José Francisco de Mattos Farah
Maria Beatriz Santos
Jose Carlos Pinheiros

Denis Szejnfeld (Radiologia)
Renato Luz (Endoscopia)
Christiano Gamba (Mol. Infecciosa)
Fernanda Lima (Nutrição)

Lister Modesto
Adriano Corona
João Alves
Ytauan Calheiros
Eduardo Portughesi

Classification of acute pancreatitis—2012: revision of the Atlanta classification and definitions by international consensus

Peter A Banks, Thomas L Bollen, Christos Dervenis, et al.

Gut published online October 25, 2012
doi: 10.1136/gutjnl-2012-302779

- Tipos: Intersticial edematosa e Necrosante
- Fases precoce e tardia
- Estratificação da gravidade

Box 3 Grades of severity

- Mild acute pancreatitis
  - No organ failure
  - No local or systemic complications
- Moderately severe acute pancreatitis
  - Organ failure that resolves within 48 h (transient organ failure) and/or
  - Local or systemic complications without persistent organ failure
- Severe acute pancreatitis
  - Persistent organ failure (>48 h)
  - –Single organ failure
  - –Multiple organ failure

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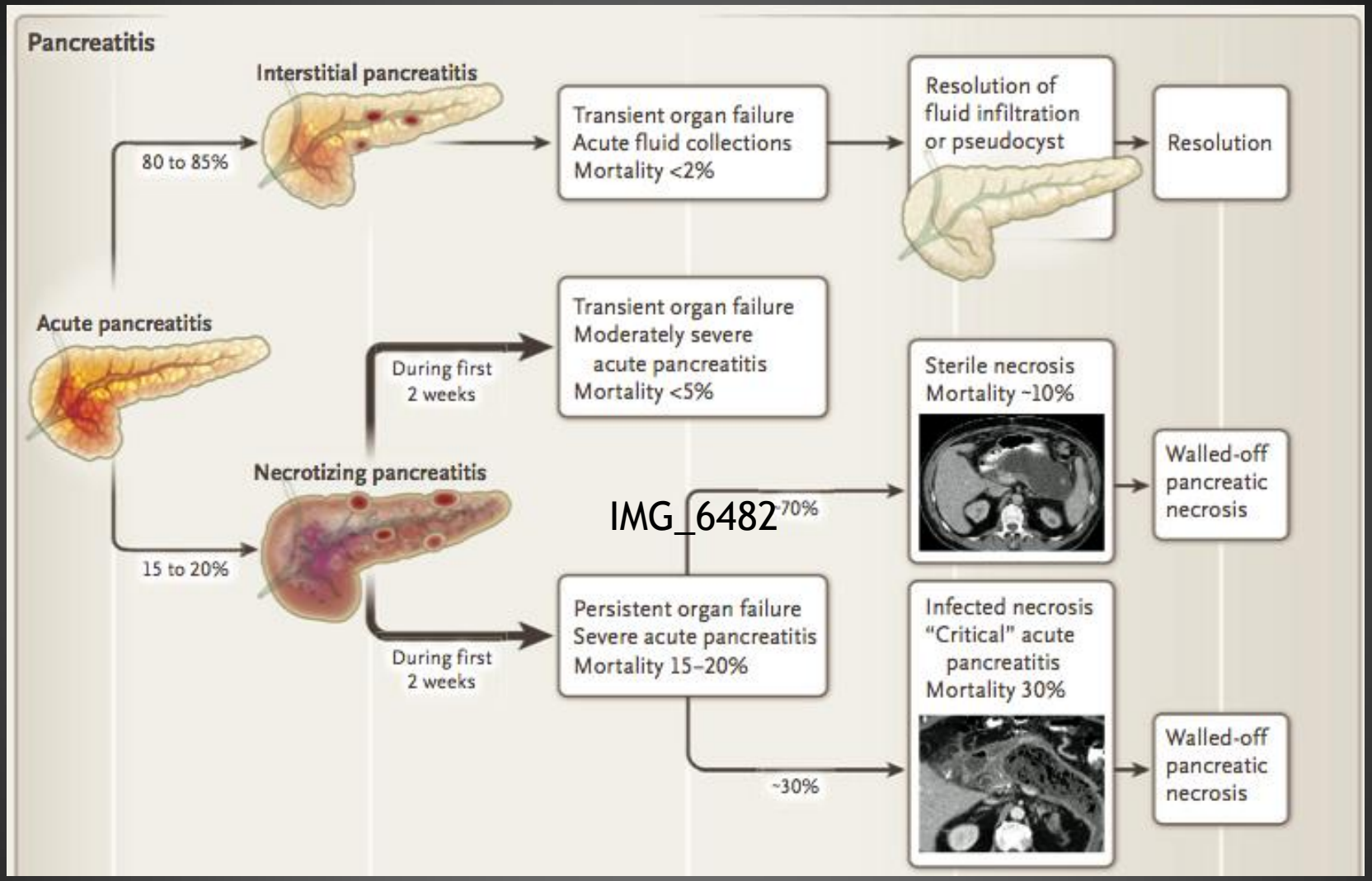


IMG_6482

Figure 1. Time Course and Management of Acute Pancreatitis.

The natural history of acute pancreatitis is shown, with a timeline of specific interventions.

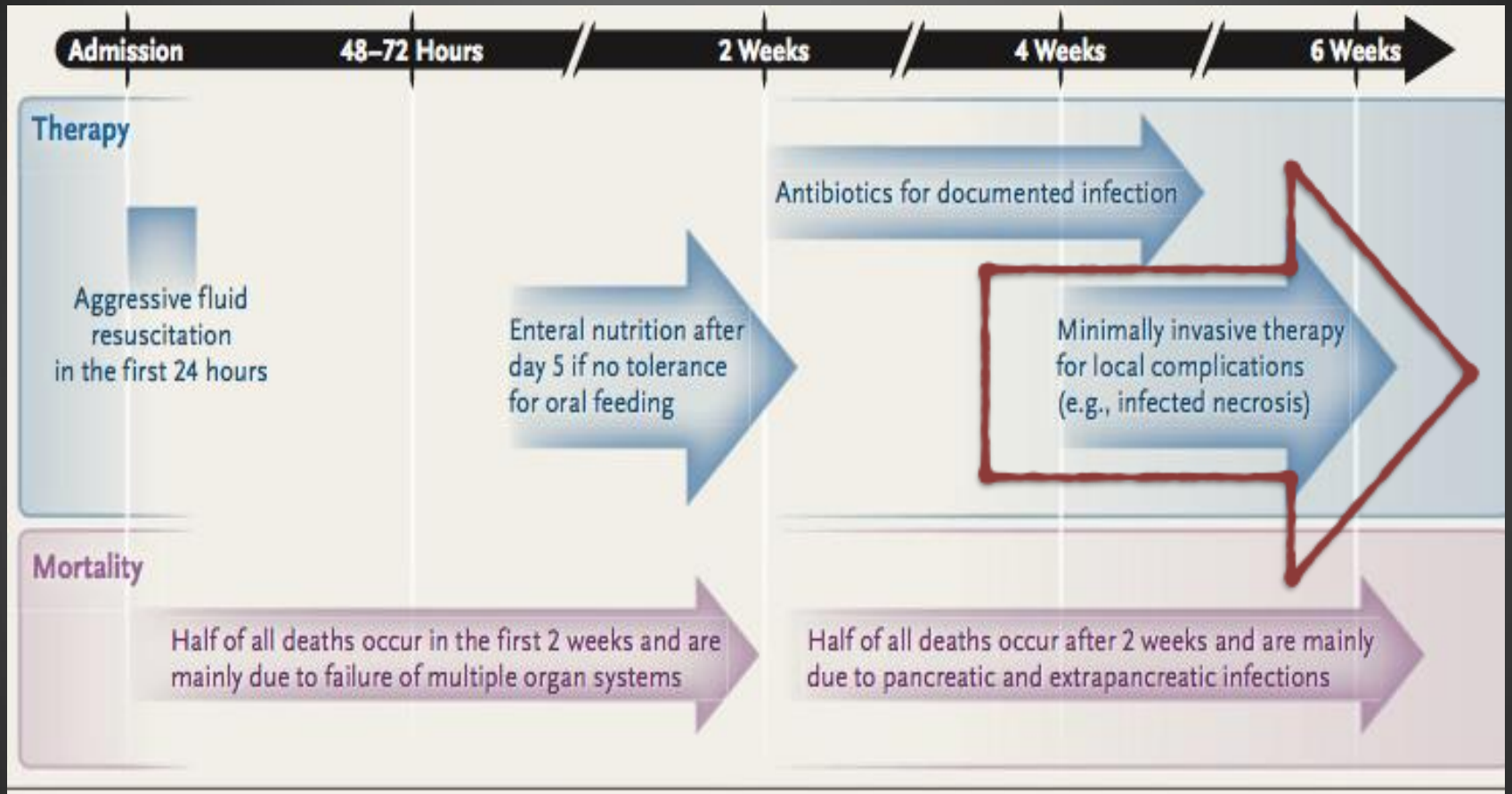


Figure 1. Time Course and Management of Acute Pancreatitis.

The natural history of acute pancreatitis is shown, with a timeline of specific interventions.

Table 2

Fluid Collections as Defined in Revised Atlanta Classification of Acute Pancreatitis and Possible Interventions

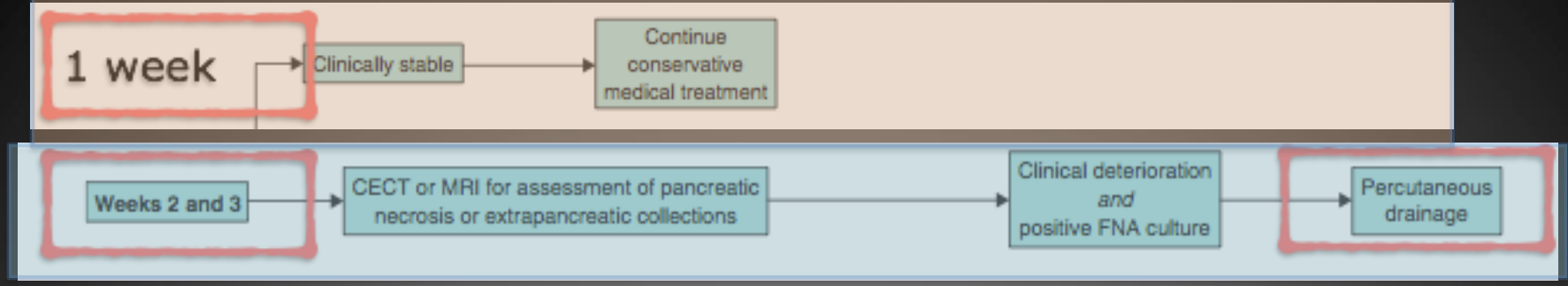
Type of Collection	Time (wk)	Necrosis	Location	Appearance	Infection	Drainage or Surgery
IEP						
APFC	≤4	No	Adjacent to pancreas, extrapancreatic only	Homogeneous, fluid attenuation, no liquefaction (debris), not encapsulated	Extremely rare	None
Pseudocyst*	>4	No	Adjacent or distant to pancreas	Homogeneous, fluid attenuation, no liquefaction (debris), encapsulated	Rare	Rarely (for infection or symptoms)
Necrotizing pancreatitis						
Sterile ANC	≤4	Yes	In parenchyma and/or extrapancreatic	Heterogeneous†, nonliquefied material, variably loculated, not encapsulated	No	Based on clinical, percutaneous drainage at times, surgery rarely‡
Infected ANC					Yes	Percutaneous drainage, surgery later if needed‡
Sterile WON	>4	Yes	In parenchyma and/or extrapancreatic	Heterogeneous†, nonliquefied material, variably loculated, encapsulated	No	Percutaneous drainage based on clinical, surgery to follow if needed‡
Infected WON					Yes	Percutaneous drainage/ surgery to follow if needed‡

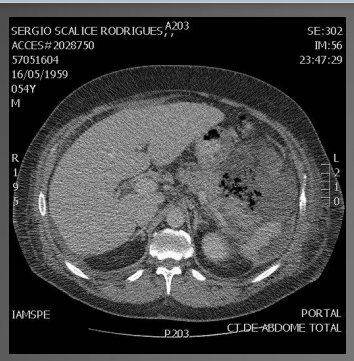
Source.—Reference 4.

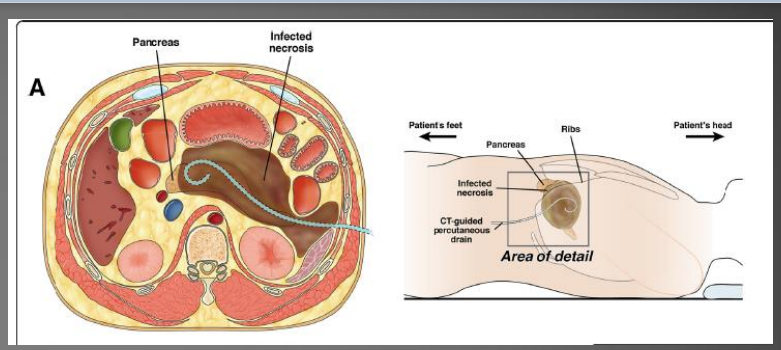
* Rarely in necrotizing pancreatitis after resection or in disconnected duct syndrome.

† Some homogeneous early in course.

‡ Or endoscopic procedure.







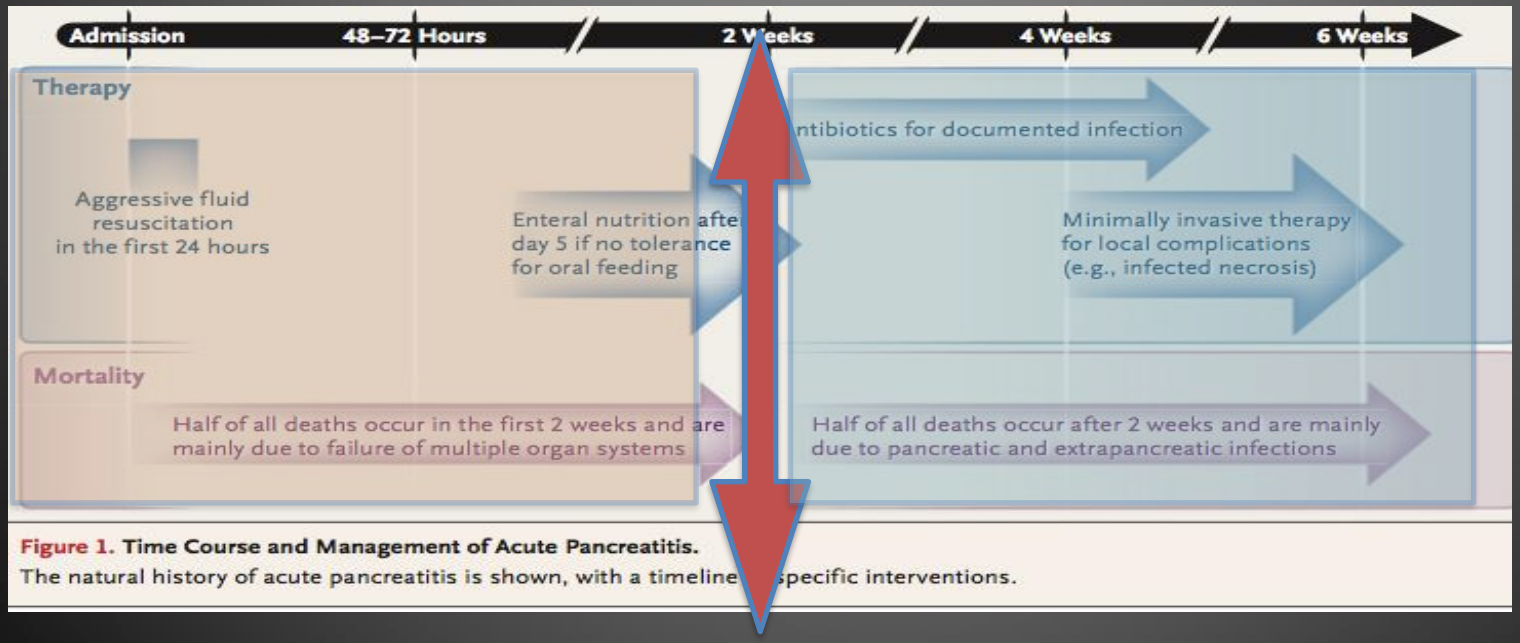


Figure 1. Time Course and Management of Acute Pancreatitis.
The natural history of acute pancreatitis is shown, with a timeline specific interventions.

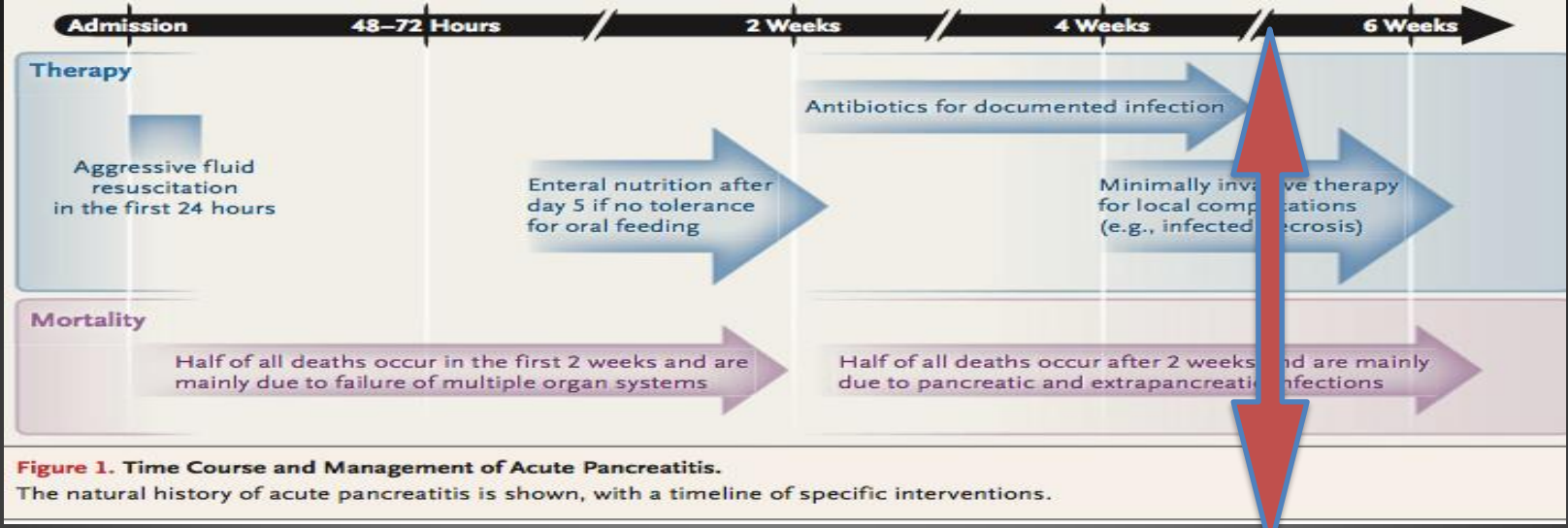
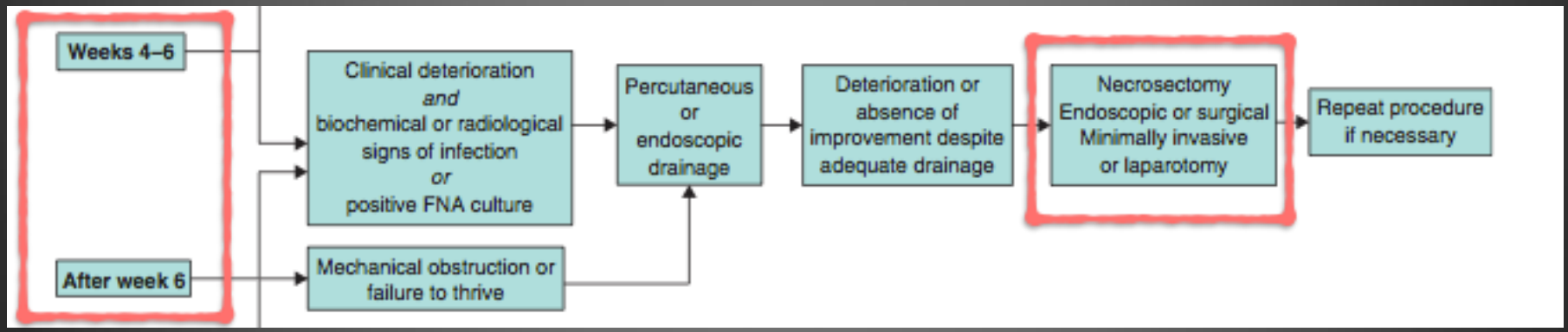
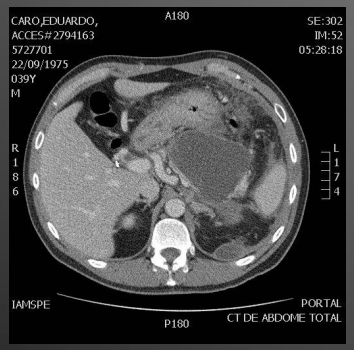
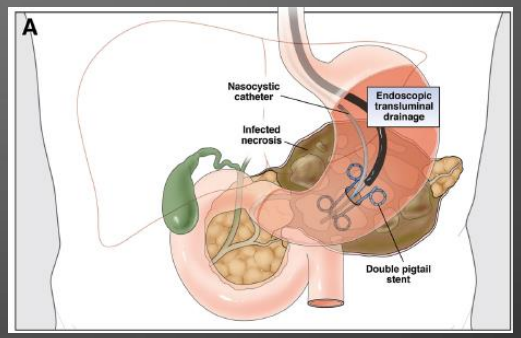


Figure 1. Time Course and Management of Acute Pancreatitis.
The natural history of acute pancreatitis is shown, with a timeline of specific interventions.







The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

A Step-up Approach or Open Necrosectomy for Necrotizing Pancreatitis

Hjalmar C. van Santvoort, M.D., Marc G. Besselink, M.D., Ph.D.,
Olaf J. Bakker, M.D., H. Sijbrand Hofker, M.D., Marja A. Boermeester, M.D., Ph.D.,
Cornelis H. Dejong, M.D., Ph.D., Harry van Goor, M.D., Ph.D.,
Alexander F. Schaapherder, M.D., Ph.D., Casper H. van Eijck, M.D., Ph.D.,

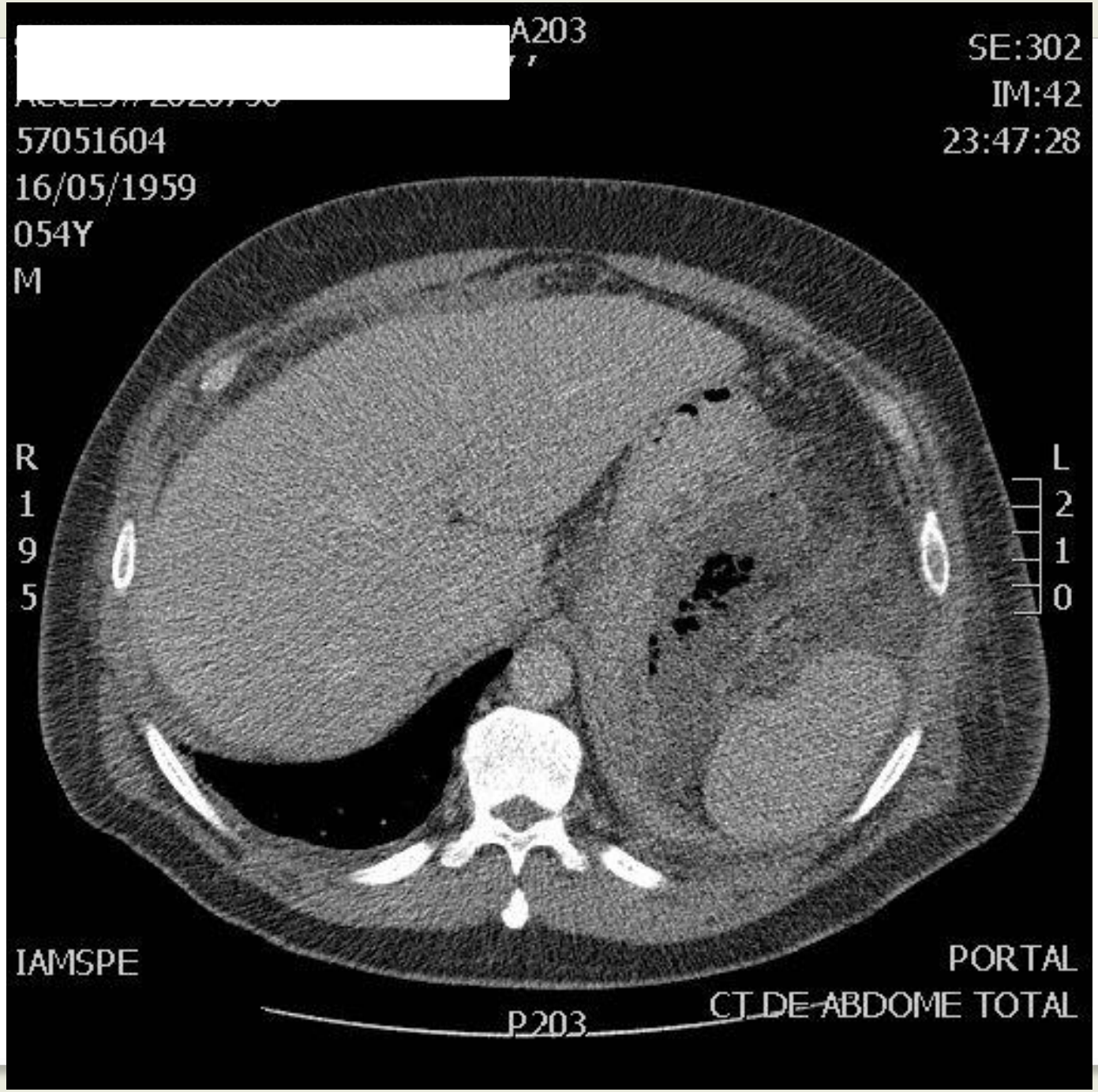
Review

Staged multidisciplinary step-up management for necrotizing pancreatitis

D. W. da Costa[1], D. Boerma[2], H. C. van Santvoort[2], K. D. Horvath[6], J. Werner[7], C. R. Carter[8], T. L. Bollen[3], H. G. Gooszen[1], M. G. Besselink[4] and O. J. Bakker[5]

Table 3. Primary and Secondary End Points.*

Outcome	Minimally Invasive Step-up Approach (N=43)	Primary Open Necrosectomy (N=45)	Risk Ratio (95% CI)	P Value
Primary composite end point: major complications or death — no. (%)†	17 (40)	31 (69)	0.57 (0.38–0.87)	0.006
Secondary end points				
Major complication — no. (%)				
New-onset multiple-organ failure or systemic complications‡	5 (12)	19 (42)	0.28 (0.11–0.67)	0.001
Multiple-organ failure	5 (12)	18 (40)		
Multiple systemic complications	0	1 (2)		
Intraabdominal bleeding requiring intervention	7 (16)	10 (22)	0.73 (0.31–1.75)	0.48
Enterocutaneous fistula or perforation of a visceral organ requiring intervention	6 (14)	10 (22)	0.63 (0.25–1.58)	0.32
Death — no. (%)	8 (19)	7 (16)	1.20 (0.48–3.01)	0.70
Other outcome — no. (%)				
Pancreatic fistula	12 (28)	17 (38)	0.74 (0.40–1.36)	0.33
Incisional hernia§	3 (7)	11 (24)	0.29 (0.09–0.95)	0.03
New-onset diabetes§	7 (16)	17 (38)	0.43 (0.20–0.94)	0.02
Use of pancreatic enzymes§	3 (7)	15 (33)	0.21 (0.07–0.67)	0.002
Health care resource utilization				
Necrosectomies (laparotomy or VARD) — no. (%)				<0.001
0	17 (40)	0		
1	19 (44)	31 (69)		
2	6 (14)	8 (18)		
≥3	1 (2)	6 (13)		
Total no. of operations¶				0.004
Per study group	53	91		
Range per patient	0–6	1–7		
Total no. of drainage procedures‖				<0.001
Per study group	82	32		
Range per patient	1–7	0–6		
New ICU admission at any time after first intervention — no. (%)**	7 (16)	18 (40)	0.41 (0.19–0.88)	0.01
Days in ICU				0.26
Median	9	11		
Range	0–281	0–111		
Days in hospital				0.53
Median	50	60		
Range	1–287	1–247		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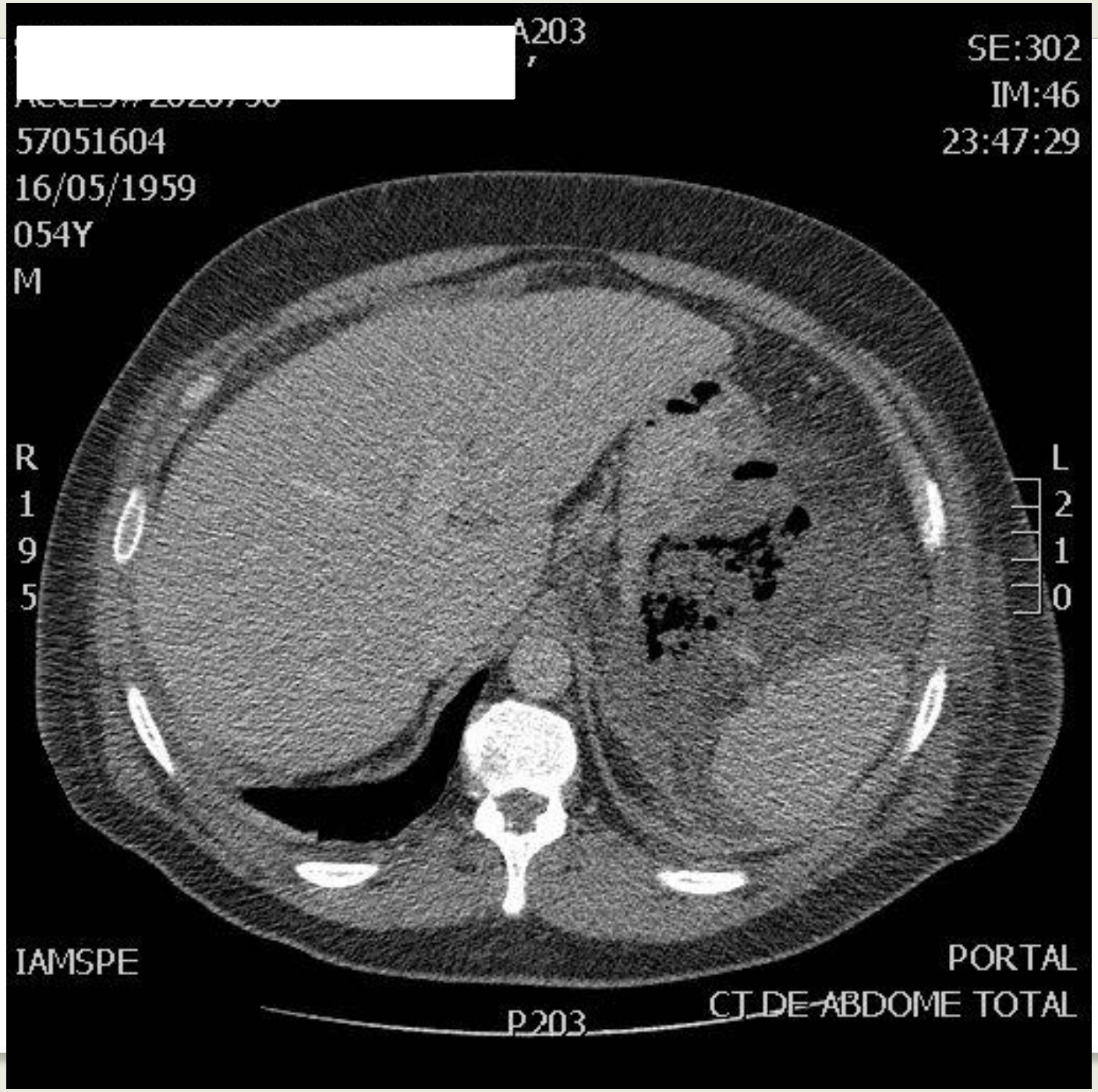
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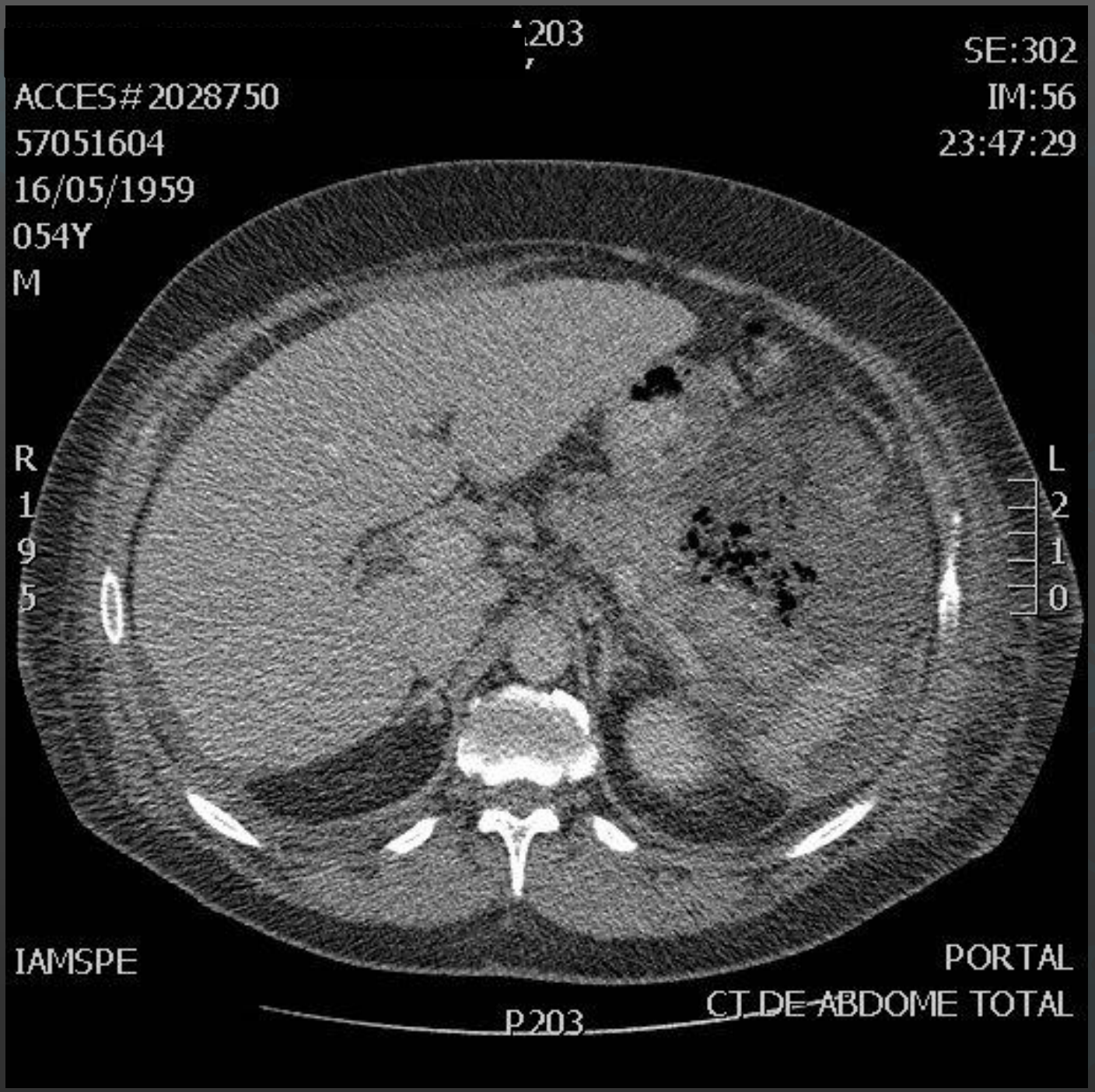
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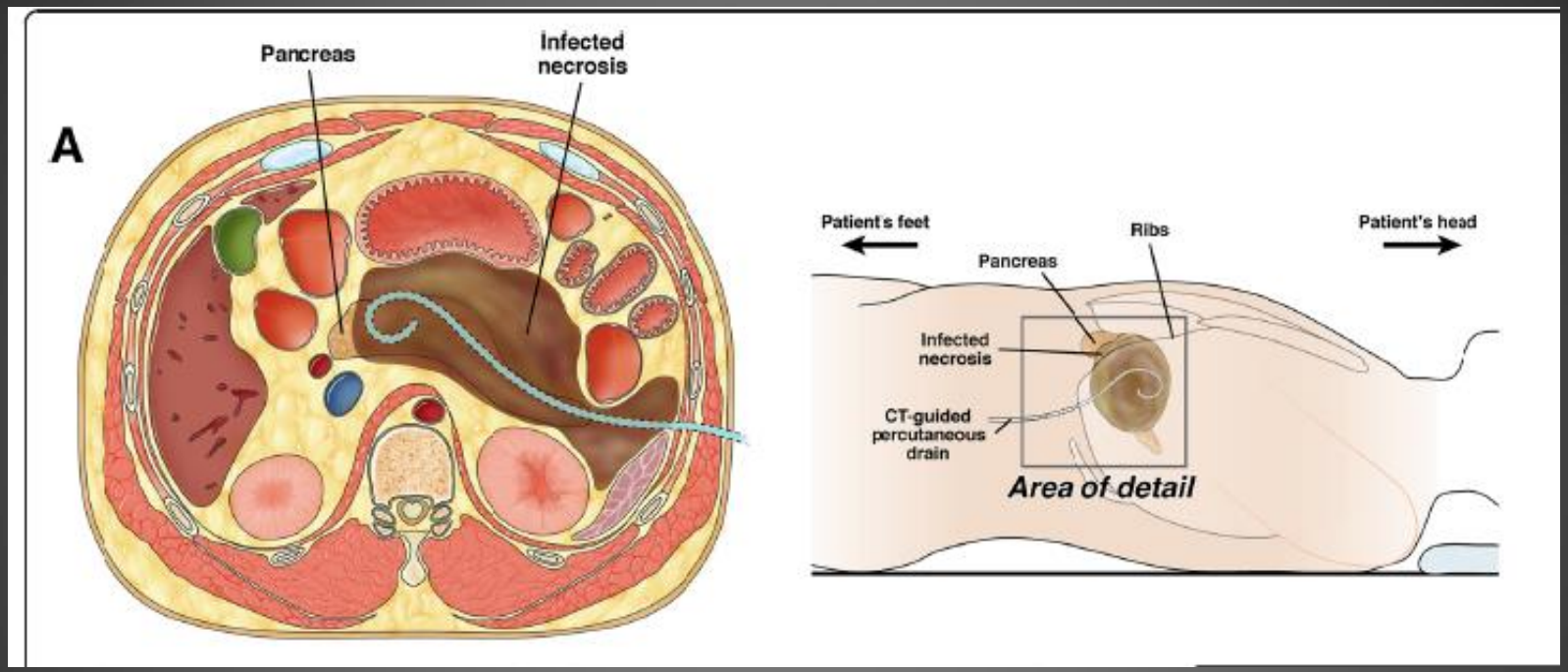

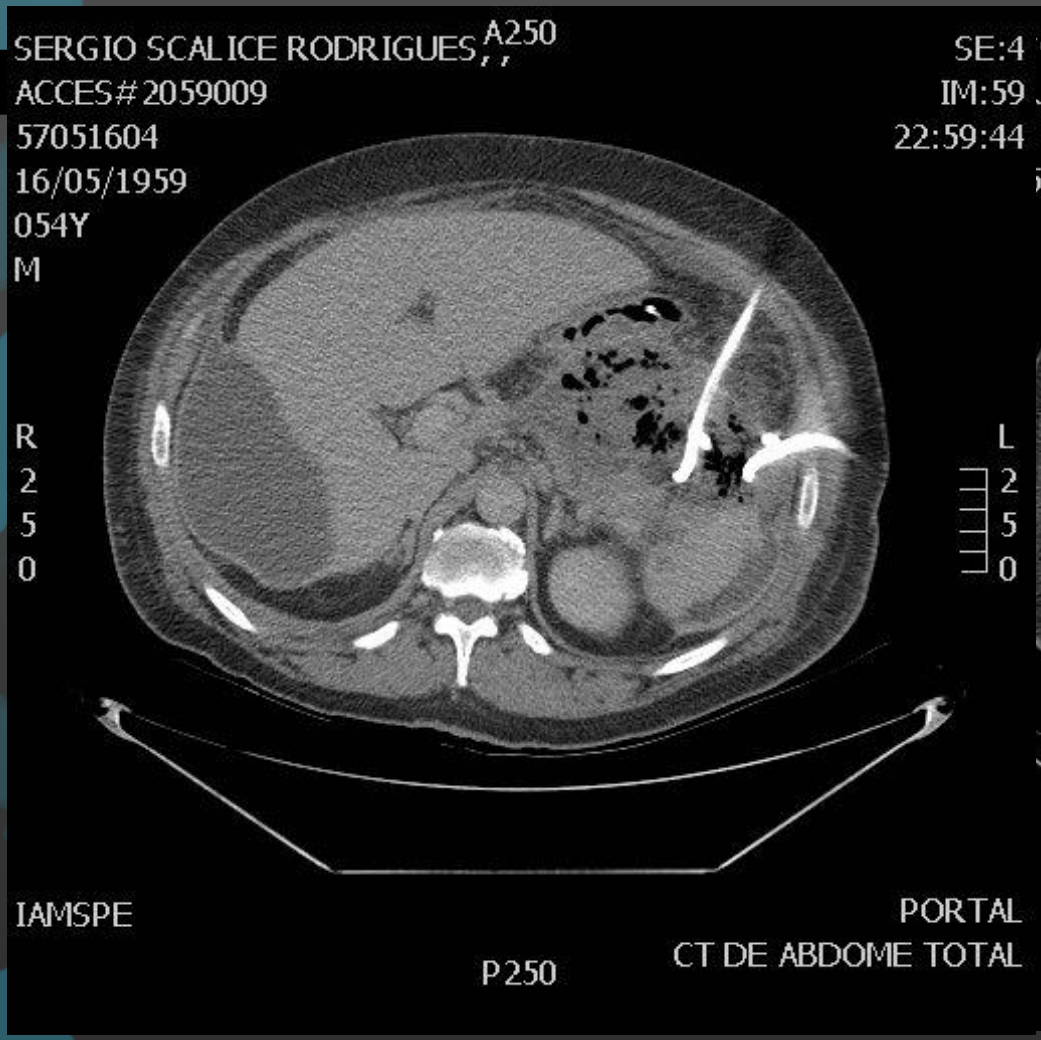
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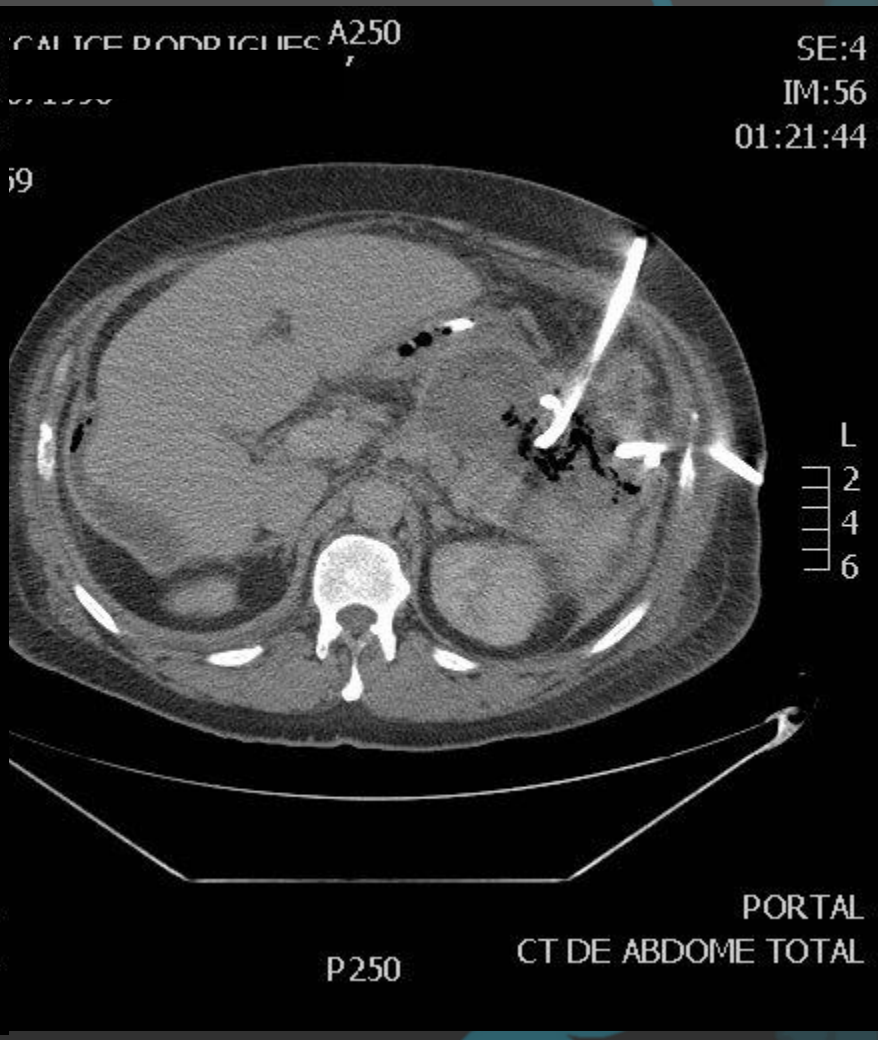
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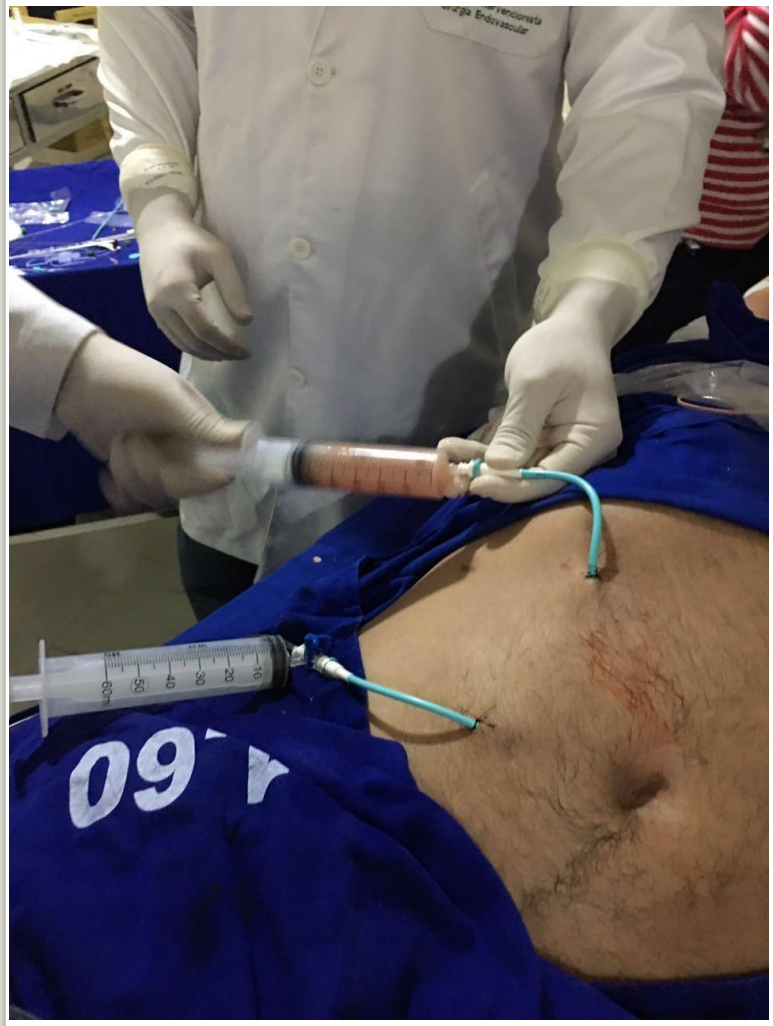

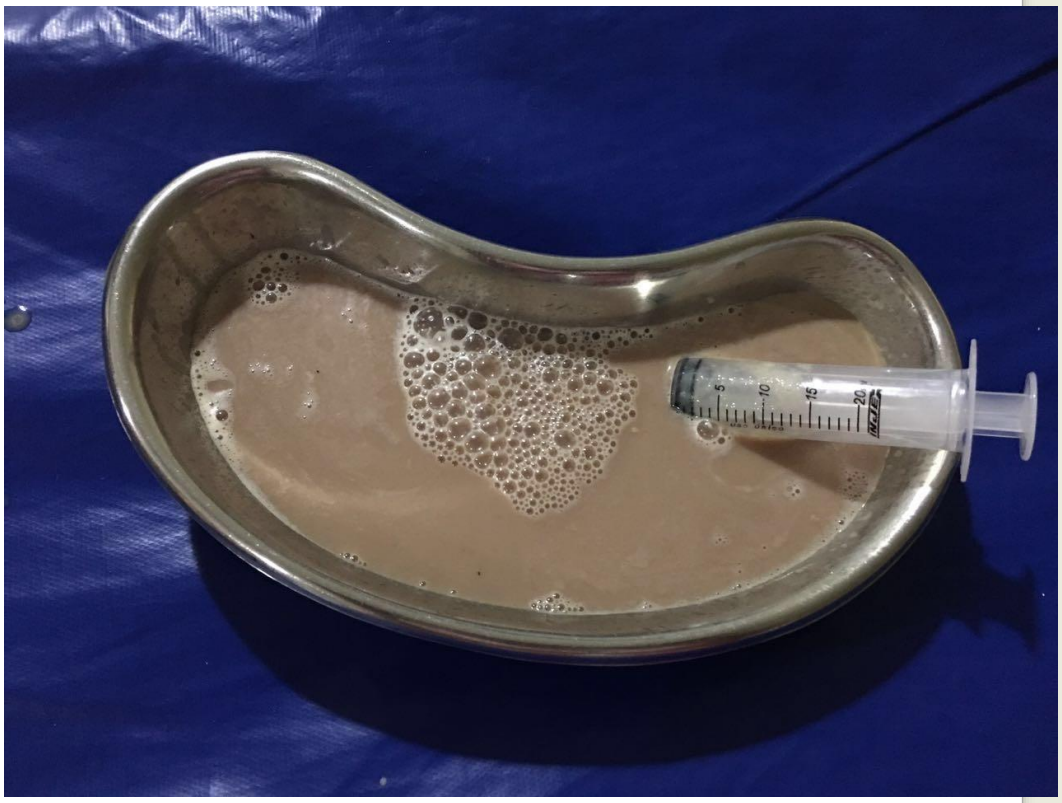

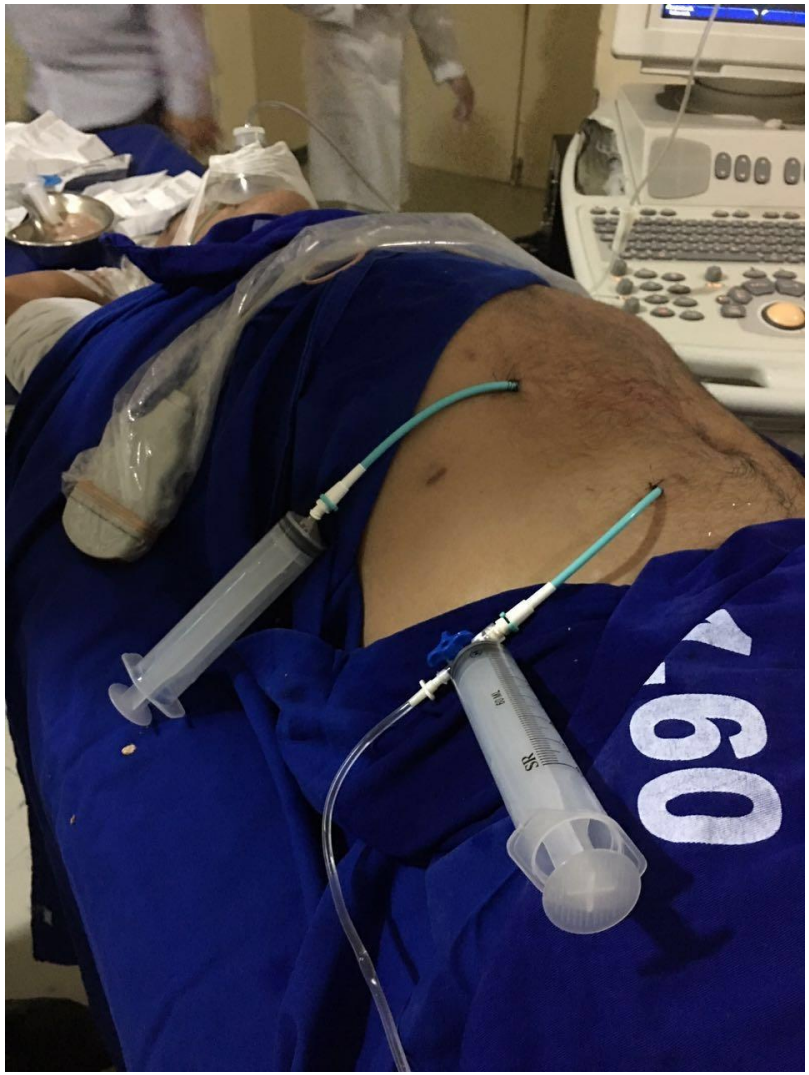

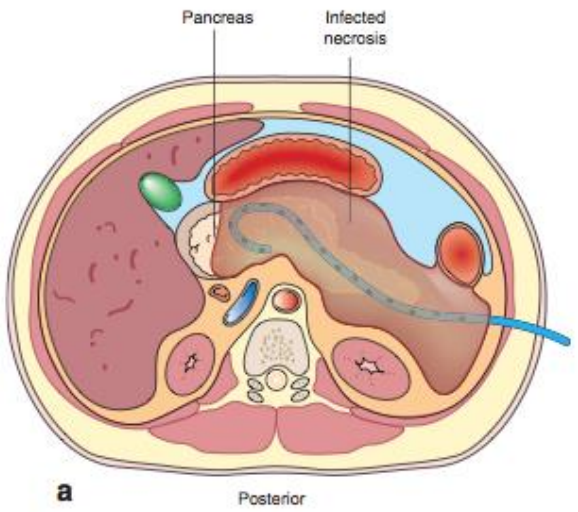
Pancreas
Infected necrosis
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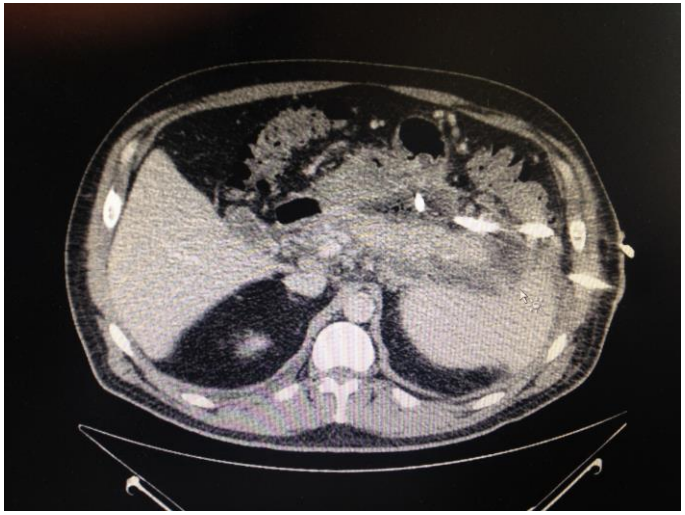
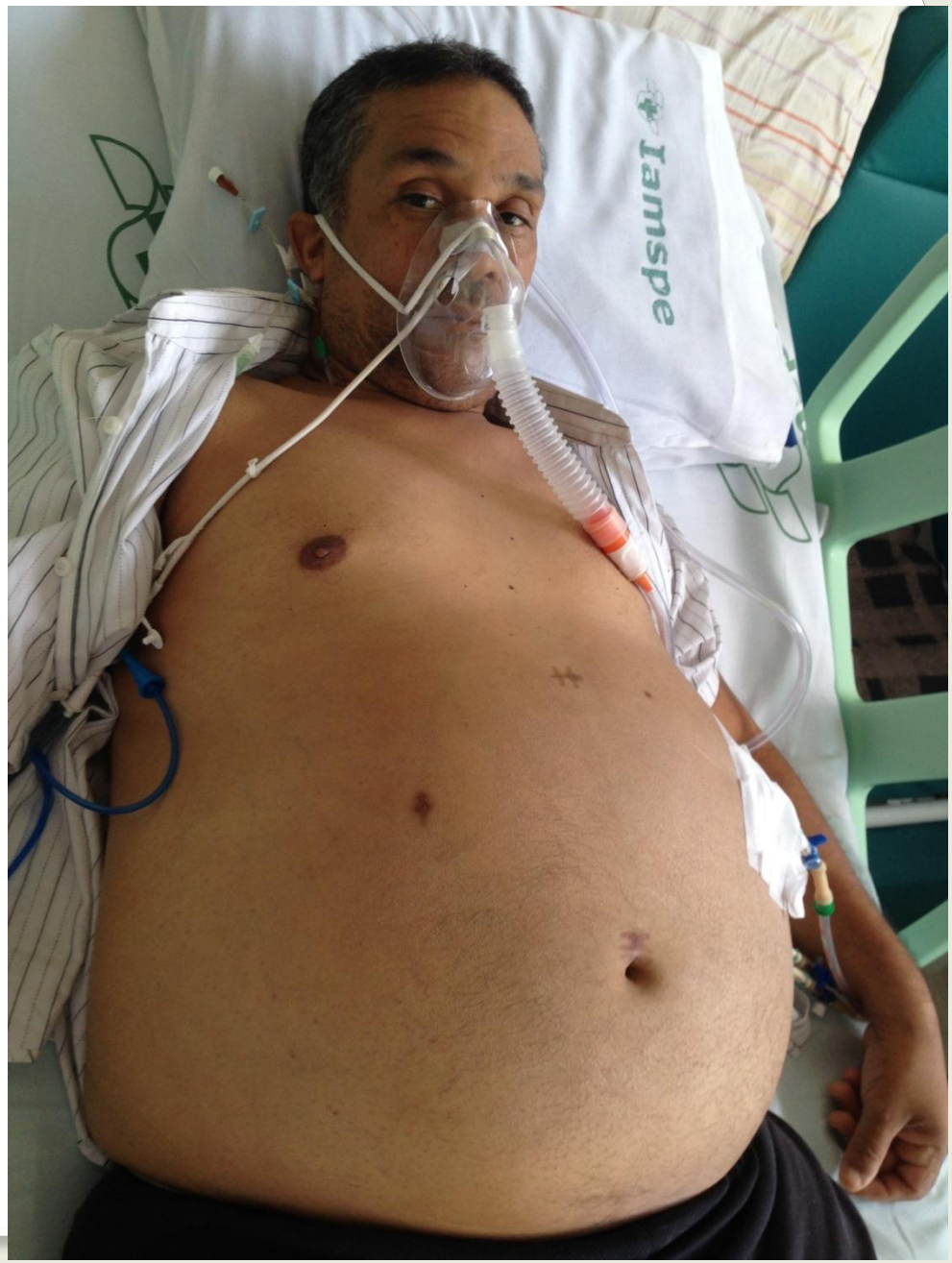
Posterior

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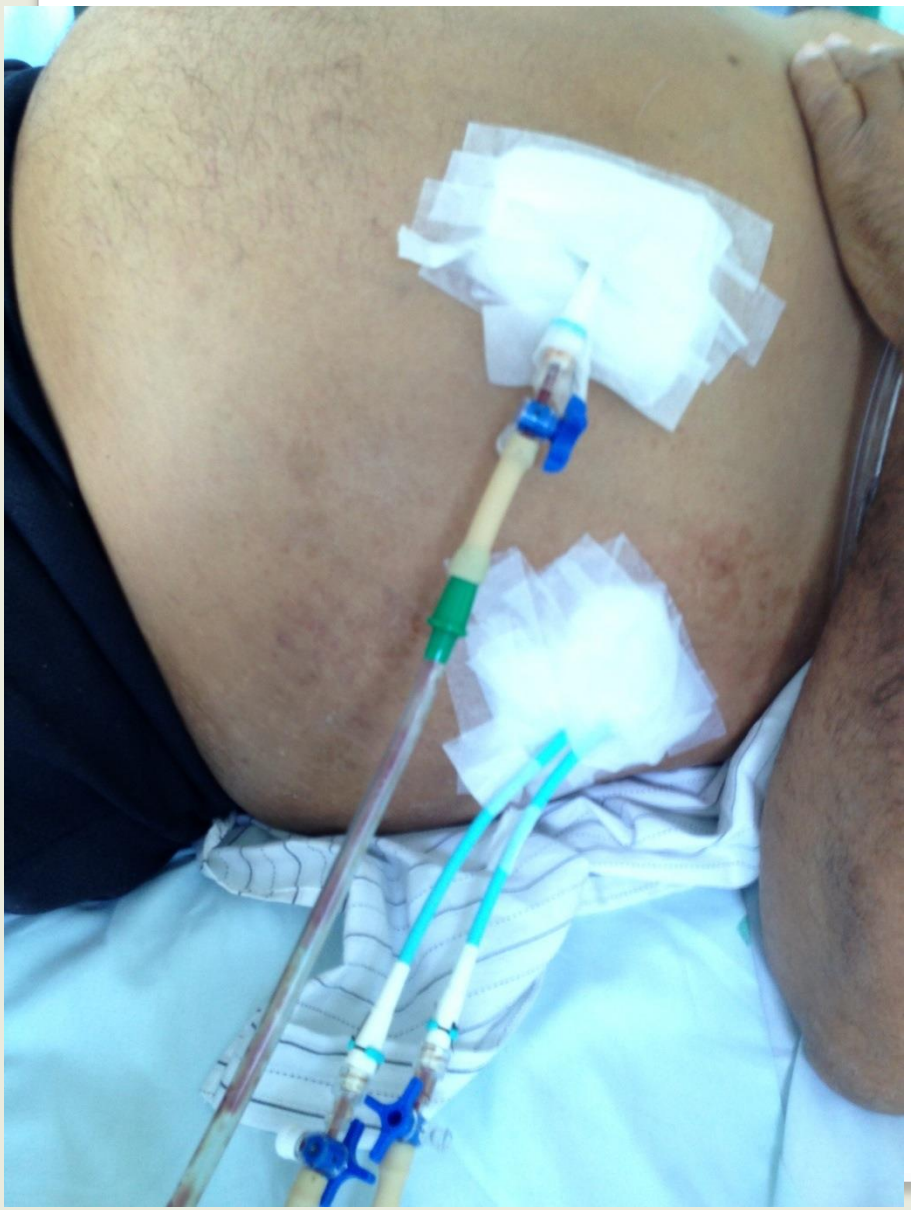

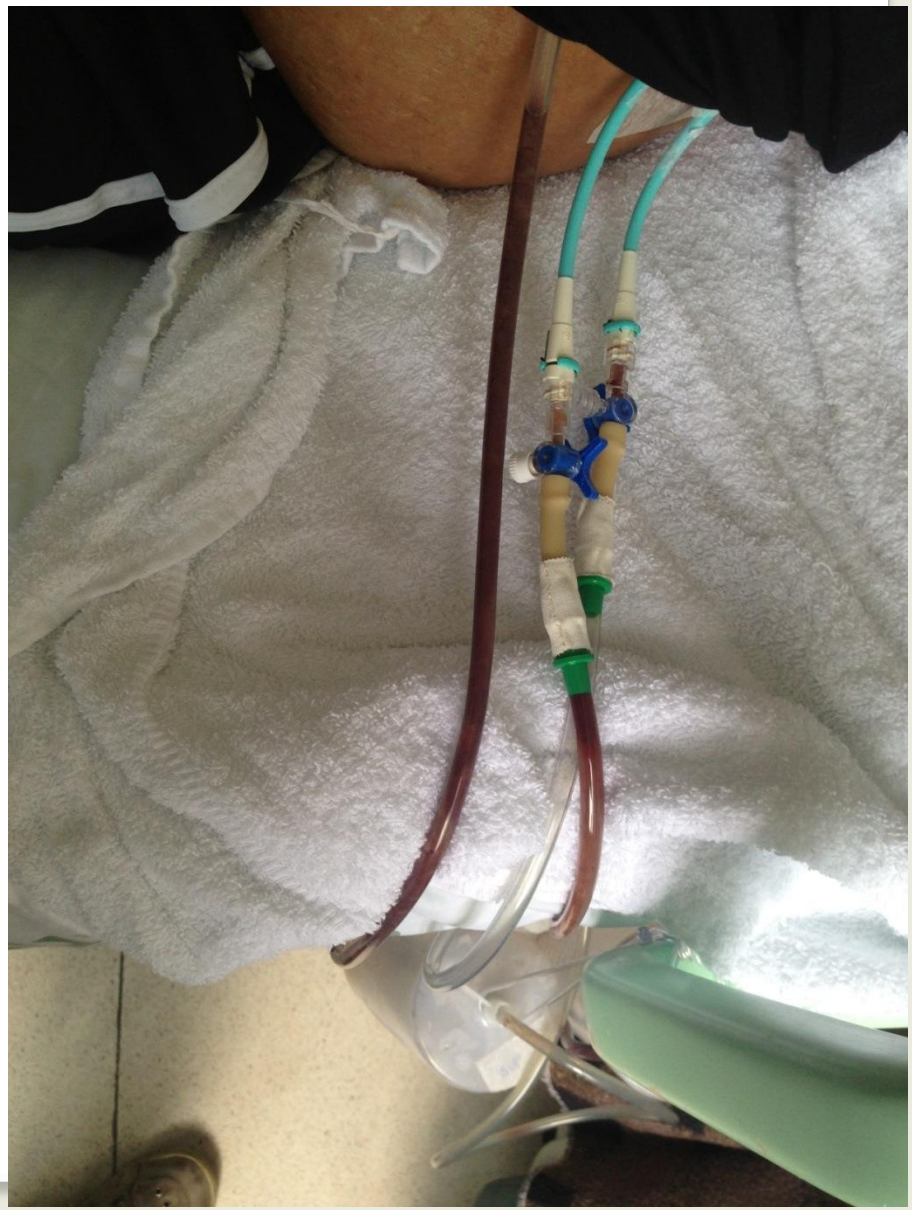

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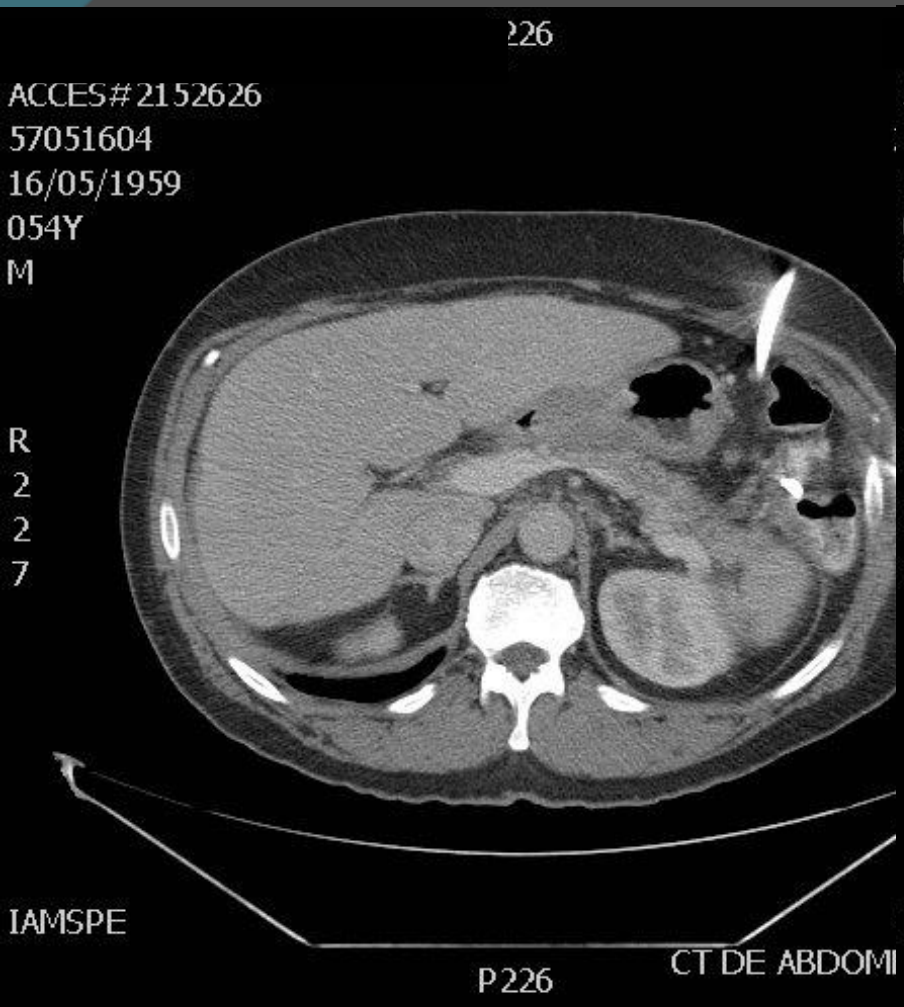

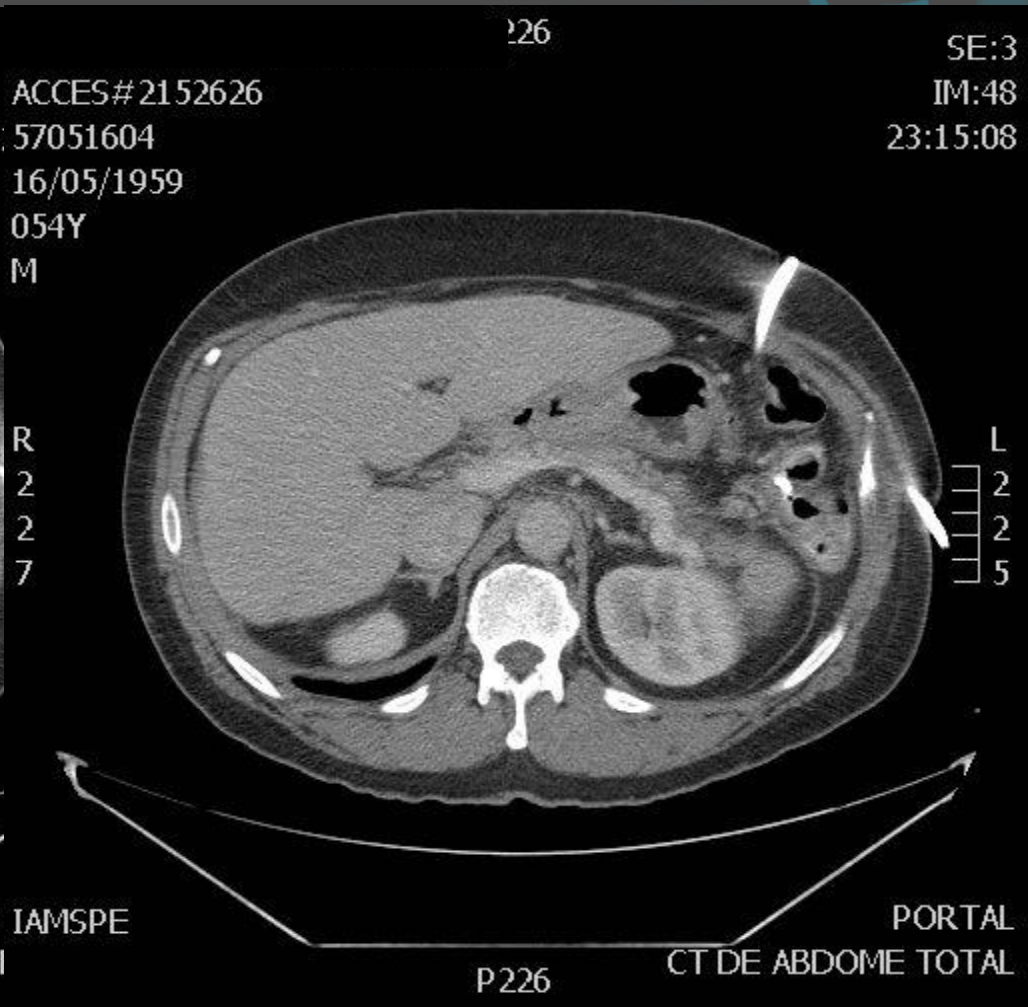

Evolução - ambulatório

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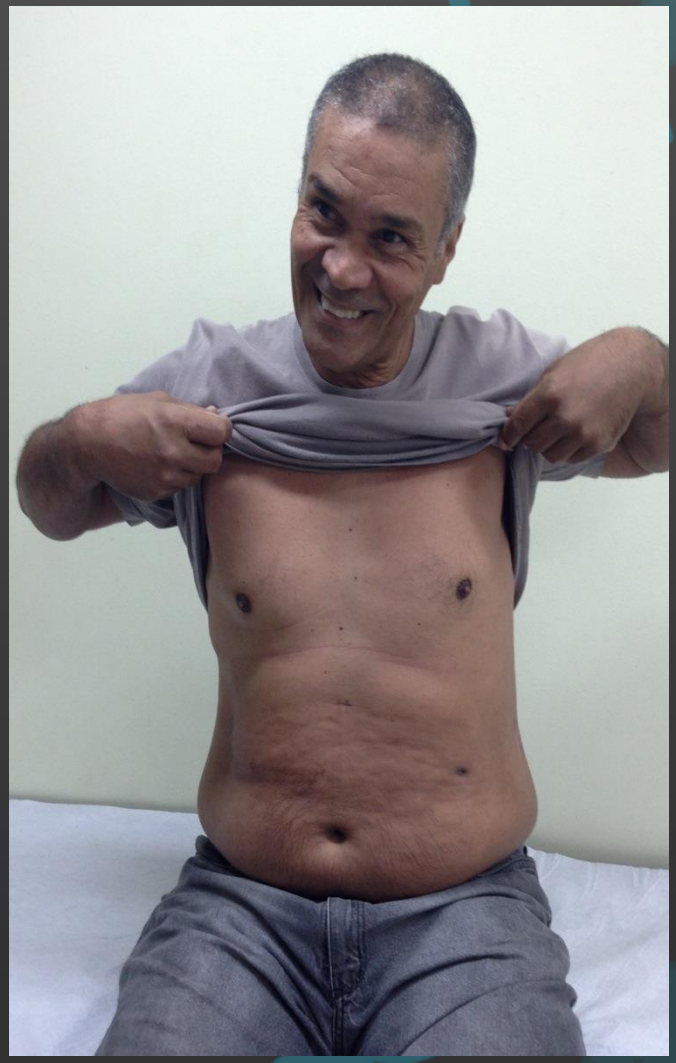
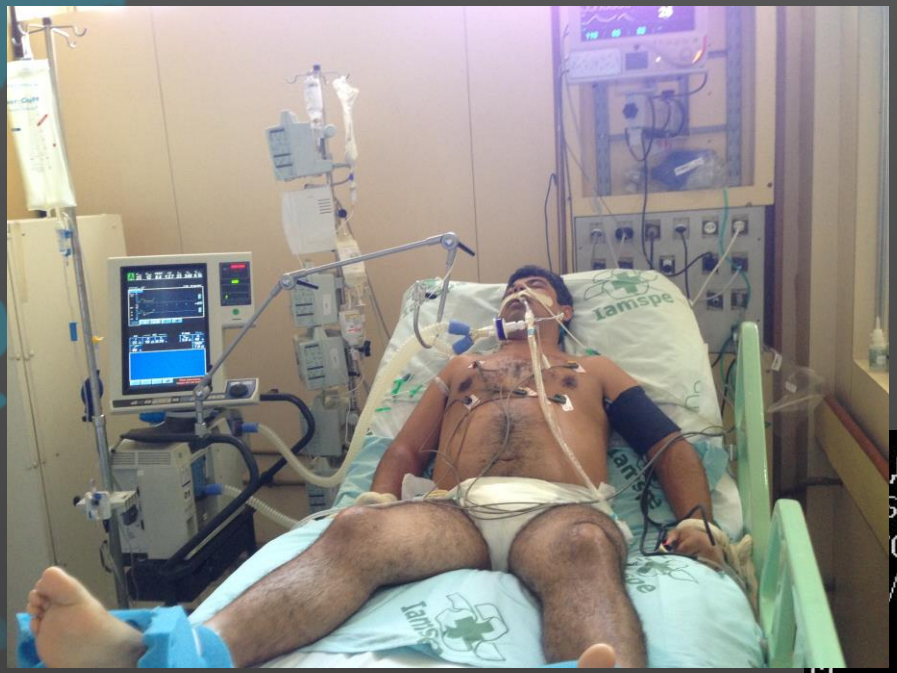
  - Drenos sem débito
  - Sacados drenos

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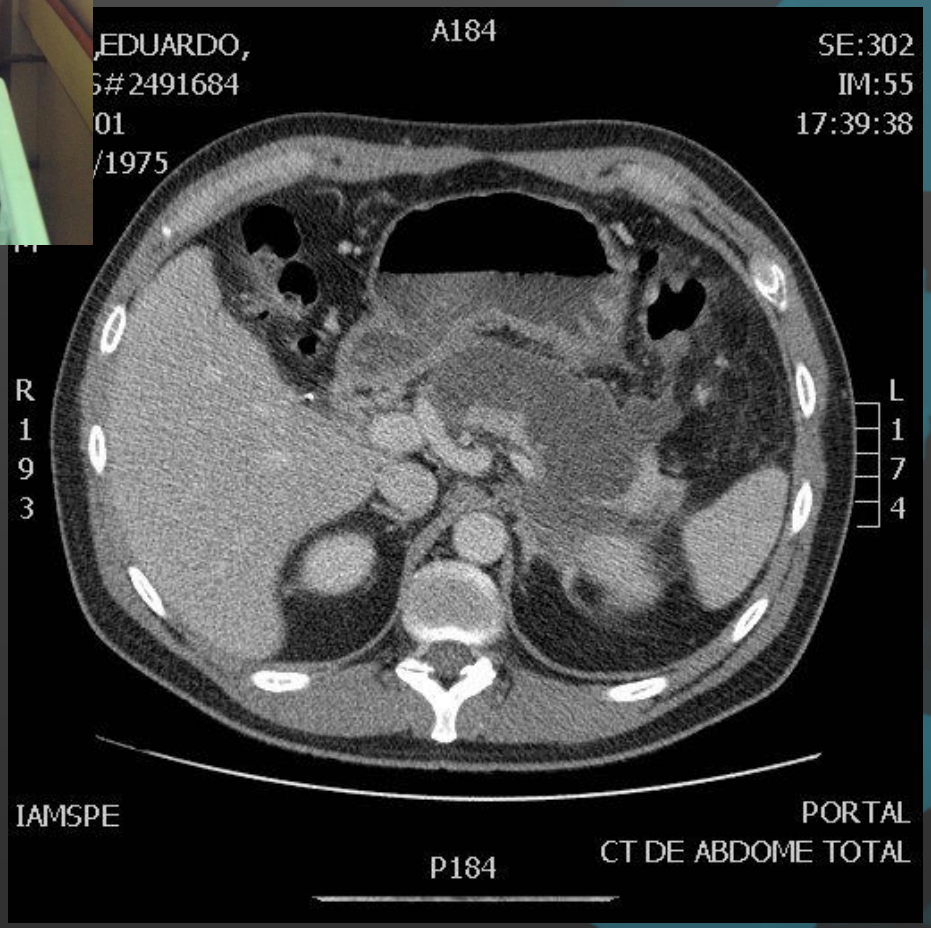
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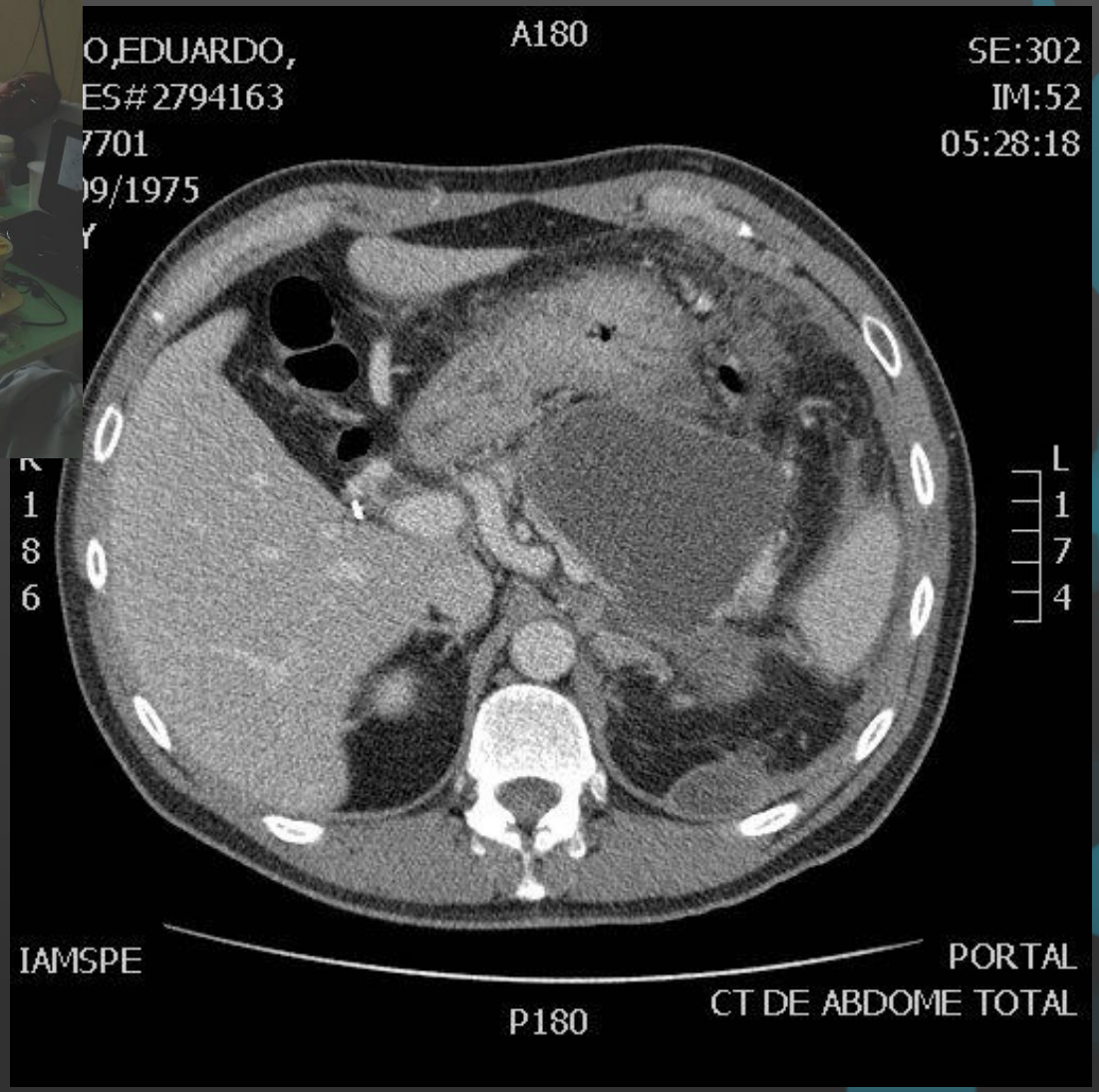
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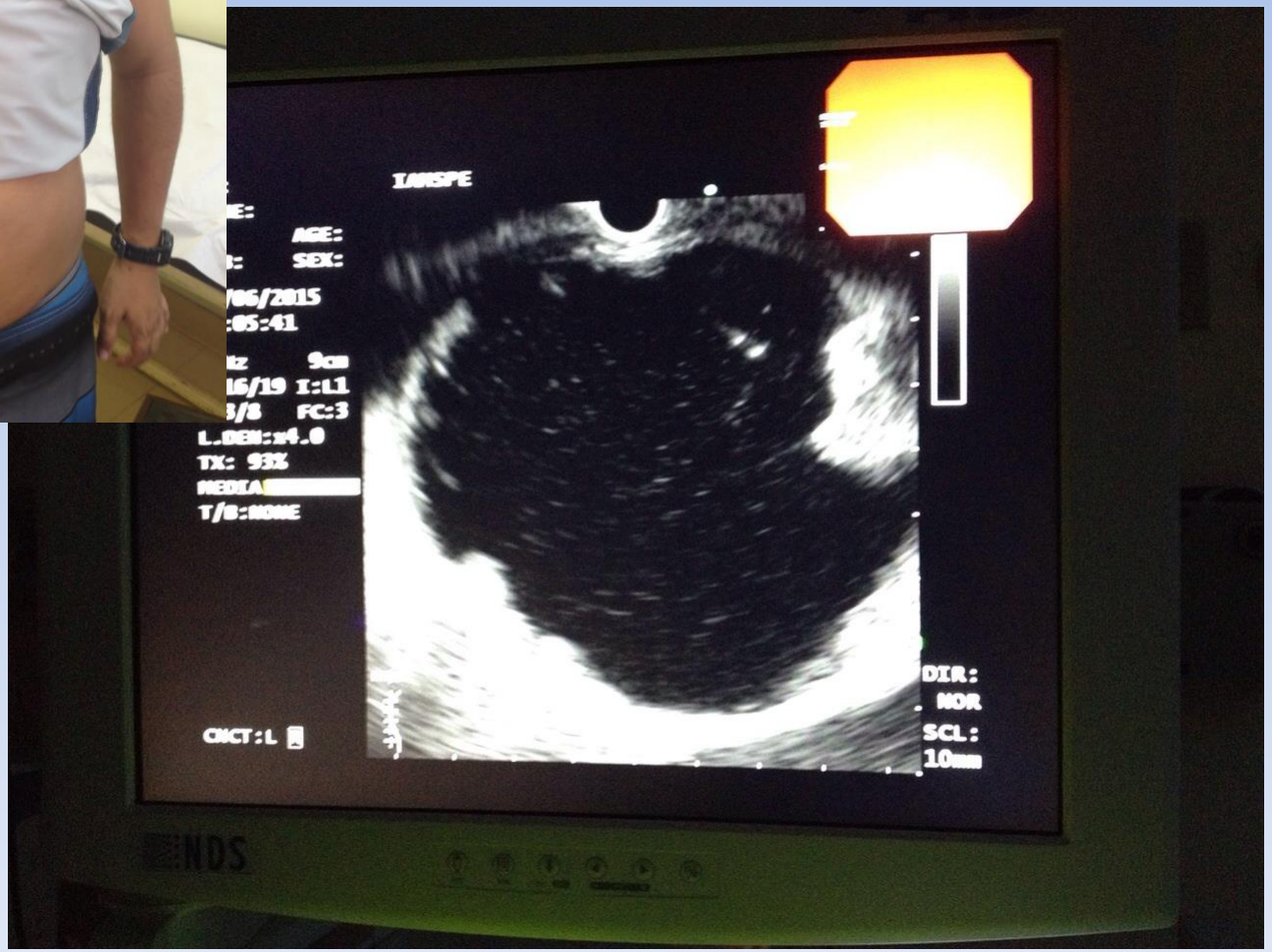

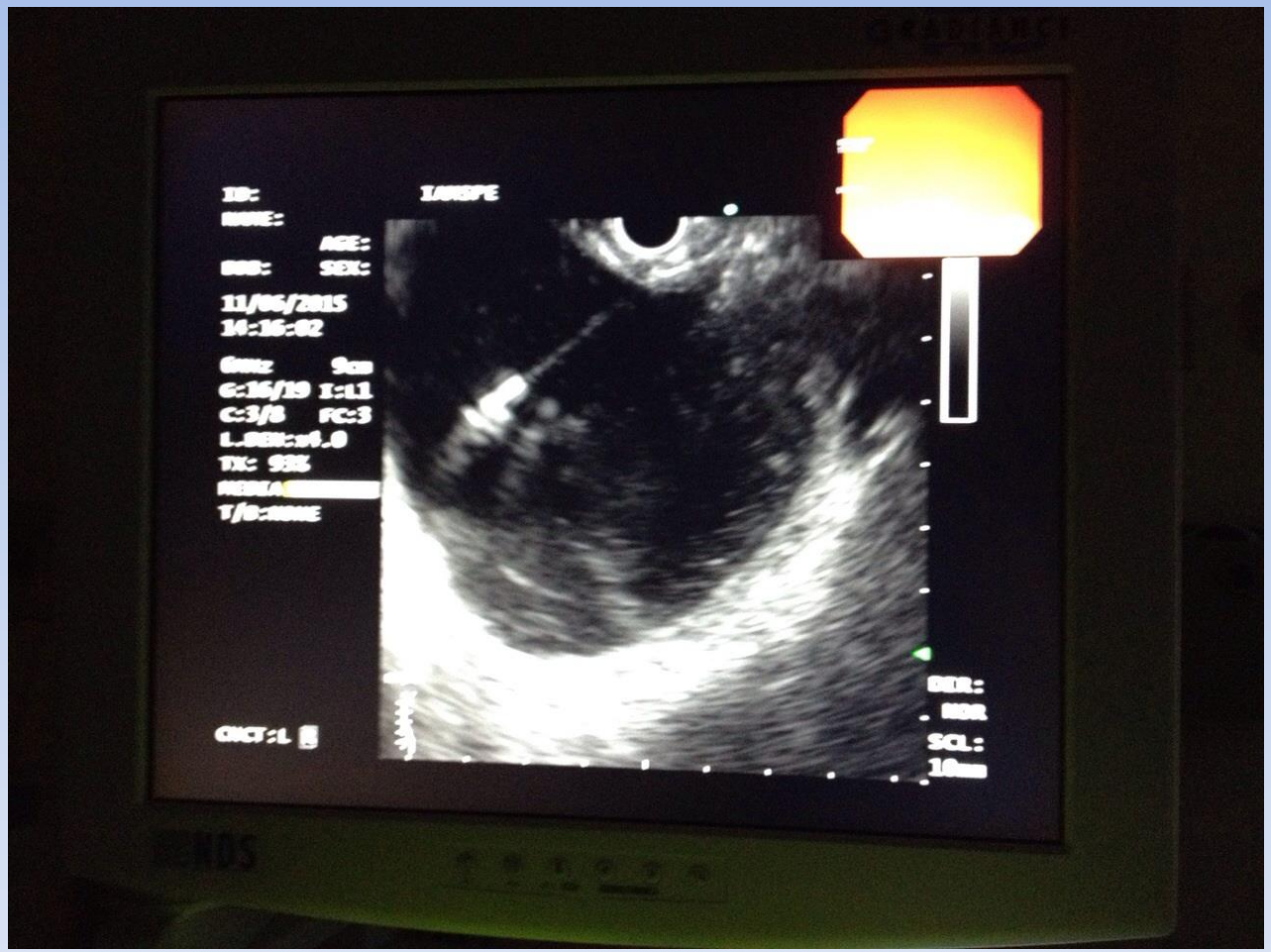
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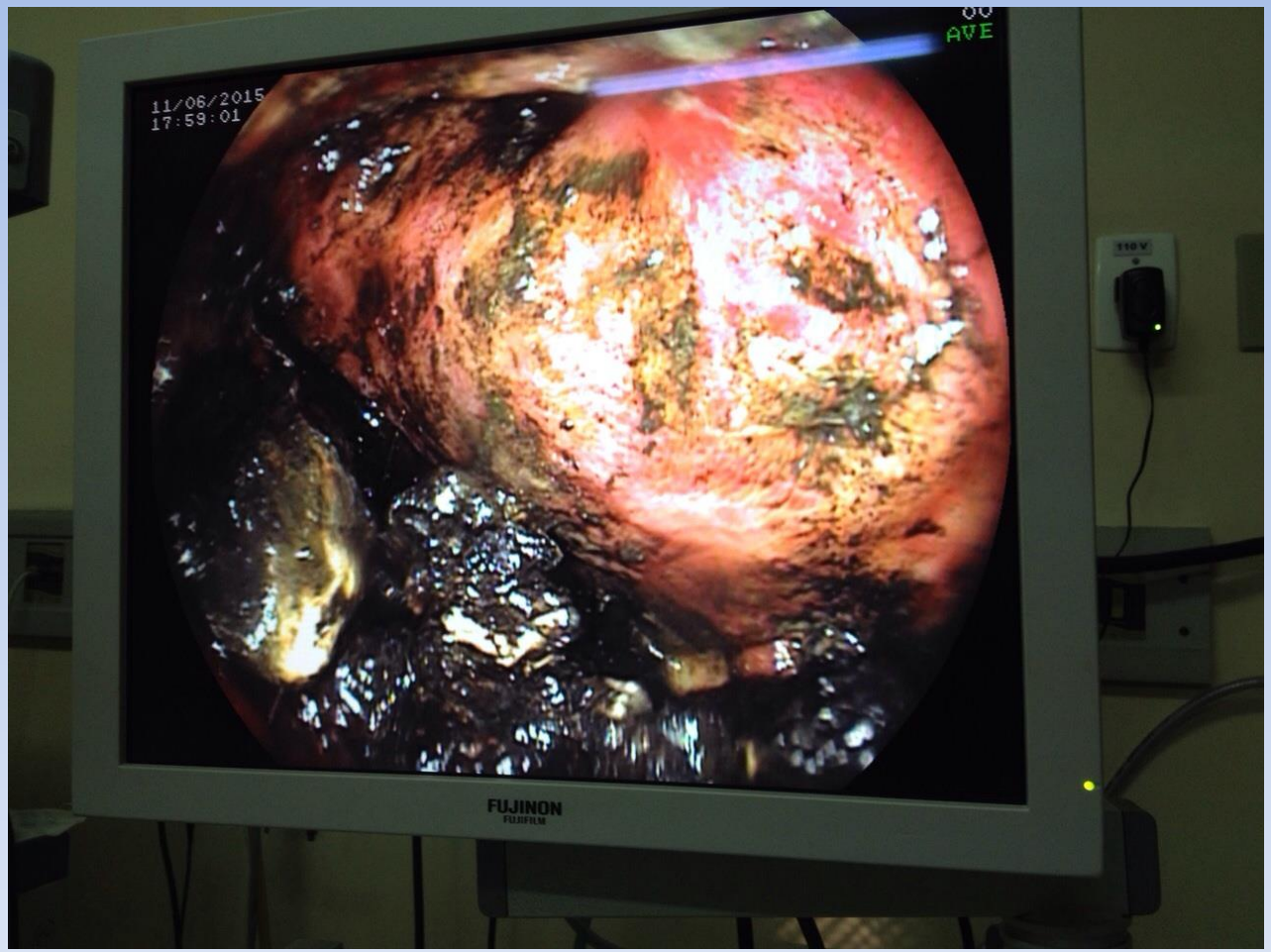
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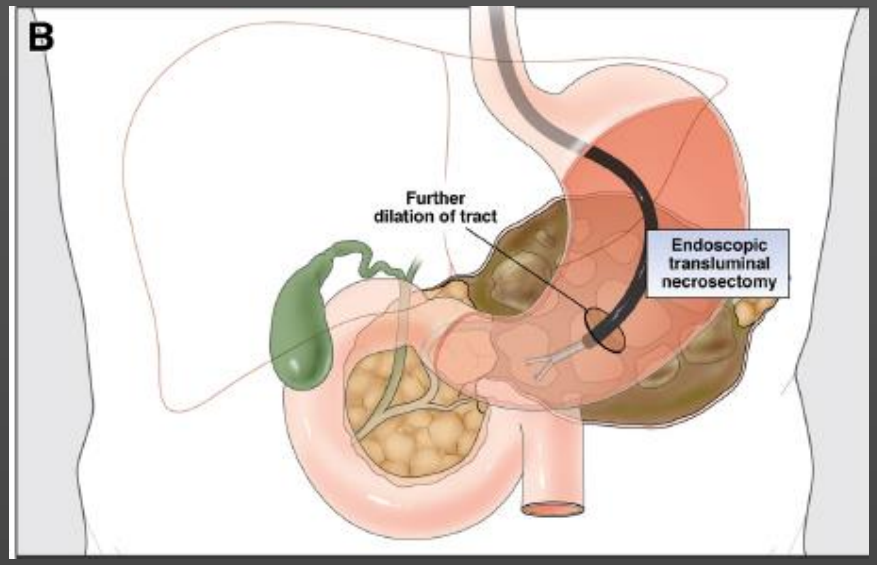
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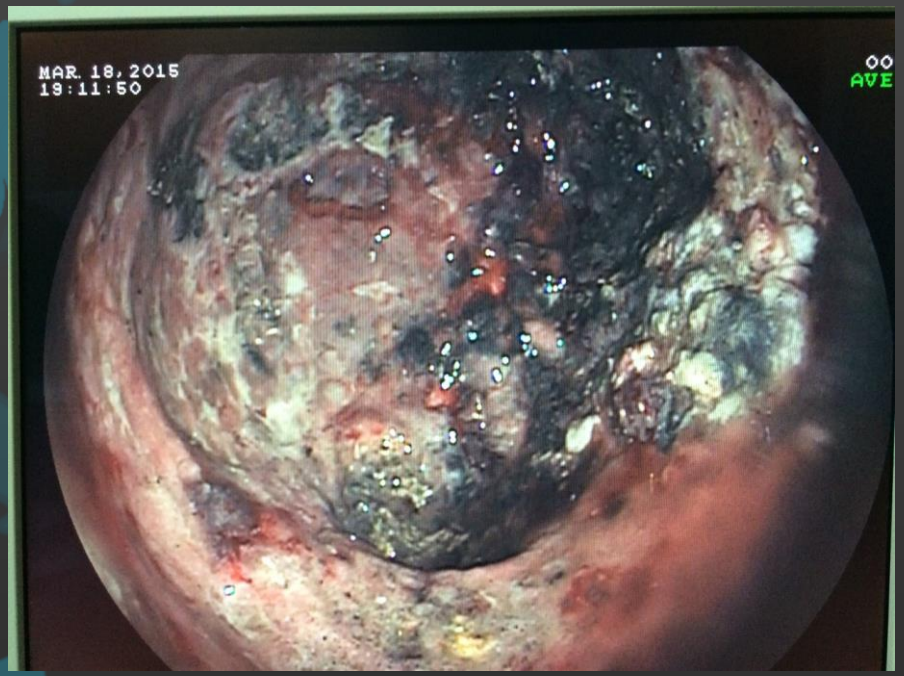
Endoscopic transluminal necrosectomy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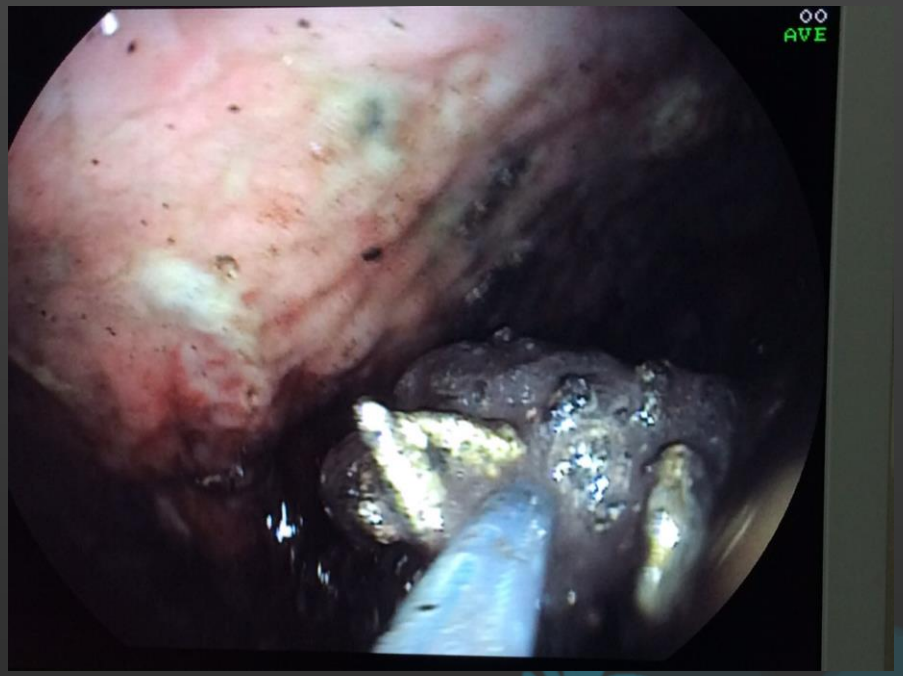
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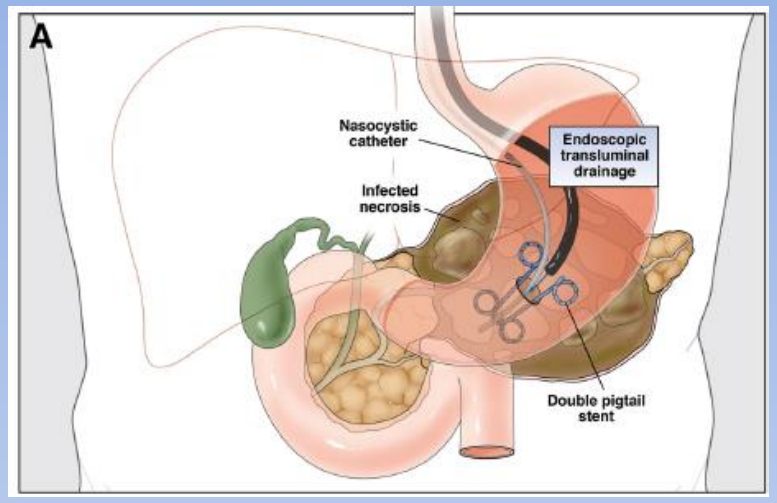
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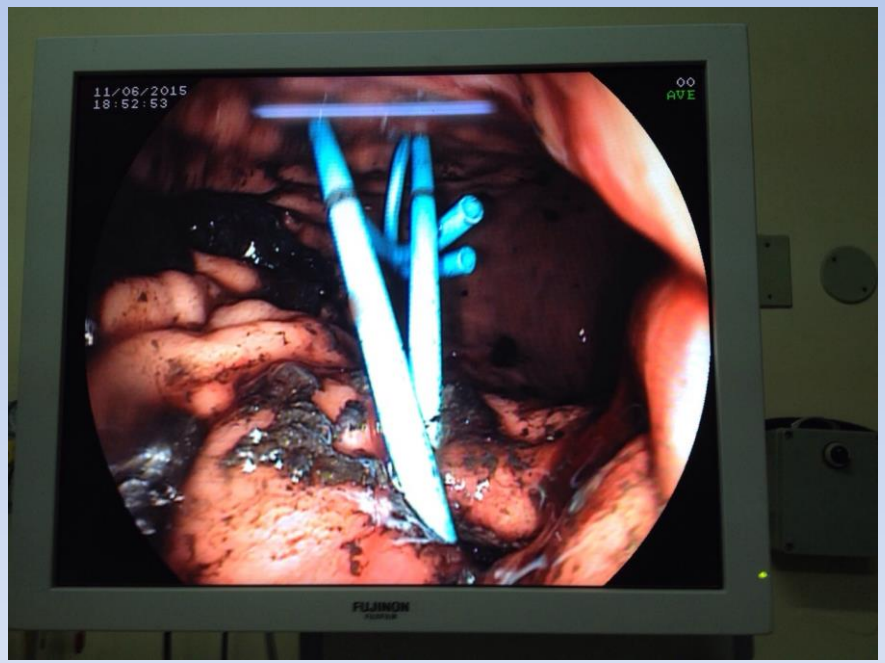
Infected necrosis
Double pigtail stent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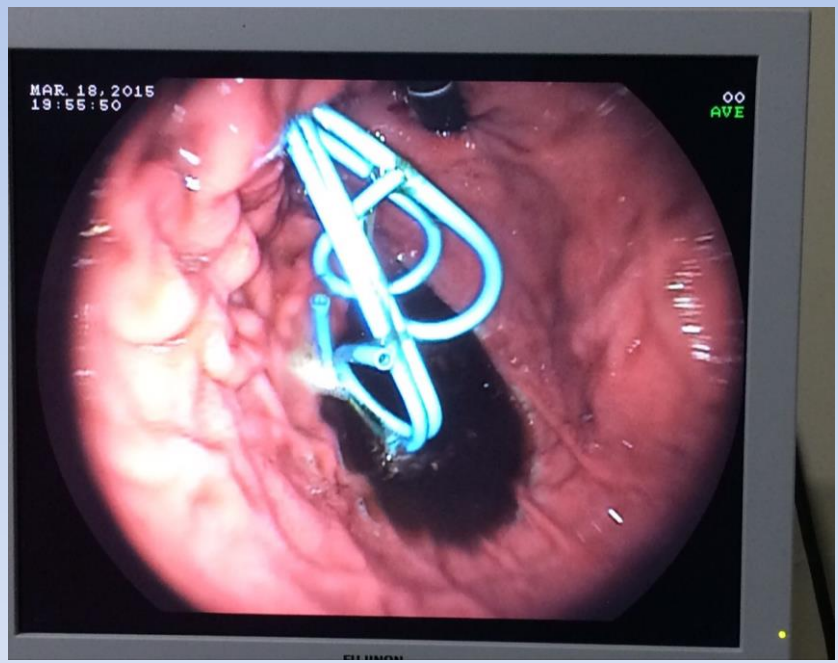
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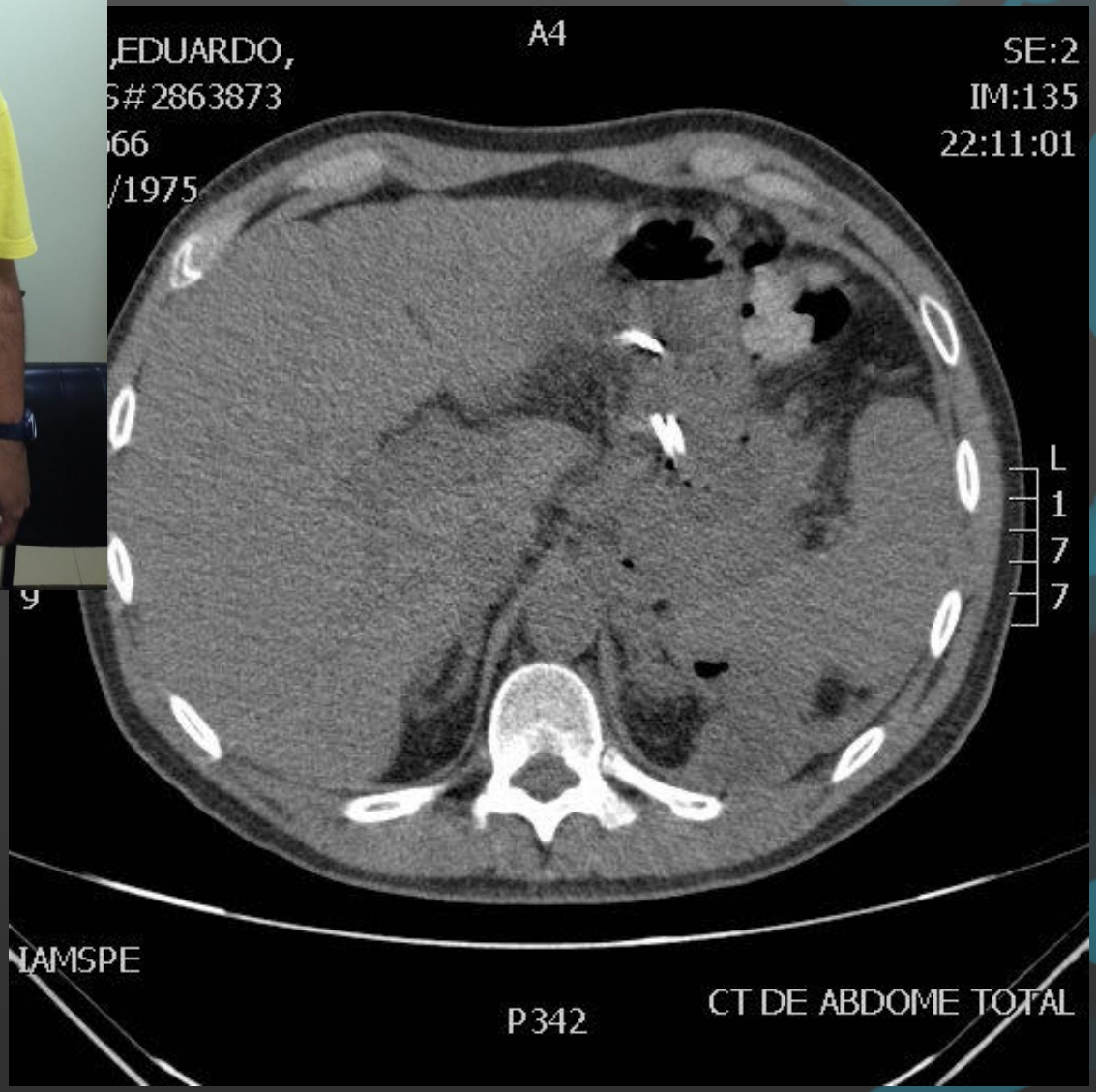
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P342
CT DE ABDOME TOTAL

- TRATAMENTO MULTIMOLDAL NA PAG

INDIVIDUALIZADO
DISCUSSÃO CONJUNTA
TRATAMENTO NECROSE ADIADO
DRENAGEM MAIS DO QUE REMOÇÃO
USO DE RECURSOS