SESIÓN BIBLIOGRÁFICA

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Viernes, 17 de Enero de 2020

Junta de Castilla y León
Consejería de Sanidad

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Complejo Asistencial Universitario de León

483 ENSAYOS
10422 ARTÍCULOS RELACIONADOS
1980-2019

thebmj | *BMJ* 2019;367:l6227 | doi: 10.1136/bmj.l6227

STATE OF THE ART REVIEW

Management of severe acute pancreatitis

O Joe Hines,[1] Stephen J Pandol[2]

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EPIDEMIOLOGÍA I

- *13-45/100.000/HAB/AÑO.*
- *COLELITIASIS.*
- *ALCOHOL.*
- *TABACO "PER SE".*
- *ALCOHOL+TABACO, NO SUMA, MULTIPLICA.*
- *DIABETES, "PER SE".*
- *DROGAS, <DEL 5%:*
  - *iDPP-4*
  - *ANÁLOGOS GLP-1*
  - *AZATIOPRINA*
  - *6-MCP*
  - *DIDANOSINA, VIDEX®*
  - *VALPROICO*
  - *IECAS*
  - *5-ASA*

EPIDEMIOLOGIA II

- CPRE Y PROCEDIMIENTOS RELACIONADOS.
- HIPERTRIGLICERIDEMIA.
- OBSTRUCTIVAS :
  - QUISTES PANCREÁTICOS
  - NEOPLASIA QUÍSTICA INTRADUCTAL
- COMIDA “BASURA”
- POCA FIBRA
- EXCESO DE VITAMINA D.
- AUTOINMUNES
- HEREDITARIAS, FIBROSIS QUÍSTICA
- PANCREAS DIVISUM.
- IDIOPÁTICA

ESCALAS DE GRAVEDAD:

1974

Criterios de Ranson

Pancreatitis biliar

Ingreso	▪ Edad >70 años ▪ Leucocitos >18.000/mm^3 ▪ Glucosa >220 mg/dL ▪ LDH >400 U/L ▪ GOT >250 U/L
48 horas de hospitalización	▪ Caída Hto >10 puntos ▪ Aumento de nitrógeno ureico>2 mg/dL ▪ Calcio sérico <8 mg/dL ▪ Déficit base >5 mEql/L ▪ Déficit volumen >4 L

Pancreatitis no biliar

Ingreso	Edad >55 años Leucocitos>16.000 mm^3 Glucosa >200 mg/dL LDH >350 U/L GOT >250 U/L
48 horas de hospitalización	Caída Hto >10 puntos Urea >5 mg/dL Calcio sérico <8 mg/dL p_aO2 <60 mm Hg Déficit base >4 mMol/L Déficit volumen >6 L

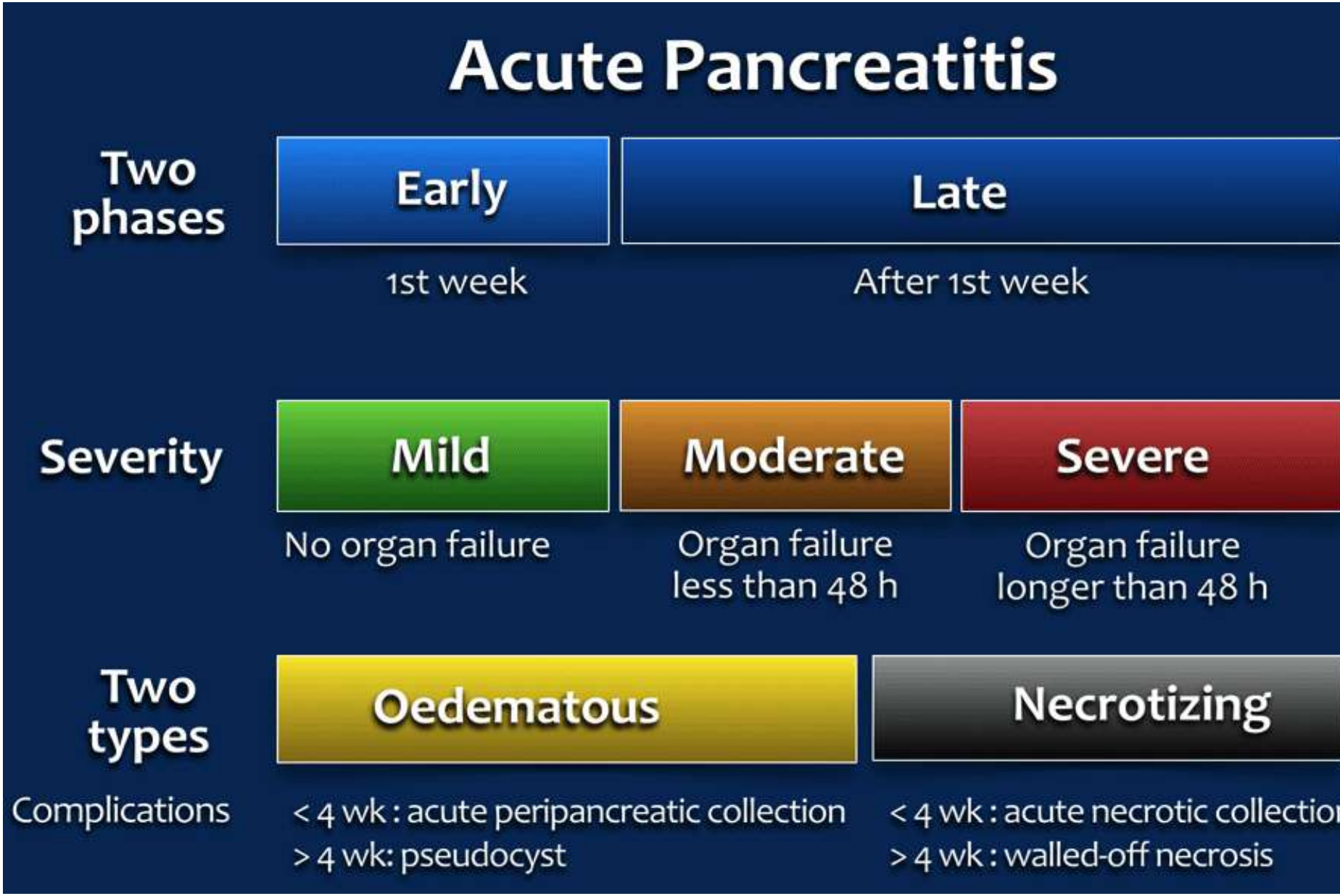
OTRAS ESCALAS Y “SCORES”

- ***RANSON 1974***
- ***ATLANTA 1992, MODIFICADA EN 2012***
- ***ACUTE PANCREATITIS ACTIVITY SCORING SYSTEM,PASS***
- ***ESCALA BISAP***
  - ***UREA***
  - ***EDAD***
  - ***MARCADORES DE SIRS***
  - ***ESTADO MENTAL***
  - ***DERRAME PLEURAL, SN***

-INFLAM.
-NECROSIS
-FALLO ORG.

MONITORIZACIÓN GLOBAL CLÍNICA Y DE IMAGEN

Acute Pancreatitis



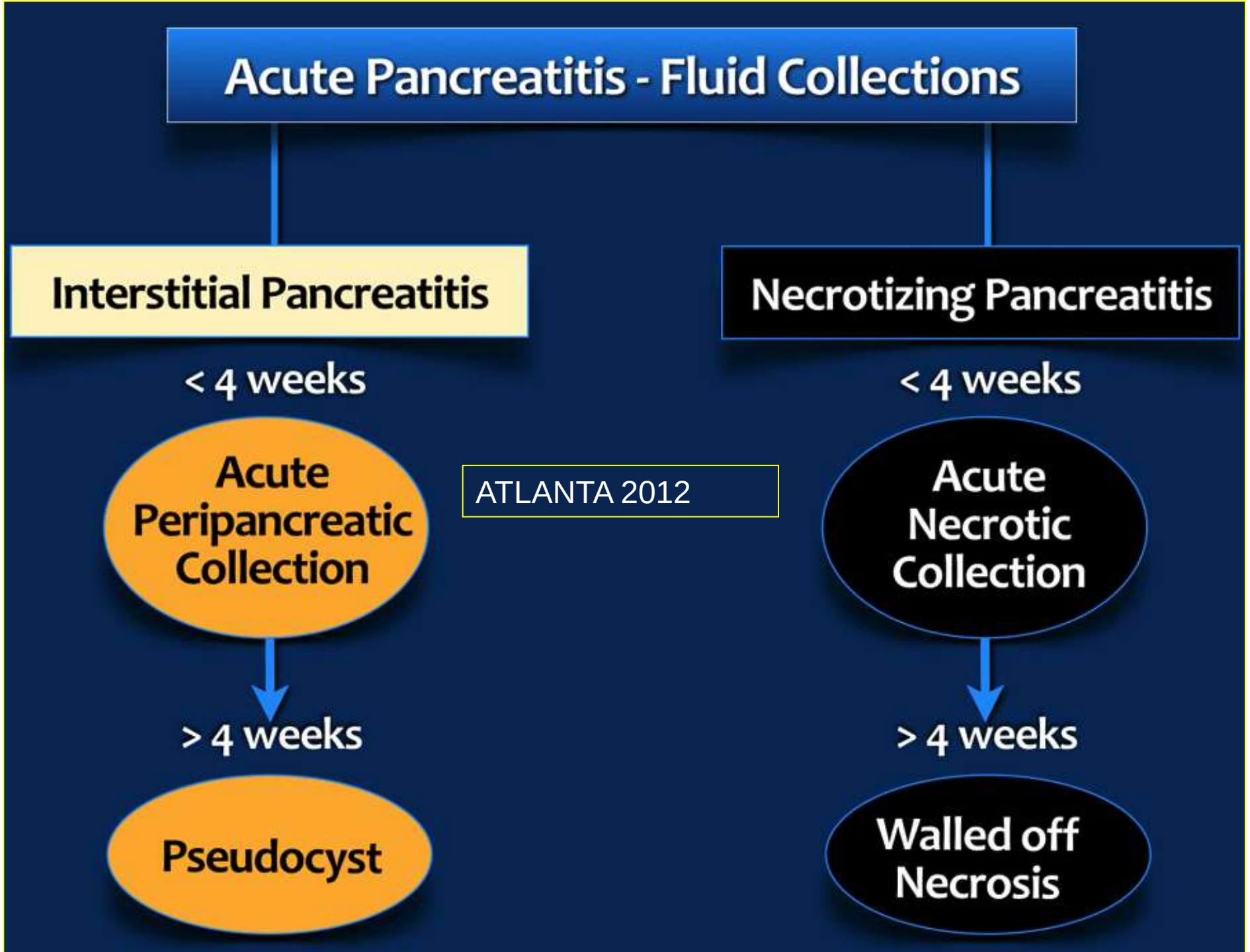
Acute Pancreatitis
Pathogenesis

-INFLAM.
-NECROSIS
-FALLO ORG.

SEVERITY
Mild

Severe

- **STAGE 1: Pancreatic Injury**
  - Edema
  - Inflammation
- **STAGE 2: Local Effects**
  - Retroperitoneal edema
  - Ileus
- **STAGE 3: Systemic Complications**
  - Hypotension/shock
  - Metabolic disturbances
  - Sepsis/organ failure


Acute Pancreatitis - Fluid Collections
Interstitial Pancreatitis
Necrotizing Pancreatitis
< 4 weeks
< 4 weeks
Acute Peripancreatic Collection
ATLANTA 2012
Acute Necrotic Collection
> 4 weeks
> 4 weeks
Pseudocyst
Walled off Necrosis

Pancreatitis intersticial edematosa

La mayoría de los pacientes con pancreatitis aguda tienen crecimiento difuso del páncreas debido a edema inflamatorio.

En la TAC el parénquima se ve homogéneo y la grasa peripancreática generalmente muestra cambios inflamatorios.

Podría haber también alguna colección líquida peripancreática.

Los síntomas en esta variante usualmente se resuelven dentro de la primera semana

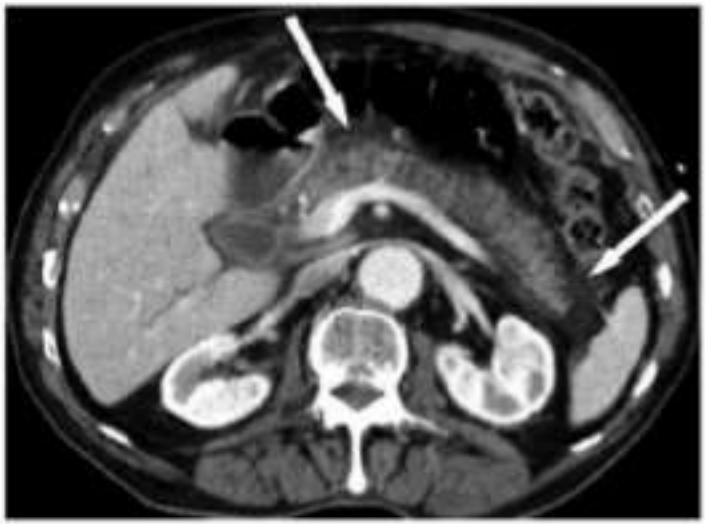
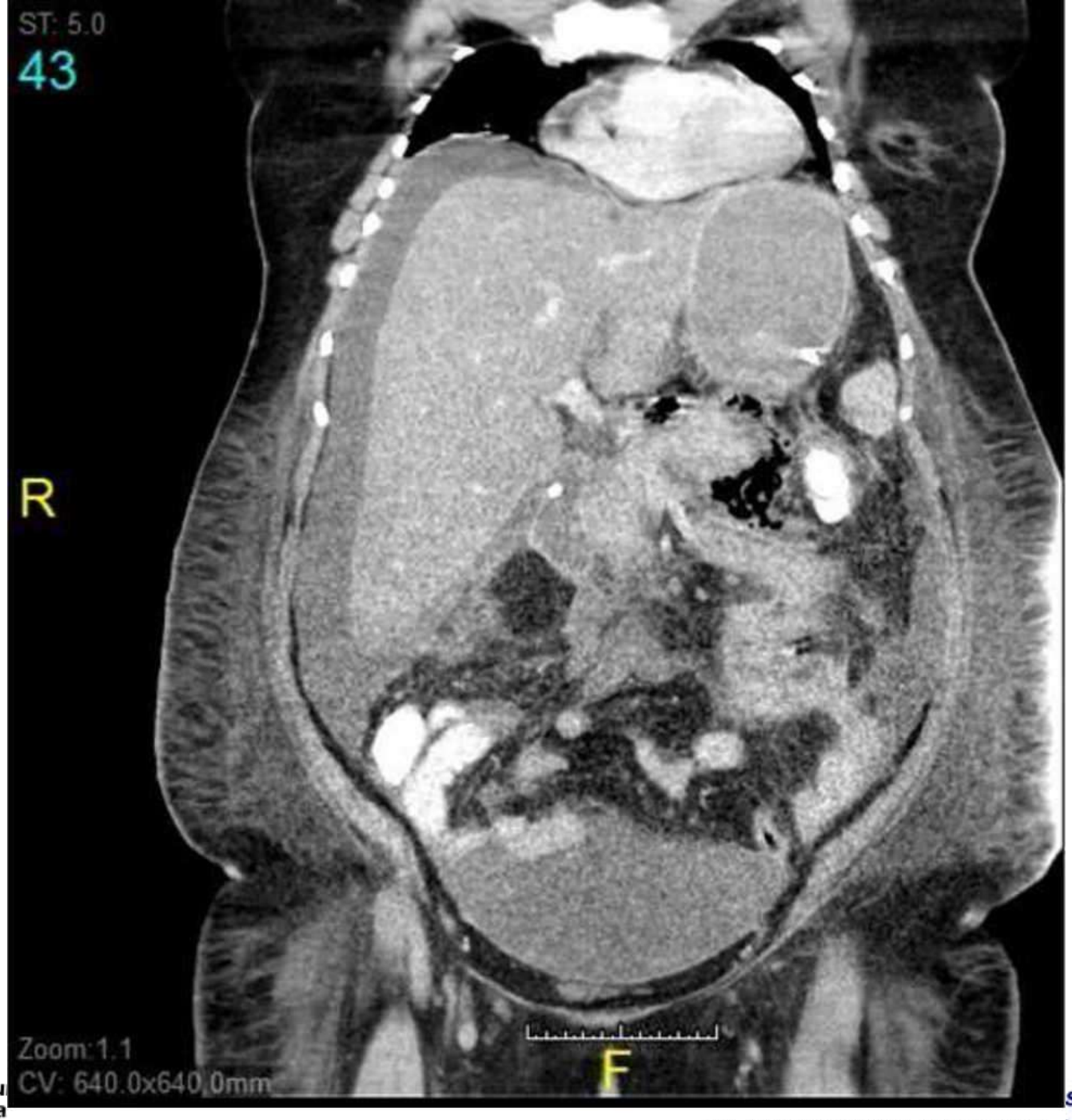


Figure 1 A 63-year-old man with acute interstitial oedematous pancreatitis. There is peripancreatic fat stranding (arrows) without an acute peripancreatic fluid collection; the pancreas enhances completely but has a heterogeneous appearance due to oedema.

Gut 2013;**62**:102–111. doi:10.1136/gutjnl-2012-302779


ST: 5.0
43
R
Zoom:1.1
CV: 640.0x640.0mm
F

CLAVES DEL MANEJO CLÍNICO

- **HIPOVOLEMIA, REPONER 5-10ml/Kg/h**
- **LACTATO RINGER, DE ELECCIÓN**
- **DETECTAR FALLO DE ÓRGANO EXTRAPANCREÁTICO.**
- ***TAC ES DE ELECCIÓN EN TODAS LAS FASES. MARCADORES DE SRIS***
- **RMN Y COLANGIO RMN NO EN LA FASE AGUDA**
- **PROFILAXIS ATB:**
  - **NO SISTEMÁTICA**
  - **CARBAPENEMs de elección**
  - **DESCONTAMINACIÓN ORAL: COL+ANF+NFX:**
  - **PROBIÓTICOS NO.**
- **NUTRICIÓN ENTERAL CON SNG "PRECOZ"**
- **PARENTERAL PARA CASOS SELECCIONADOS**
- **SONDA NASOGÁSTRICA**…….

ARSENAL TERAPEÚTICO

- ***OCTEÓTRIDO: SIN EFECTO SOBRE MORTALIDAD***
- ***ANTIOXIDANTES: NO RECOMENDABLES***
- ***PENTOXIFILINA : < TNF Y LEUCOTRIENOS. PLAQUETAS***
- ***LEXIPAFANT: ANTG. FACT. ACT. PLAQUETARIO.AMINORA EL FALLO DE ÓRGANO***
- ***GABEXATE:INH. PROTEASA. NULO EFECT. EN MORT.***
- ***IBP+SOMATOSTATINA***
- ***APROTININA, CALCITONINA***
- ***EDTA***
- ***GLUCAGON***
- ***AINES, ETC.***

*

Moggia E, Koti R, Belgaumkar AP, et al. Pharmacological interventions for acute pancreatitis. *Cochrane Database Syst Rev* 2017;4:CD011384.

A DÍA DE HOY, NO TENEMOS NADA QUE MODIFIQUE SIGNIFICATIVAMENTE EL CURSO DE LA ENFERMEDAD MODERADA/SEVERA*

Table 1 | Recommendations adapted from the International Association of Pancreatology/American Pancreatic Association (IAP/APA)[43]; the American Gastroenterological Association (AGA)[34]; and the American Society of Gastrointestinal Endoscopy (ASGE)[46]

Recommendation	Strength of recommendation
The definition of acute pancreatitis is based on the fulfillment of two of the following three criteria: clinical (upper abdominal pain), laboratory (serum amylase or lipase >3× upper limit of normal), and/or imaging (CT, MRI, ultrasonography) criteria (IAP/APA)	High
The indication for initial CT assessment in acute pancreatitis can be: diagnostic uncertainty, confirmation of severity based on clinical predictors of severe acute pancreatitis, or failure to respond to conservative treatment or in the setting of clinical deterioration (IAP/APA)	High
Ringer's lactate is recommended for initial fluid resuscitation in acute pancreatitis (IAP/APA, AGA)	Moderate
Goal directed intravenous fluid therapy with 5-10 mL/kg/h should be used initially until resuscitation goals are reached (IAP/APA, AGA)	Low
Management in, or referral to, a specialist center is necessary for patients with severe acute pancreatitis and for those who may need interventional radiologic, endoscopic, or surgical intervention (IAP/APA)	High
Intravenous antibiotic prophylaxis is not recommended for the prevention of infectious complications in acute pancreatitis (IAP/APA)	High
Probiotic prophylaxis is not recommended for the prevention of infectious complications in acute pancreatitis (IAP/APA)	High
In patients with acute biliary pancreatitis and no cholangitis, the recommendation is against the routine use of urgent ERCP (AGA)	Moderate
Urgent ERCP (<24 h) is required in patients with acute cholangitis (IAP/APA)	High
In patients with acute pancreatitis, early (within 24 h) oral feeding is recommended as tolerated, rather than keeping the patient nil by mouth (AGA)	High
In patients with acute pancreatitis and inability to feed orally, enteral rather than parenteral nutrition is recommended (AGA)	High

Acute Peripancreatic Collection

- < 4 weeks
- In interstitial pancreatitis
- Homogeneous - fluid density
- *No fully definable wall*
- Adjacent to pancreas
- Confined by normal fascial planes

Acute Necrotic Collection

- < 4 weeks
- In necrotizing pancreatitis
- Heterogeneous collection
- *No fully definable wall*
- Intra- or extrapancreatic

Pseudocyst

- > 4 weeks
- In interstitial pancreatitis
- Homogeneous - fluid density
- *Well defined wall*
- Adjacent to pancreas
- No non-liquid component

Walled-off Necrosis

- > 4 weeks
- In necrotizing pancreatitis
- Heterogeneous collection
- *Well-defined wall*
- Intra- or extrapancreatic

thebmj | BMJ 2019;367:l6227 | doi: 10.1136/bmj.l6227

Table 1 | Recommendations adapted from the International Association of Pancreatology/American Pancreatic Association (IAP/APA)[43]; the American Gastroenterological Association (AGA)[34]; and the American Society of Gastrointestinal Endoscopy (ASGE)[46]

Recommendation	Strength of recommendation
For patients with proven or suspected infected necrotizing pancreatitis, invasive intervention (ie, percutaneous catheter drainage, endoscopic transluminal drainage/necrosectomy, minimally invasive or open necrosectomy) should be delayed where possible until ≥4 weeks after initial presentation to allow the collection to become "walled-off" (IAP/APA, ASGE)	High
All infected pancreatic fluid collections should be drained in patients who fail to improve with conservative management alone (ASGE)	High
Symptomatic sterile necrosis lasting >8 weeks after the onset of acute pancreatitis should be drained (ASGE)	High
The optimal interventional strategy for patients with suspected or confirmed infected necrotizing pancreatitis is initial image guided percutaneous (retroperitoneal) catheter drainage or endoscopic transluminal drainage, followed, if necessary, by endoscopic or surgical necrosectomy (IAP/APA, ASGE)	Moderate
Endoscopic drainage of pancreatic fluid collections should be performed only with the availability of surgical and interventional radiology support (ASGE)	High

CT=computed tomography; ERCP=endoscopic retrograde cholangiopancreatography; MRI=magnetic resonance imaging.

PARED

WONP

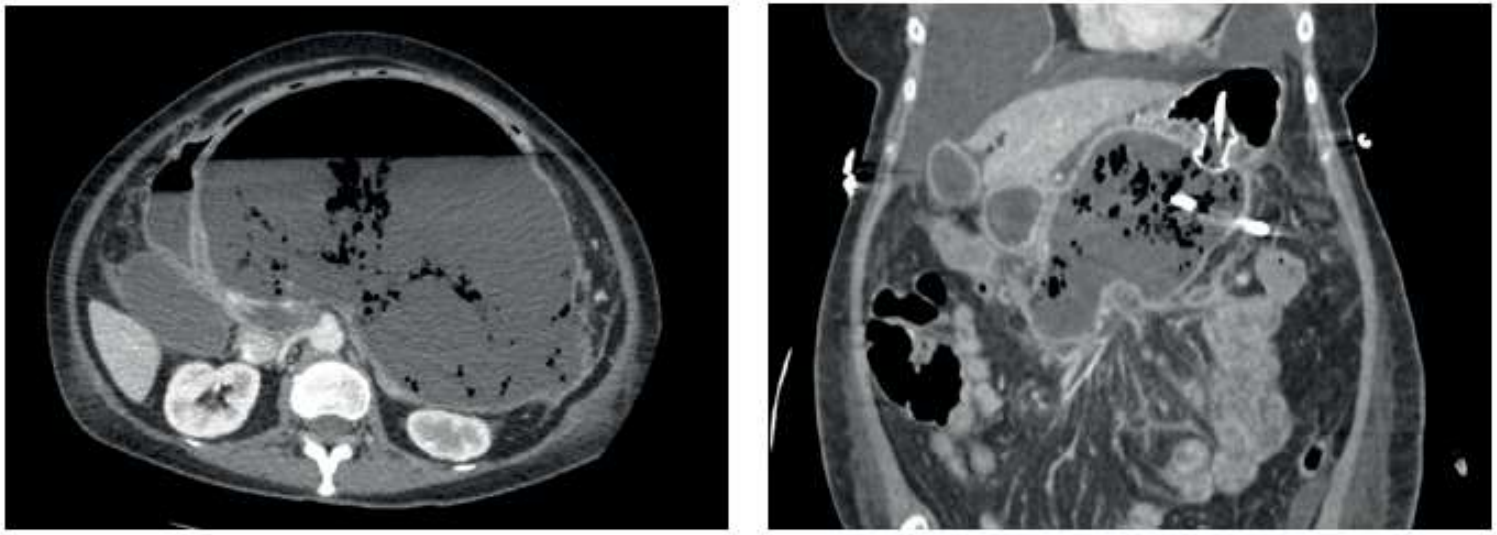
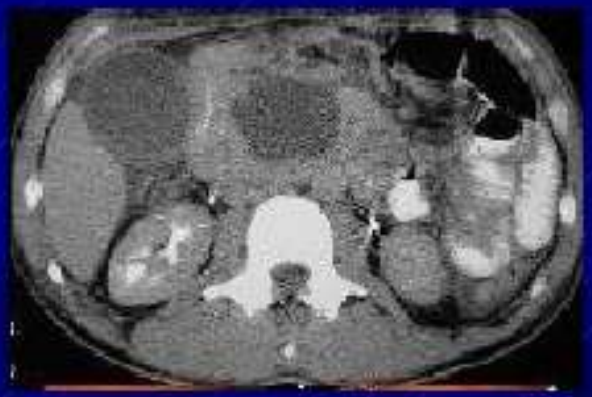


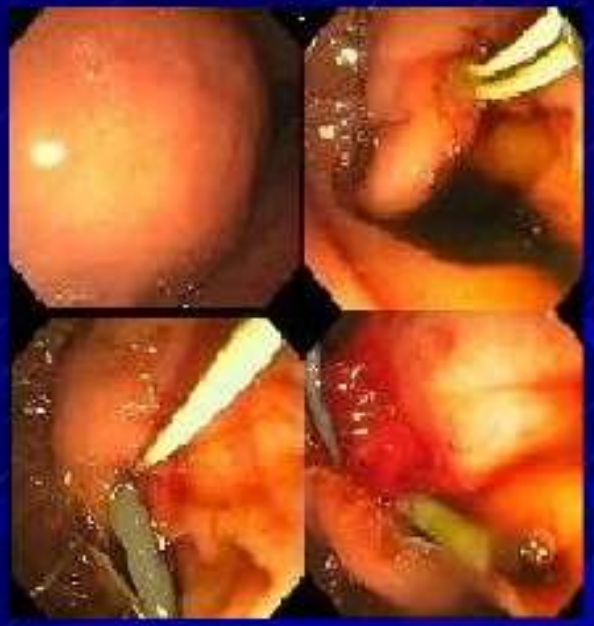
Fig 1 | Left: Contrast enhanced computed tomography scan showing a large area of walled-off necrosis with a mature wall, an air-fluid level, and gas in solid necrotic material implying infection. Right: A luminal opposing stent has been placed between the stomach and the walled-off necrosis, and a pigtail drain runs through the center of the stent. The patient has also had a percutaneous drain placed

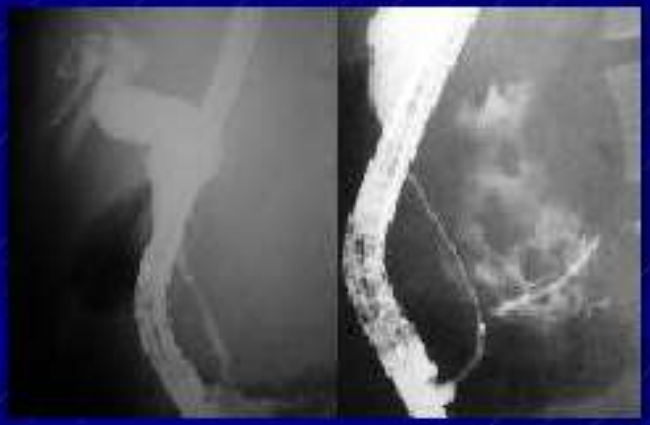
- LAVADO PERITONEAL NO RECOMENDABLE
- ECOENDOSCOPIA Y DRENAJE PERCUTANEOS

Drenaje transpapilar

- Pseudoquiste Pancreático con compresión de vía biliar e ictericia.
- En CPRE se encontró abombamiento en bulbo duodenal y comunicación del quiste con el Wirsung.
- Se practica papilotomía, se deja stent biliar y sonda nasoquística transpapilar







QUESTIONS FOR FUTURE RESEARCH

- What type of fluid replacement strategies would allow for correction of hypovolemia from pancreatitis without compromising pulmonary and abdominal organ function?
- What drugs can mitigate the conditions of inflammation, necrosis, and organ failure in severe acute pancreatitis?
- What are the long term nutritional and metabolic consequences of acute pancreatitis, and how should these be managed?
- How does the gut microbiome influence the course of severe acute pancreatitis, and what measures can support normal microbiome function during pancreatitis?

doi: 10.1136/bmj.l6227 | *BMJ* 2019;367:l6227 | the bmj

- ***CPRE PRECOZ***
- ***CIRUGÍA BILIAR PRECOZ***

BMJ 2019;367:l6832 doi: 10.1136/bmj.l6832 (Published 5 December 2019)

NEWS

Tuberculosis: experts question evidence and safety data used to approve latest drug

Vidya Krishnan

Hyderabad

DATOS EPIDEMIOLÓGICOS DE LA TB. EN EL MUNDO

- 10 MILLONES DE ENFERMOS/AÑO
- 1,6 MILLONES MUEREN
- 1M. DE CASOS DE MDR-TB/AÑO
- 6% SON XDR-TB
- 4,25% EN ESPAÑA SON MDR/XDR-TB
- 13,4 /100000 DE ESPAÑA
- 127 PAISES DEL MUNDO TIENE XDR-TB
- 1 DE CADA 3 MUERTOS SON POR MDR-TB/XDR-TB

www.tballiance.org

TUBERCULOSIS MULTIRRESISTENTE, 4,25% DE LAS CEPAS CULTIVADAS

- ***MDR-TB : RESISTENTE A RIFAMPICINA E HIDRACIDA.***
- ***PRE-XDR-TB: SE AÑADE, RESISTENCIA A FLUORQUINOLONAS E INYECTABLES DE SEGUNDA LÍNEA, PERO NO A LOS DOS.***
- ***XDR-TB: SE AÑADE RESISTENCA A FQ E INYECTABLES DE SEGUNDA LÍNEA***

TUBERCULOSTÁTICOS DE SEGUNDA LINEA

-*ETIONAMIDA*
-*PROTIONAMIDA*
-*CICLOSERINA*
-*RIFABUTINA*
-*PAS*
-*AMINOGLICÓSIDOS, (KANA,CAPREO Y AMIKA)*
-*FLUORQUINOLONAS*
-*CLOFAMICINA*
-*TIOCETAZONA*

BEDAQUILINA, SIRTURO®

- SIEMPRE ASOCIADO A 3 Ó 4 FÁRMACOS SENSIBLES.
- INHIBE LA ATP-SINTASA.
- BACTERICIDA PARA BK ACTIVOS Y LATENTES.
- DOSIFICACIÓN DE INDUCCIÓN Y DE MANTENIMIENTO.
- EN RÉGIMEN DE TERAPIA DIRECTAMENTE OBSERVADA
- NO EN INSUFICIENCIA HEPÁTICA
- NO CON INHIBIDORES DE CYP3A4
- ALARGA EL QTc
- 85,4% DE EFICACIA, SIEMPRE COMBINADA
- HASTA 24 MESES HAY QUE TRATAR

BPaL REGIMEN, Nix-TB

- **DISEÑADO PARA CASOS XDR-TB**
- **INCLUYE EL *PRETOMANID,200mg/d***
- **ASOCIADO A BEDAQUILINA 400mg/d Y A LINEZOLID, 1200mg/d**
- **PERMITE PAUTAS "CORTAS", DE 6 MESES**
- **AUTORIZADO FDA EN AGOSTO DE 2019**
- **TASAS DE ESTERILIZACIÓN DEL ESPUTO DE HASTA EL 89% EN 6M.**
- **EN EL Nix-TB, 95 DE 107, BK -, A LOS 6M**
- **HEPATOTOXICIDAD EN 36,7%.**
- **26 SEMANAS**

PRETOMANID. PRECAUCIONES DE USO

- **CONTRAINDICADO:**
  - **DS-TB**
  - **INFECCIÓN LATENTE POR *M. Tuberculosis***
  - **MDR-TB TOLERANTE O QUE RESPONDA A TERAPIA STANDARD.**
- ***SEGURO COMBINADO CON BEDAQUILINA Y LINEZOLID ORAL, EXCLUSIVAMENTE***
- **TOXICIDAD HEPÁTICA**
- **MIELOSUPRESIÓN EN DIFERENTES GRADOS**
- **NEUROPATÍA ÓPTICA Y PERIFÉRICA**
- **QT > DE 500mseg.**
- **SOLO TB. PULMONAR**
- **ES UN NITROIMIDAZOL, BACTERICIDA PARA BK**

www.tballiance.org/pretomanid

HACEN FALTA MAS ESTUDIOS, CON PRETOMANID, RESULTADOS PROMETEDORES

The same week, an editorial published in the *Lancet Respiratory Medicine* quoted the Global TB Community Advisory Board in saying that "the approval of [pretomanid] is based on an uncontrolled, non-randomised study in 109 patients [and] it risks lowering the evidentiary standards required for new tuberculosis medicines."[4]

BMJ 2019;367:l6428 doi: 10.1136/bmj.l6428 (Published 29 November 2019)

PRACTICE

PRACTICE POINTER

Ablation therapy in atrial fibrillation

Alysha Bhatti *academic foundation doctor*[1], Pippa Oakeshott *professor of general practice*[2], Mehul Dhinoja *consultant cardiologist and electrophysiologist*[3], Julia Grapsa *consultant cardiologist*[4]

[1]St George's University Hospitals NHS Trust, Tooting, London SW17 0QT, UK; [2]Population Health Research Institute, St George's University of London, Tooting, London SW17 0RE, UK; [3]Arrhythmia Service, Department of Cardiology, St Bartholomew's Hospital, London EC1A 7BE, UK; [4]Department of Cardiology, Royal London Hospital, London E1 1FR, UK

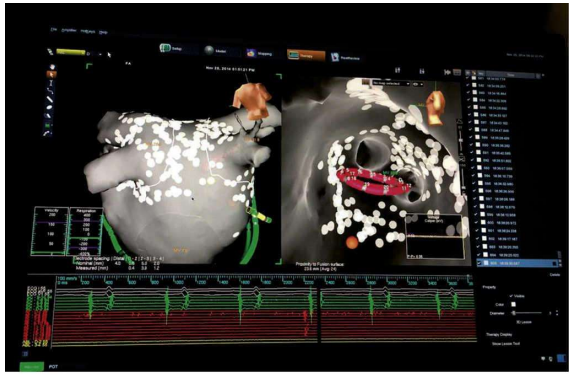
DATOS EPIDEMIOLÓGICOS ACXFA

- 1% DE LA POBLACIÓN GENERAL
- 6% EN >DE 60 AÑOS
- FRECUENTEMENTE ASOCIADA A ICC.
- *5 EL RIESGO DE ICTUS INCAPACITANTE
- *2 EL RIESGO DE MUERTE

Chugs SS et als., Circulation 2014; 129:837-47

INDICACIONES DE LA ABLACIÓN DE VV.PP.

- **CUANDO NO ES ASINTOMÁTICA:**
  - **PALPITACIONES**
  - **DISNEA**
  - **MAREOS**
  - **INTOLERANCIA AL EJERCICIO**
  - **MERMA DE LA QoL**
  - **INEFICACIA ANTIARRITMICOS**
  - **CONTRAINDICACIÓN PARA SU USO**
  - **NECESIDADES DEL PACIENTE**
  - **6000 PROCEDIMIENTOS AL AÑO EN UK**
  - **100 PROCEDIMIENTOS/1000000 HAB.**



Rev Col Cardiol. 2016;23 Supl 2:4-16

Albert et als., JAMA 2019;321: 1255-7
https://www.nice.org.uk/guidance/ipg68

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ABLACIÓN Vs. TRATAMIENTO MÉDICO

- ABLACION < RRR DEL 53%
- SIMILAR POR RADIOFRECUENCIA QUE POR CRIOTERAPIA
- IRRITABILIDAD PRECOZ
- NUNCA REPETIR ANTES DE 3 MESES
- 20-40% NECESITA REPETIR ABLACIÓN
- DEL 53 AL 79% SIGUEN EN RITMO SINUSAL A 3 AÑOS

MEDIDAS POST ABLACIÓN

- ACO 4 SEMANAS ANTES Y DOS SEMANAS DESPUÉS.
- ES CORRECTO SEGUIR CON ACO EN FUNCIÓN DEL CHA2-DS2-VASC PREVIO.
- NO HAY ENSAYOS SOBRE REDUCCIÓN DEL RIESGO DE ICTUS, TRAS ABLACIÓN EXITOSA.
- “ABLACIONADOS” TIENEN HASTA UN 60% DE >RIESGO DE ICTUS QUE LA POBLACION GENERAL
- IBP DURANTE 1 MES, TRAS PROCEDIMIENTO.
- ANTIARRITMICOS PREVIOS 6 SEMANAS POST-ABLACIÓN.
- SE DESCONOCE SI HAY BENEFICIO A LARGO PLAZO, DE MANTENER LOS ANTIARRÍTMICOS.

Adderley NJ et als. BMJ 2018;361:k1717.29743285

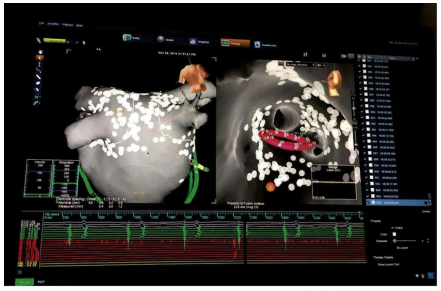
LA ABLACIÓN VA MAL EN :

- ***ANCIANOS***
- ***HIPERTENSOS***
- ***DIABÉTICOS-2***
- ***OBESOS***
- ***INSUFICIENCIA CARDÍACA***
- ***APNEA DEL SUEÑO***

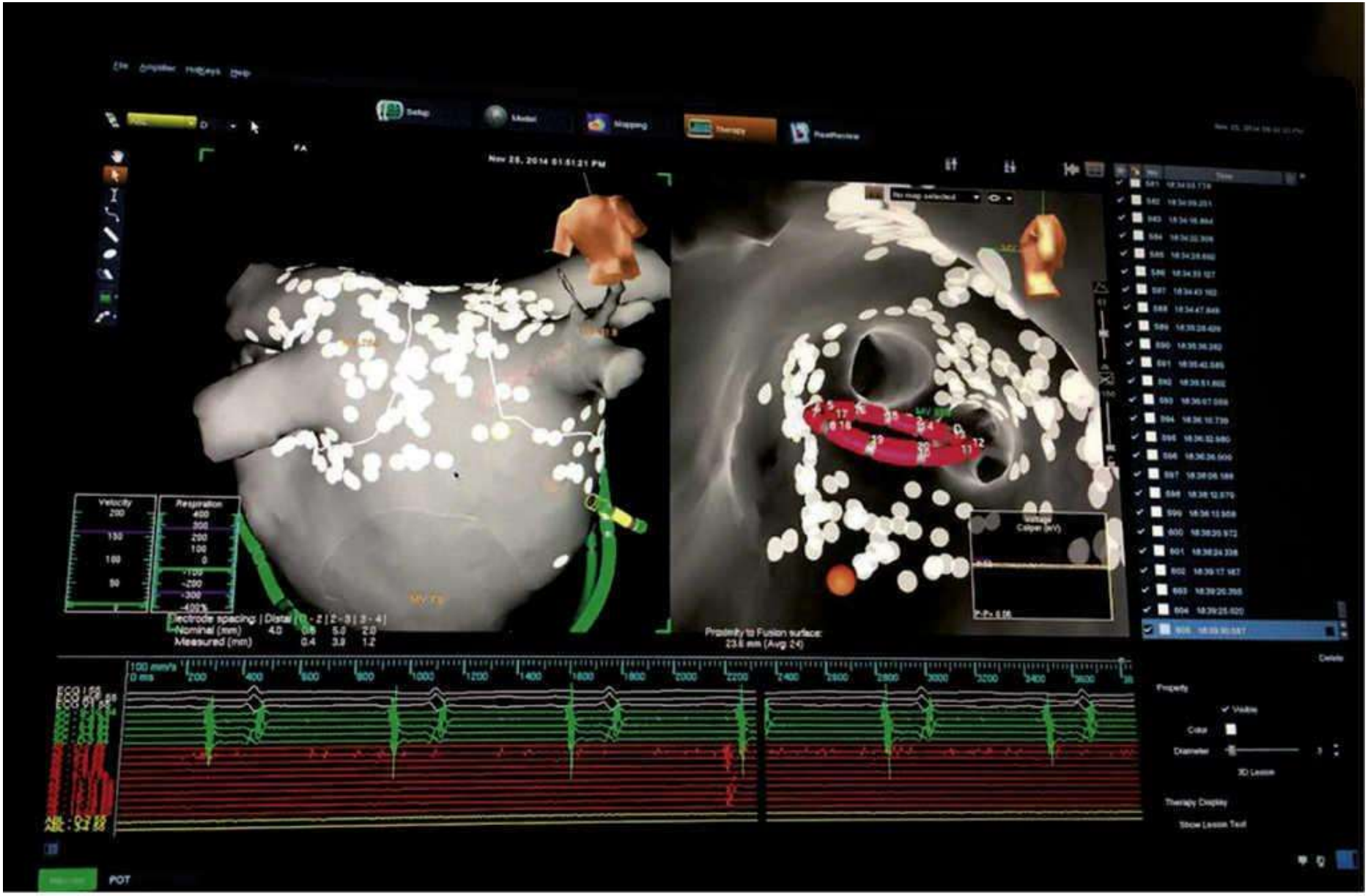
MORBILIDAD DEL PROCEDIMIENTO

The risks of serious complications are less than one in 50 (1.6%), and these risks are reducing as techniques improve.[7] Serious complications include:

- Cardiac tamponade (1 in 100)
- Stroke (1 in 100)
- Pulmonary vein stenosis (<1 in 100)
- Nerve damage (<1 in 100)
- Atrio-oesophageal fistula (<1 in 1000)
- Death (<1 in 1000).



Calkins et als. Heart Rhytm 2017; 14 e275-244



CABANA STUDY: MORTALITY

- 2204 PACIENTES.
- END POINT PRIMARIO: MUERTE, D. STROKE HEMORRAGIA Y PARADA CARDÍACA.
  - MEJOR TTO. MÉDICO A LOS 48 MESES
- MORT. POR TODAS LAS CAUSAS: NO DIFERENCIAS SIGNIFICATIVAS
- A FAVOR DE ABLACIÓN EL COMPUESTO:
  - MORTALIDAD
  - HOSPITALIZACION
  - 51,7% vs 58,1%, p<0.001

Packer et als. JAMA 2019; 321:1261-74

CASTLE –AF STUDY

- ***PAC. EN ICC AÑADIDA***
- ***MEJOR LA ABLACIÓN QUE EL TTO. MÉDICO***
- ***28,5 vs 44,6% , p=0,007***
- ***< RIESGO DE MUERTE***
- ***< RIESGO DE HOSPITALIZACIÓN***

Marrouche et als. N Engl J Med 2018; 378:417-27

MENSAJES

What you need to know

- Ablation is a management option for those experiencing symptoms of atrial fibrillation who have not responded to, or wish to avoid, anti-arrhythmic medication, or for whom such medication is contraindicated
- Ablation has been shown to improve quality of life but has not yet been shown to reduce stroke risk or mortality. Long term anticoagulation is still indicated after ablation, according to the pre-ablation stroke risk
- The success rate in returning to sinus rhythm is around 80% at three years, but up to a third of patients need more than one procedure to achieve this

COSAS QUE NO SABEMOS

Questions for further research

- In patients with a high stroke risk profile and recent onset of atrial fibrillation, does early rhythm control therapy reduce cardiovascular complications?
- Are short term corticosteroids an effective and safe option in the prevention of post-ablation recurrence of atrial fibrillation?
- What is the role of newer technologies in earlier detection of atrial fibrillation and what impact do they have on stroke rates and mortality?

LA ABLACIÓN ES SUPERIOR EN TÉRMINOS DE QoL

thebmj Visual summary

Ablation therapy for atrial fibrilation

Ablation therapy is an increasingly common procedure indicated in patients with atrial fibrillation causing symptoms (such as palpitations or breathlessness) who have not responded to anti-arrhythmic medication or not wanting to take such medications. This infographic summarises what ablation therapy entails, including the potential benefits and risks.

- ✔ Reduces symptoms
- ✔ Improves quality of life
- ✖ Hasn't been shown to reduce stroke risk or mortality

Before procedure

Specialist discussion

A specialist should discuss the planned hospital stay and advise on existing medications

Anticoagulation medication

Anticoagulation is advised to reduce the risk of stroke during the procedure

WAR Warfarin

or

DOAC Direct oral anticoagulant

Medication should be taken for at least 4 weeks before the procedure

Calculate CHA_2DS_2-VASC score

The patient's pre-ablation score can be used to determine whether long ter anticoagulation is required

≥2 Women	≥1 Men	Othe

During procedure

1-4 hours

May be performed under local or general anaesthetic. Catheters are inserted into the heart via veins in the groin. The area of the inner surface of the heart generating abnormal electrical activity is identified, and ablation is used to generate scar tissue that no longer conducts abnormal impulses.

Ablation modality

Radiofrequency
Uses heat generated from medium frequency alternating current

Cryotherapy
Uses extreme cold to destroy tissue

BMJ 2019;367:16248

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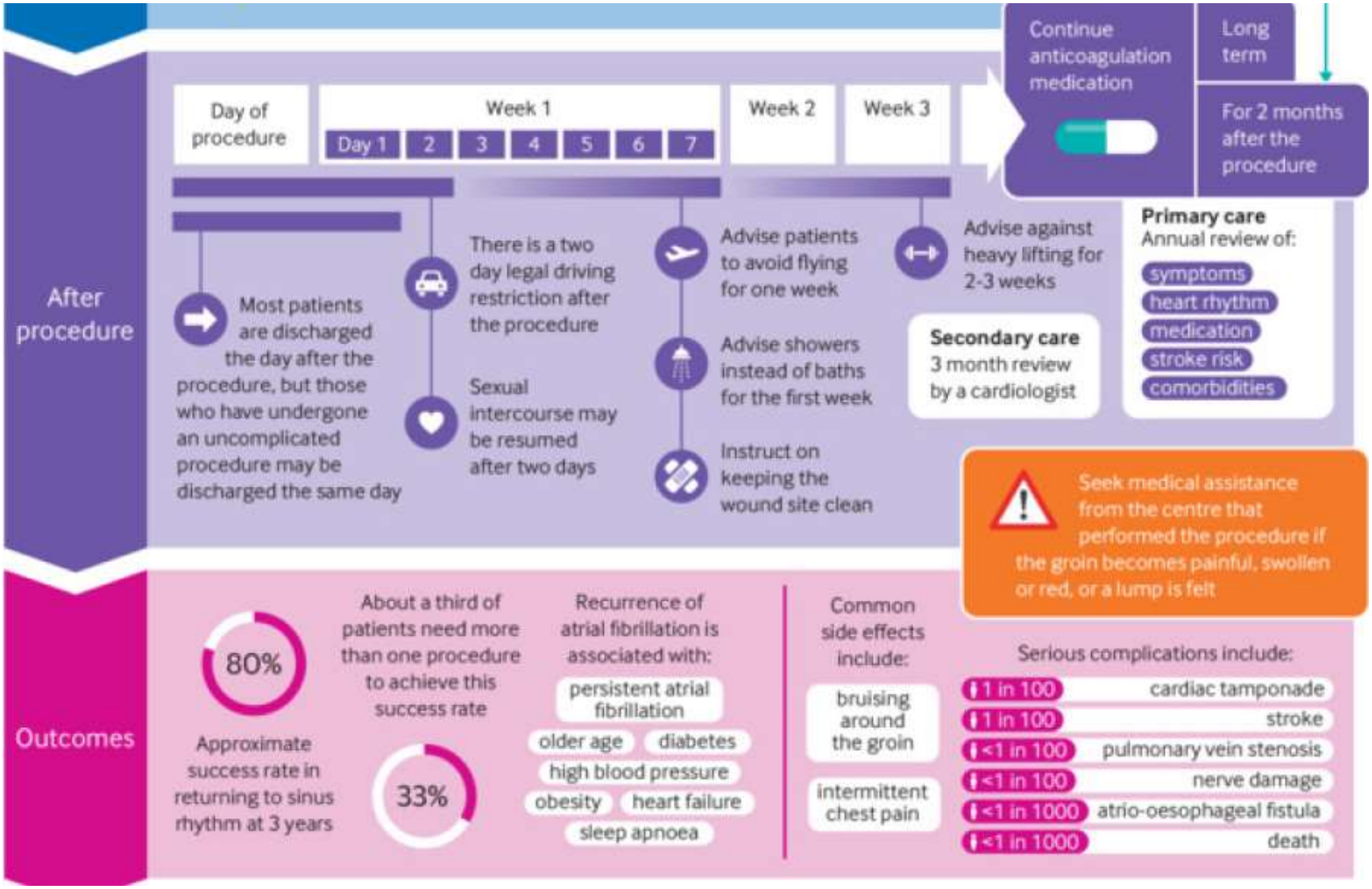

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