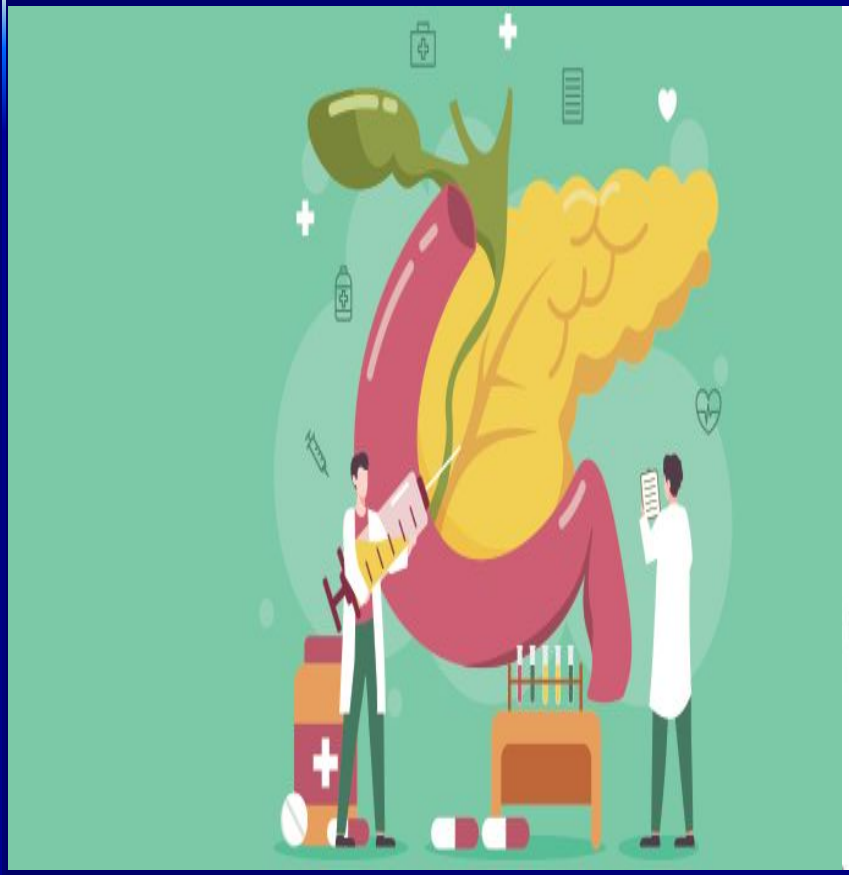
Table 7. Revised Atlanta Criteria for Acute Pancreatitis

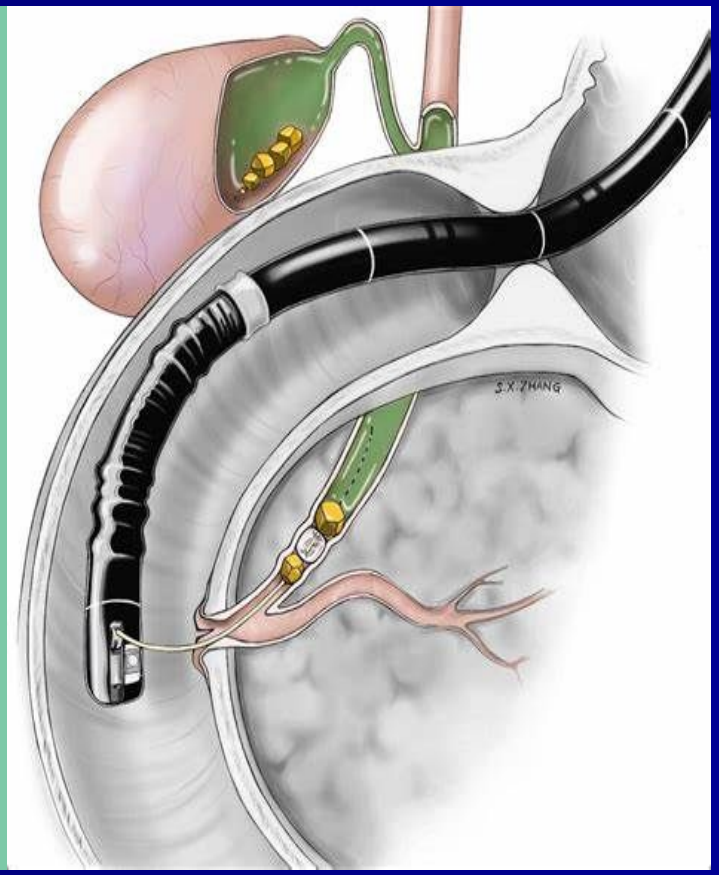
Severity	*Criteria*
Mild	No organ failure
	No local complications (e.g., peripancreatic fluid collections, pancreatic necrosis, peripancreatic necrosis)
	No systemic complications
	Typically resolves in first week
Moderate	Transient organ failure (≤ 48 hours)
	or
	Local complications
	or
	Exacerbation of comorbid disease
Severe	Persistent organ failure (> 48 hours)

Information from reference 25.

Grade	Balthazar Score	Points
A	Normal pancreas	0
B	Pancreatic enlargement	1
C	Pancreatic inflammation and/or peripancreatic fat	2
D	Single peripancreatic fluid collection	3
E	Two or more fluid collections and/or retroperitoneal air	4
	Percentage necrosis	
	0	0
	< 30	2
	30 – 50	4
	> 50	6
	CT Severity Index	
	Low degree	0 –
	Middle degree (6% mortality)	4 –

	At the time of admission:	
1	Age	>55 years
2	White blood cell count	>16,000/mm^3
3	Blood glucose	>200 mg/dL (11.1 mmol/L)
4	Aspartate aminotransferase (AST)	>250 U/L
5	Serum Lactate dehydrogenase (LDH)	>350 U/L
	Within 48 hours of the admission	
1	Serum calcium	<2 mmol/L (<8 mg/dL)
2	Blood urea nitrogen(BUN)	Increase by ≥5 mg/dL (1.8 mmol/L) despite IV fluid hydration
3	Hematocrit	Fall by ≥10%
4	PaO_2	<60 mmHg
5	Base deficit	>4 mEq/L
6	Fluid sequestation	>6000 mL (> 6 L)




S.X.ZHANG

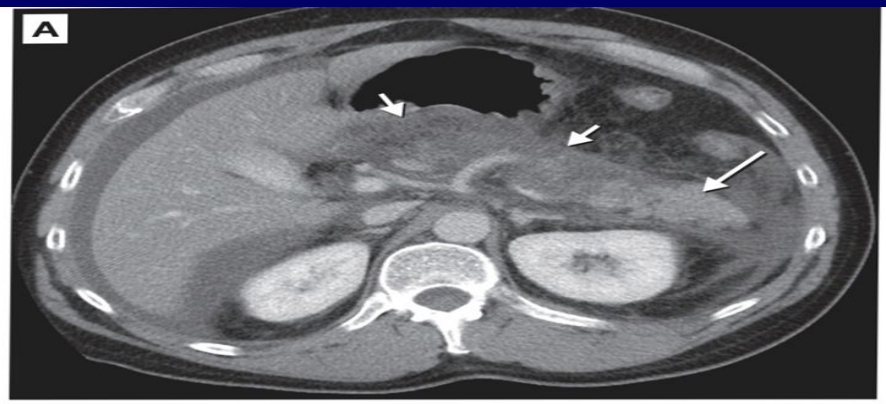
Urgent endoscopic retrograde cholangiopancreatography with sphincterotomy versus conservative treatment in predicted severe acute gallstone pancreatitis (APEC): a multicentre randomised controlled trial

Nicolien J Schepers, Nora D L Hallensleben, Marc G Besselink, Marie-Paule G F Anten, Thomas L Bollen, David W da Costa, Foke van Delft, Sven M van Dijk, Hendrik M van Dullemen, Marcel G W Dijkgraaf, Casper H J van Eijck, G Willemien Erkelens, Nicole S Erler, Paul Fockens, Erwin J M van Geenen, Janneke van Grinsven, Robbert A Hollemans, Jeanin E van Hooft, Rene W M van der Hulst, Jeroen M Jansen, Frank J G M Kubben, Sjoerd D Kuiken, Robert J F Laheij, Rutger Quispel, Rogier J J de Ridder, Marno C M Rijk, Tessa E H Römkens, Carola H M Ruigrok, Erik J Schoon, Matthijs P Schwartz, Xavier J N M Smeets, B W Marcel Spanier, Adriaan C I T L Tan, Willem J Thijs, Robin Timmer, Niels G Venneman, Robert C Verdonk, Frank P Vleggaar, Wim van de Vrie, Ben J Witteman, Hjalmar C van Santvoort, Olaf J Bakker, Marco J Bruno, on behalf of the

Added value of this study

This trial answers the question of whether urgent ERCP with biliary sphincterotomy should be done in patients with predicted severe acute gallstone pancreatitis, with or without cholestasis, but without cholangitis. Our findings suggest that urgent ERCP with biliary sphincterotomy did not reduce the composite endpoint of major complications or mortality compared with conservative treatment. Although cholangitis occurred more often in patients treated conservatively, this had no negative impact on overall outcome.

Definition of necrosis



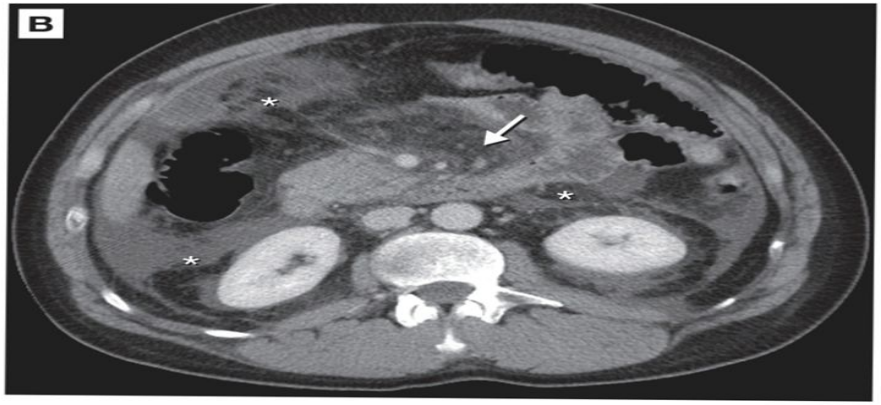
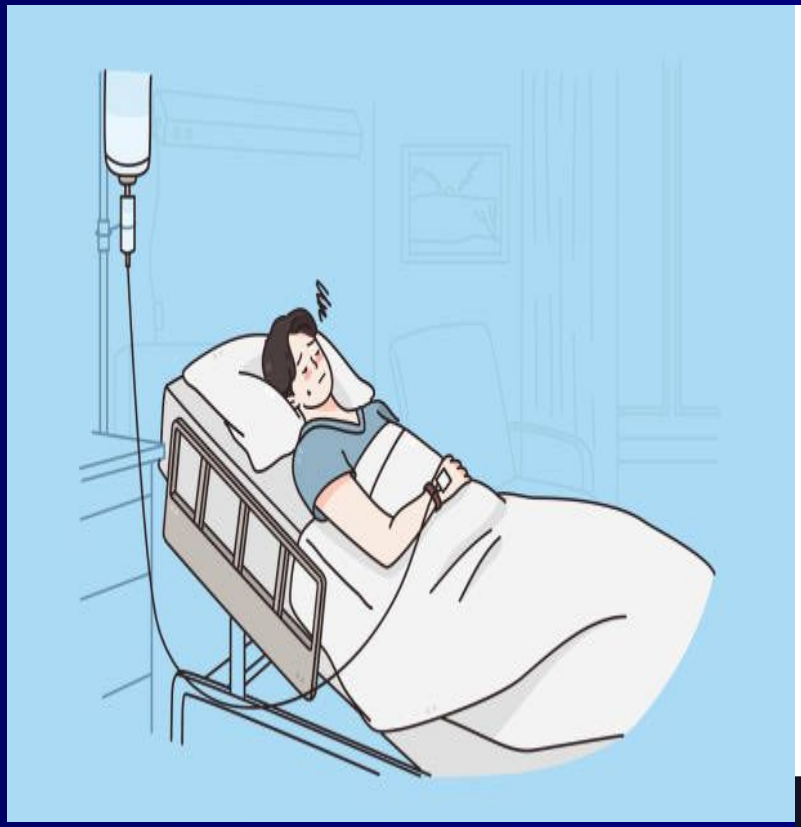


Figure 36.2. Acute Necrotizing Pancreatitis. A, The patient had severe biliary pancreatitis. Note that the density of the necrotic portion of the pancreas (short arrows) is less than that of the normal-enhancing pancreas in the tail (long arrow). B, Note the necrosis in the body (arrow) and the peripancreatic edema (asterisks). The pancreatic head is well perfused.

Conservative management of acute necrotizing pancreatitis



Indications for intervention in ANP

- Proven IPN.
- ▪ Clinically suspected IPN: in the absence of documented IPN,
- ongoing organ failure or persisting unwellness (“failure to thrive”)

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مجردُ ورقةٍ وقعت على الأرض
فصنعتْ أجملَ ابتسامة

Just a leave , fell on ground
And makes the most beautiful smile

The Beautiful Damascus

شكراً, Merci, Danke, ,ممنون

سوباس, Xie Xie, Thanks ,شكريا