Isquemia Mesentérica

Diagnóstico e Intervencionismo.

Julio Palmero
H. Clínico Universitario. Valencia

Isquemia mesentérica

Oclusiva.

-Oclusión arterial 70-80% de los casos

-Embolia AMS 50%

-Trombosis AMS 10%

- Oclusión venosa 5-10% de los casos

No oclusiva o Hipoperfusión 5-50%.

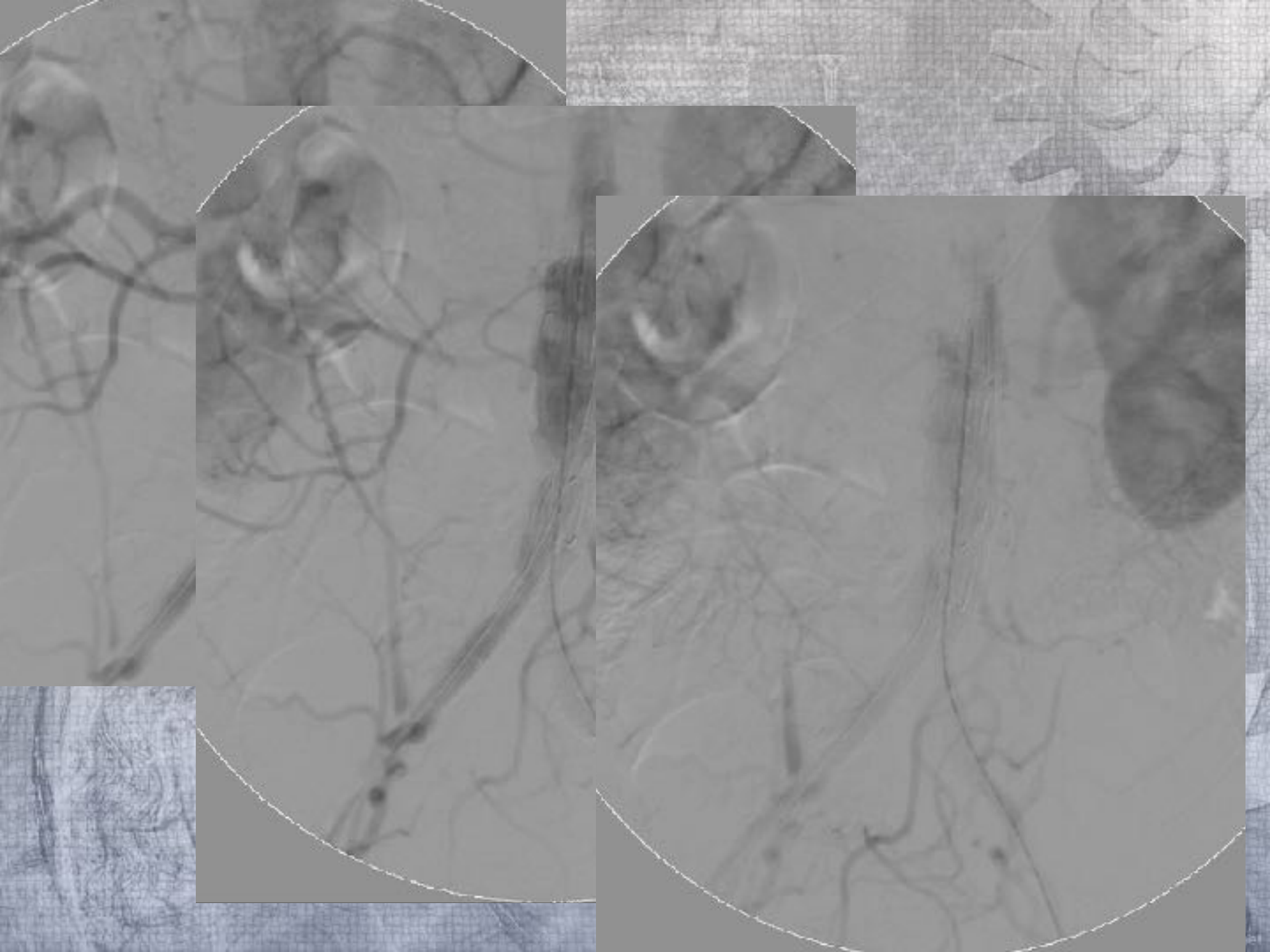
-Hipotensión, arritmia, IC, deshidratación, traumatismos, Cirugía sobre aorta, etc.

Isquemia mesentérica crónica arterial

- Lesiones ateromatosas
- La proporción de lesiones arteriales no ateromatosas probablemente es mas alta en las arterias viscerales que en otros territorios
  - Arteritis Takayasu
  - Lesiones displásicas
  - Tromboangitis obliterante
  - Lesiones inducidas por radiación

Isquemia mesentérica crónica arterial

- Afectación de al menos dos vasos viscerales es necesaria
- Arteriosclerosis difusa vasos dístales (diabetes, insuficiencia renal terminal). Incapacidad de desarrollo de circulación colateral. Isquemia con estenosis simple



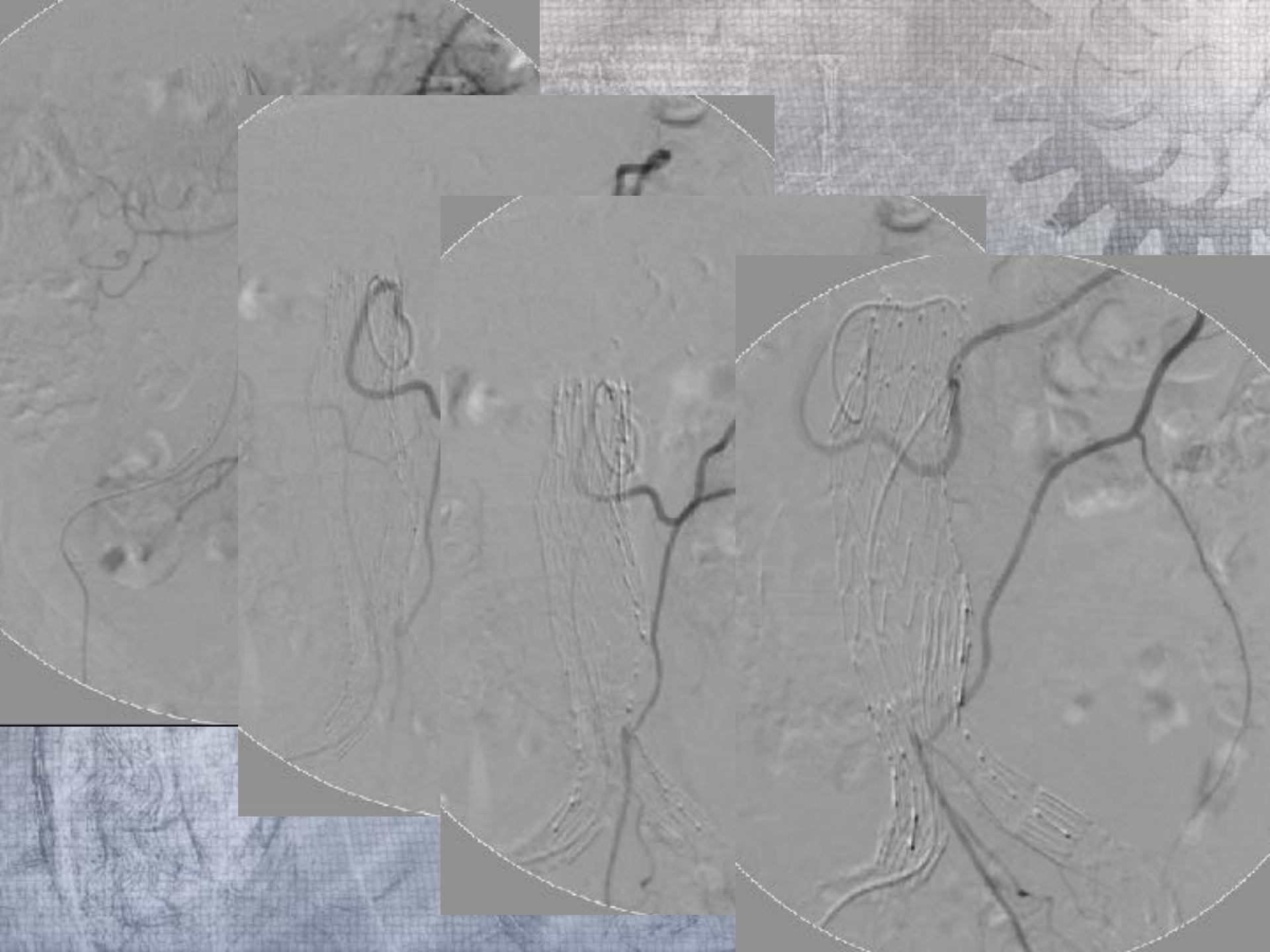


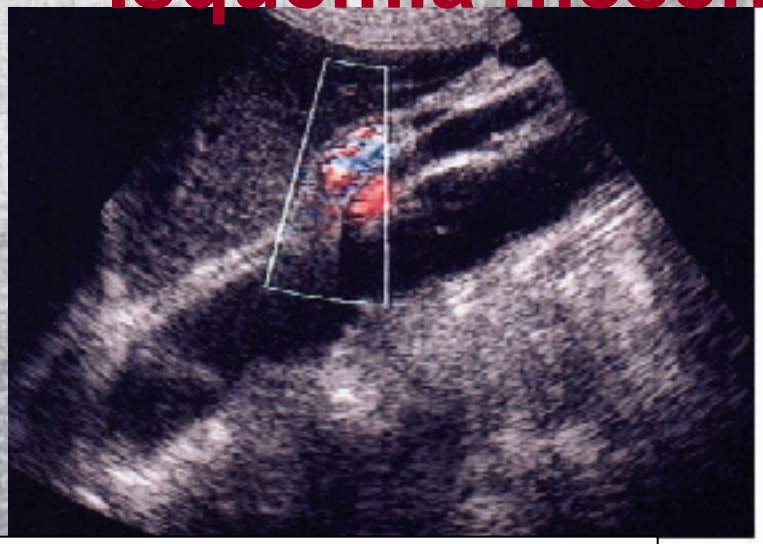
Table 1
Characteristics of 16 Patients with CMI

Patient/ Age (y)/ Sex	Other Vascular Disease*	Signs and Symptoms	Weight Loss (kg)	Time to Diagnosis (mo)	Site of Significant Stenosis or Occlusion†	Cause
1/85/F	LLOAD	Angina	14	1	SMA‡	Atheroma
2/41/M	LLOAD	Angina	2	24	CA, SMA, IMA	Atheroma
3/69/M	LLOAD	Ischemic gastropathy	0	6	CA, SMA	Atheroma
4/56/M	LLOAD, CAD, SAI	Angina	6	2	CA, SMA	Atheroma
5/34/M	LLOAD	Angina	30	56	CA, SMA	Buerger arteritis
6/92/F	None	Angina	8	24	CA, SMA	Atheroma
7/75/M	LLOAD, CAD	Diarrhea, constipation	5	11	SMA‡	Atheroma
8/73/M	SAI	Angina	7	8	CA, IMA	Atheroma
9/72/M	LLOAD, CAD, SAI	Angina	0	3	CA, SMA	Atheroma
10/62/M	None	Angina	15	9	SMA	Atheroma
11/90/F	None	Angina	5	3	SMA‡	Atheroma
12/54/F	LLOAD, SAI	Angina	0	3	CA, SMA	MAL§ syndrome, Takayasu arteritis
13/75/F	LLOAD	Ischemic gastropathy	0	9	CA, SMA	MAL syndrome, atheroma
14/75/F	None	Angina	0	3	SMA, IMA	Dysplasia, atheroma
15/45/M	None	Angina	20	18	CA, SMA	Atheroma
16/53/M	LLOAD	Angina	7	6	CA, SMA	Atheroma

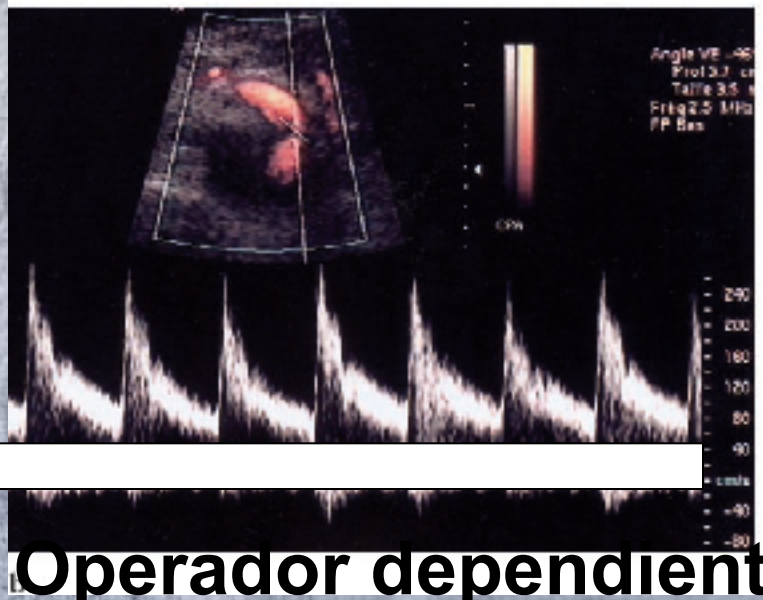
*CAD = coronary artery disease, LLOAD = lower limb occlusive arterial disease, SAI = supraaortic involvement.
†CA = celiac artery, IMA = inferior mesenteric artery.
‡Lesion located distally in the SMA (at least 4 cm from the ostium).
§MAL = median arcuate ligament.

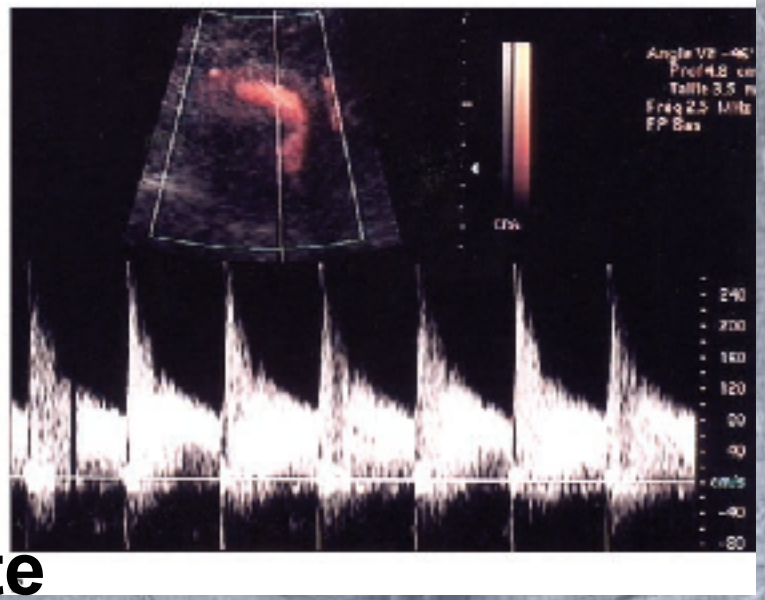
Copyright 2002 radiographics.net

Isquemia mesentérica crónica arterial



Velocidad de pico sistólico mayor 275 cm/sec altamente especifico de estenosis significativa AMS), velocidad al final de diástole mayor de 45 cm/sec puede ser mas especifica



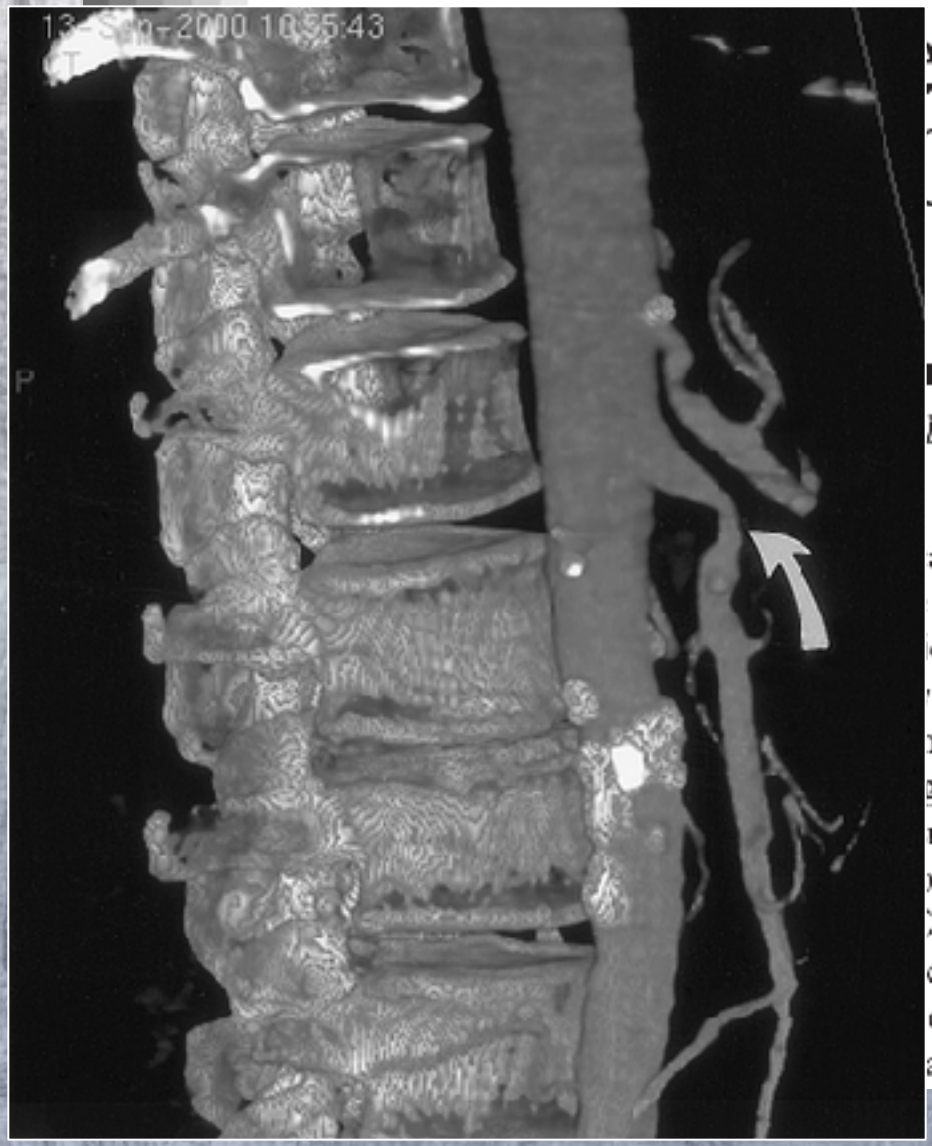


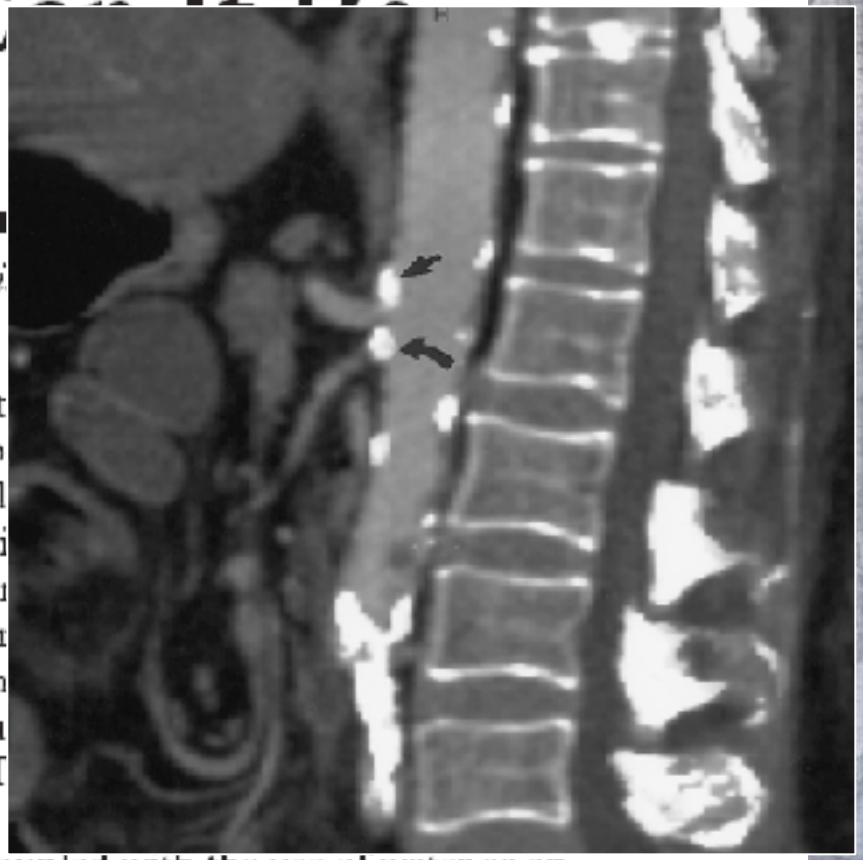
Operador dependiente

Artefactos

Multi–Detector Row

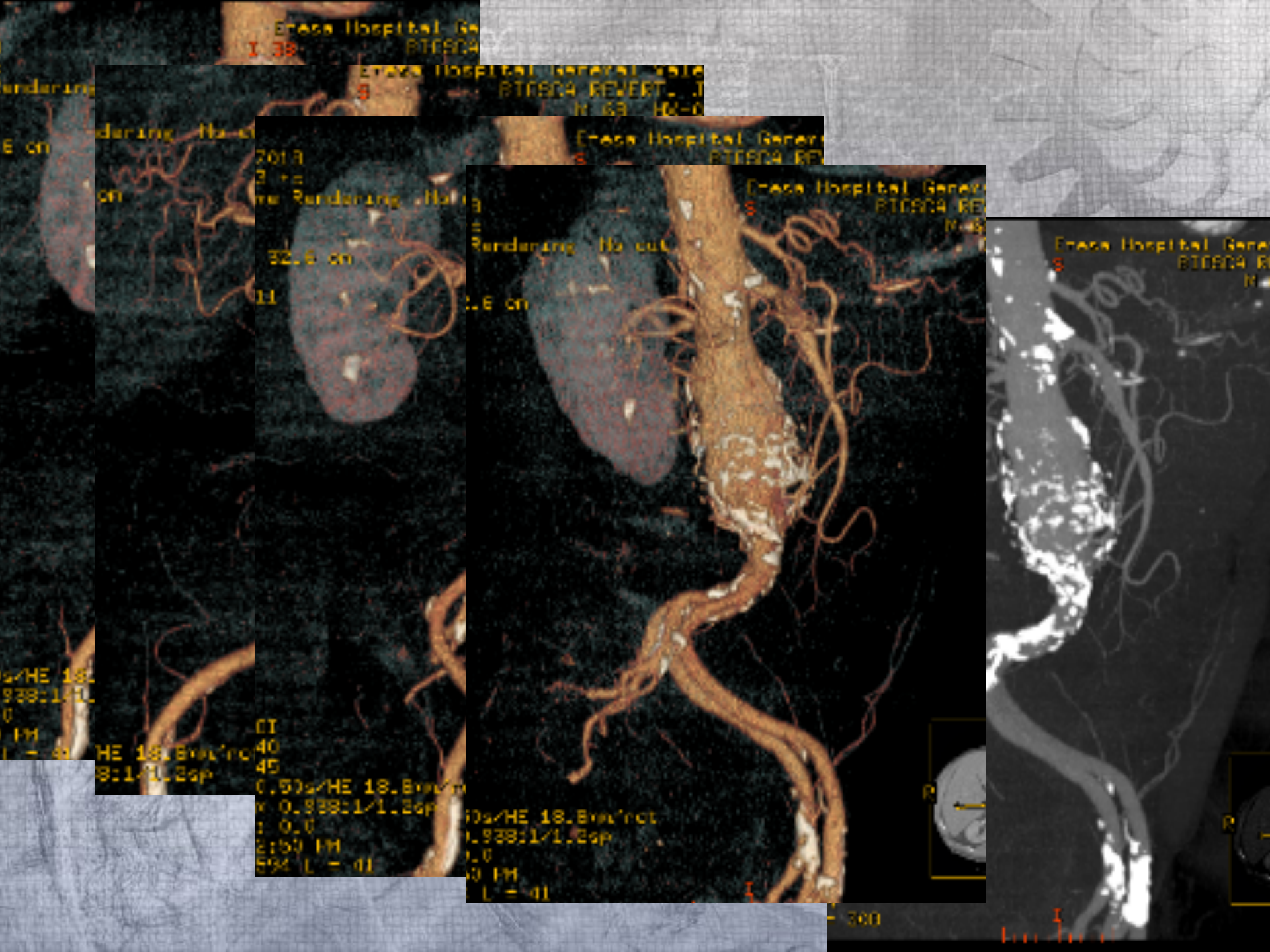
enteric

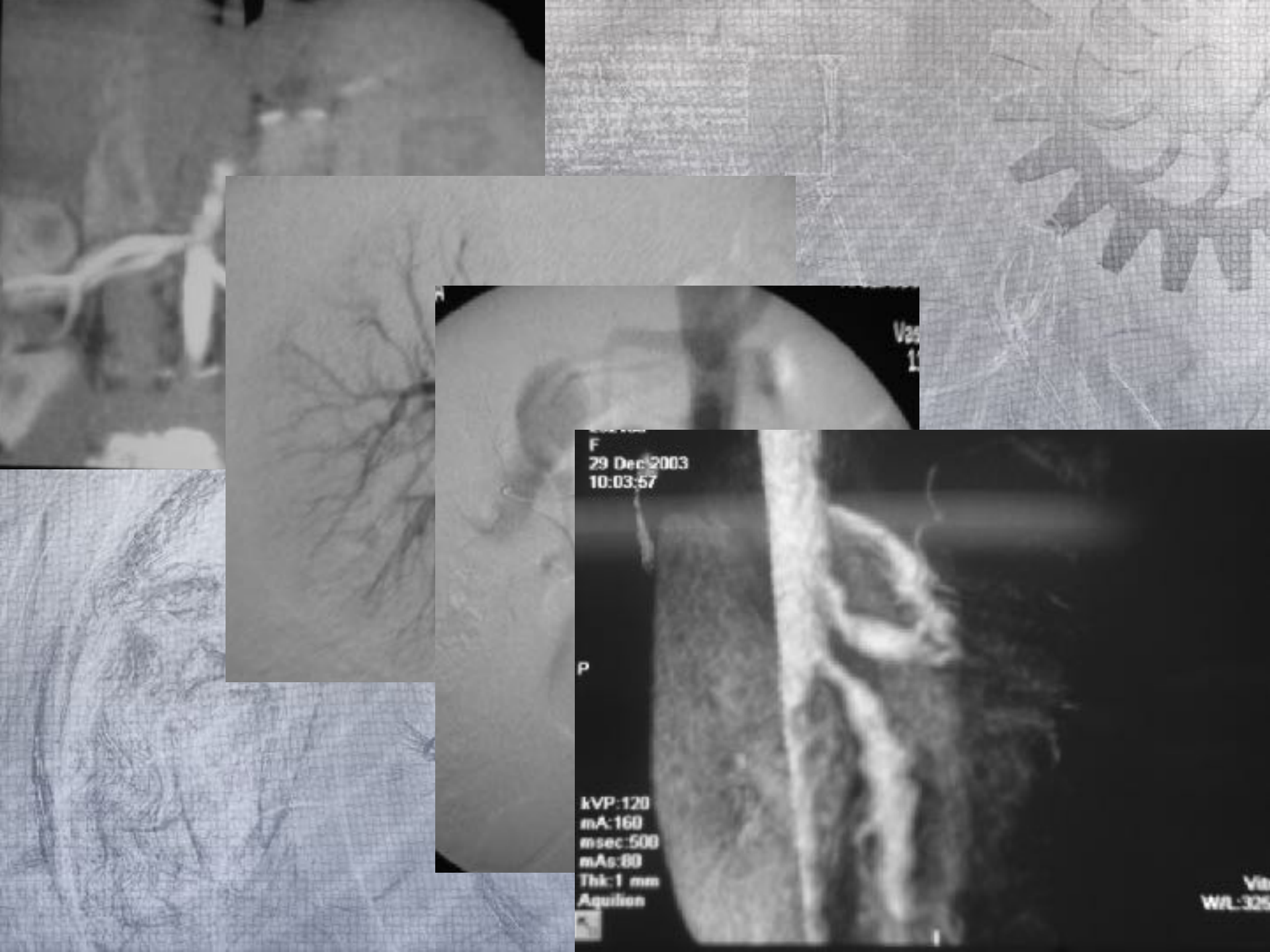




coupled with the use of water as an

alization of the bowel wall and mesen-


Erasa Hospital Ge
BTESCA
Erasa Hospital General
BTESCA REVERT
Erasa Hospital Gener
BTESCA REV
Erasa Hospital Gener
BTESCA R
32.6 cm
Rendering No cut
CT
40
45
R
I
300


F
29 Dec 2003
10:03:57
P
kVP:120
mA:160
msec:500
mAs:80
Thk:1 mm
Aquilion

LAURA
05/08/1998 F
519471
alencia
alencia

Table 3
Patient Data and Procedure Success Rates from Studies of PTA

Study and Year	Patients with Signs of CMI	Male-Female Ratio	Percentage of Patients with Solitary Lesions	Procedure Success Rate per Patient (%)	Procedure Success Rate per Artery (%)	Percentage of Successful Multiple-Vessel Procedures
Golden et al (53), 1982	7	4/3	0 (0/7)	86 (6/7)	86 (6/7)	0 (0/7)
Odurny et al (47), 1988	10	5/5	0 (0/10)	100 (10/10)	89 (17/19)	50 (5/10)
McShane et al (28), 1992	6	3/3	17 (1/6)	100 (6/6)	100 (10/10)	50 (3/6)
Matsumoto et al (33), 1995	11/19	10/9	5 (1/19)	79 (15/19)	80 (16/20)	0 (0/19)
Rose et al (48), 1995	7/8	2/6	0 (0/7)	38 (3/8)	33 (3/9)	12 (1/8)
Halliscy et al (52), 1995	14/16	3/13	25 (4/16)	88 (14/16)	84 (21/25)	25 (4/16)
Allen et al (34), 1996	19	3/16	. . .	95 (18/19)	96 (23/24)	16 (3/19)
Maspes et al (12), 1998	23	5/18	35 (8/23)	96 (22/23)	90 (37/41)	61 (14/23)
Nyman et al (32), 1998	4/5	3/2	0 (0/4)	100 (5/5)	83 (5/6)	0 (0/5)
Current study, 2001	16	10/6	25 (4/16)	100 (16/16)	74 (17/23)	6 (1/16)
All studies	117	48/81	17 (18/108)	89 (115/129)	84 (155/184)	24 (31/129)

Note. Values in parentheses are raw data.

Table 4
Mortality, Morbidity, and Clinical Success Rates from Studies of PTA

Study	PTA-related Mortality Rate (%)	Major Morbidity Rate (%)	Initial Clinical Success Rate (%)	Rate of Recurrence of Ischemic Symptoms (%)	Long-term Clinical Success Rate (%)*	Length of Follow-up (mo)†
Golden et al (53)	0 (0/7)	0 (0/7)	100 (6/6)	0 (0/6)	100 (6/6)	25
Odurny et al (47)	10 (1/10)‡	0 (0/10)	78 (7/9)	71 (5/7)	71 (5/7)	24
McShane et al (28)	0 (0/6)	0 (0/6)	83 (5/6)	40 (2/5)	100 (5/5)	21
Matsumoto et al (33)	0 (0/19)	16 (3/19)	80 (12/15)	17 (2/12)	92 (11/12)	25
Rose et al (48)	0 (0/8)	25 (2/8)	100 (7/7)	14 (1/7)	100 (7/7)	2–13
Hallisey et al (52)	0 (0/16)	0 (0/16)	100 (14/14)	25 (3/12)	83 (10/12)	4–48
Allen et al (34)	5 (1/19)§	5 (1/19)	79 (15/19)	20 (3/15)	93 (14/15)	39
Maspes et al (12)	0 (0/23)	0 (0/23)	77 (17/22)	24 (4/17)	82 (18/22)	27
Nyman et al (32)	0 (0/5)	40 (2/5)	100 (4/4)	25 (1/4)	100 (4/4)	8–36
Current study	0 (0/16)	12 (2/16)	100 (16/16)	12 (2/16)	100 (14/14)	26
All studies	1.6 (2/129)	7.8 (10/129)	87 (103/118)	23 (23/101)	90 (94/104)	26.3

Note.—Values in parentheses are raw data.
*Primary assisted.
†Values are mean or range.
‡Death caused by acute limb ischemia and septicemia.
§Death caused by occlusive dissection and bowel infarction.

Copyright 2002 radiographics.rsna.org

Isquemia mesentérica crónica arterial

- Isquemia mesentérica crónica es infrecuente y a menudo se diagnostica tarde
- Complicaciones o episodios de isquemia aguda ocurren en ausencia de tratamiento
- No existen test específicos de diagnóstico funcional de isquemia crónica

- DOPPLER
- ANGIO-TC
- ANGIO-RM

RX

entérica aguda

-Norma

-Nivele
asas.

-Engro
mucos

-Úlcera

-Patrón

-Formación

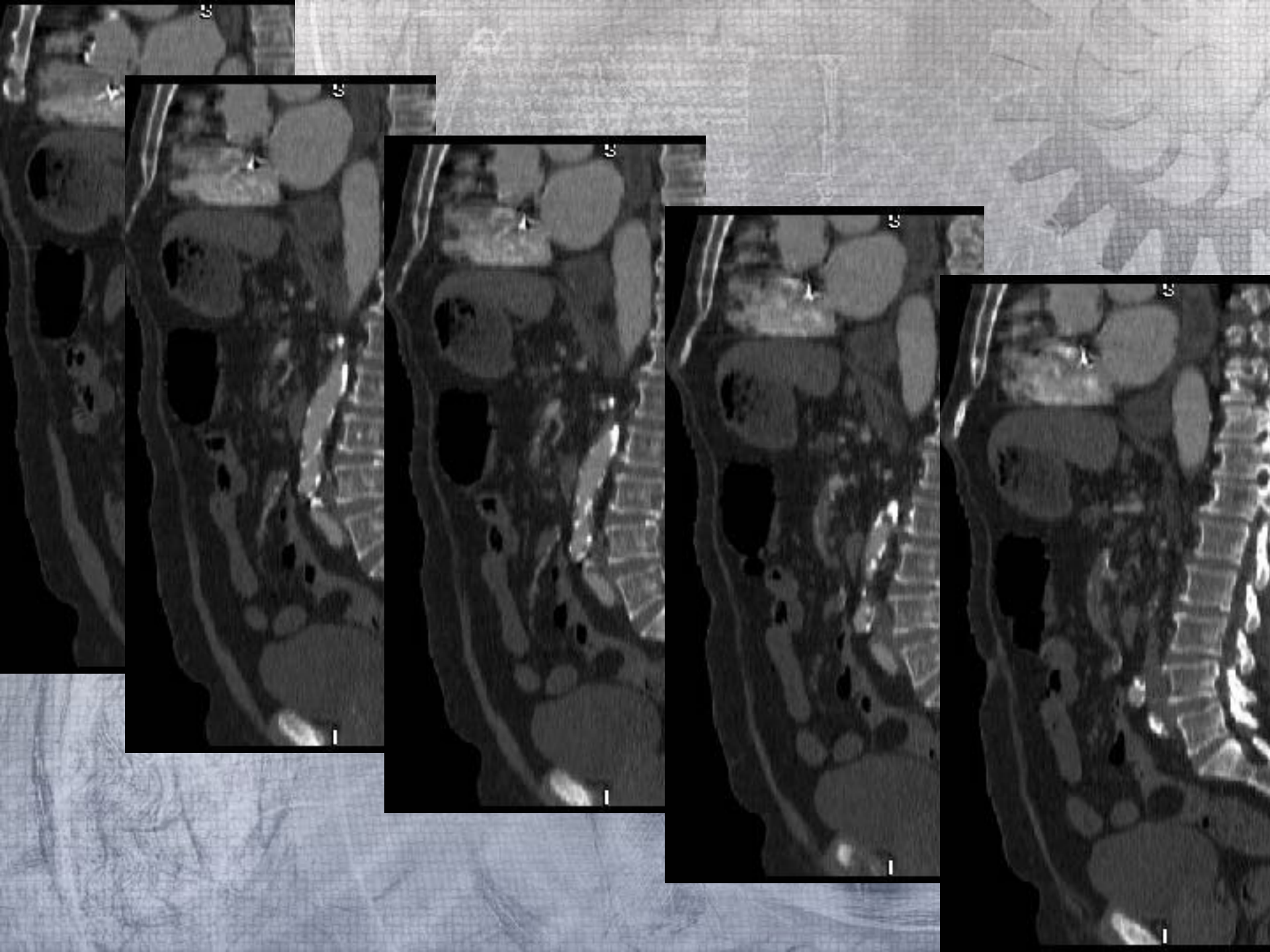
-Neumatosis intes

TC

d: 96%.

Nor

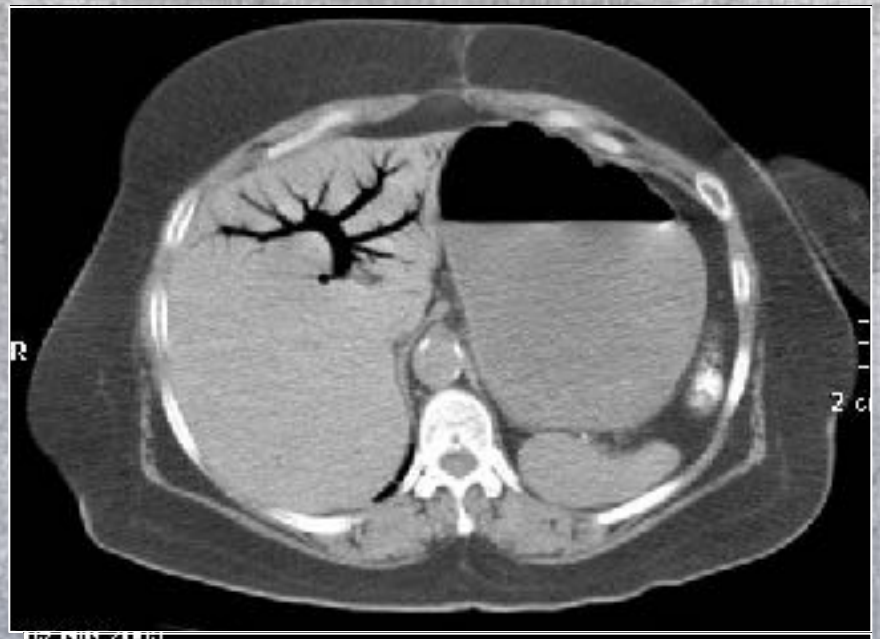
mesentérica


S
I

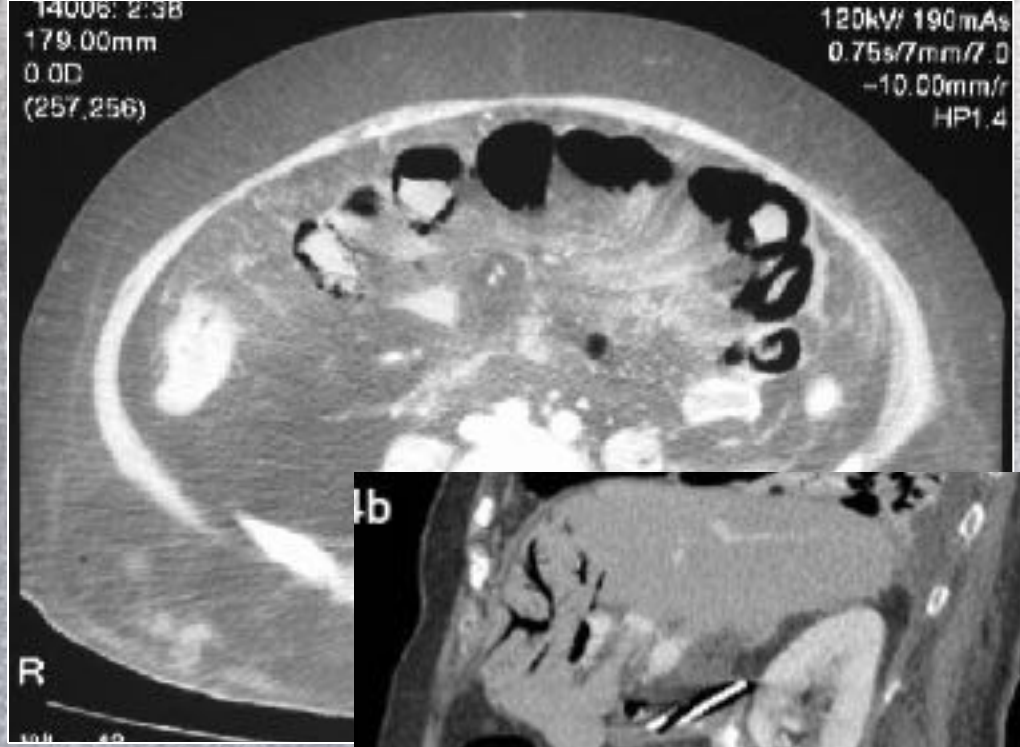
-Engrosamiento circunferencial de la pared es el hallazgo mas frecuente

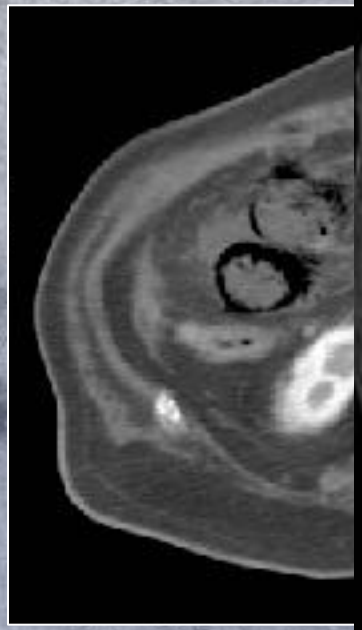
- Signo de doble halo “target sing”, por edema (<UH) o hemorragia de submucosa (>UH)
- Trabeculación de la grasa adyacente, líquido libre (paracólico)
- Adelgazamiento de pared e hipocaptación (necrosis)

- Gas en vena porta y mesentérica. 13% de casos.



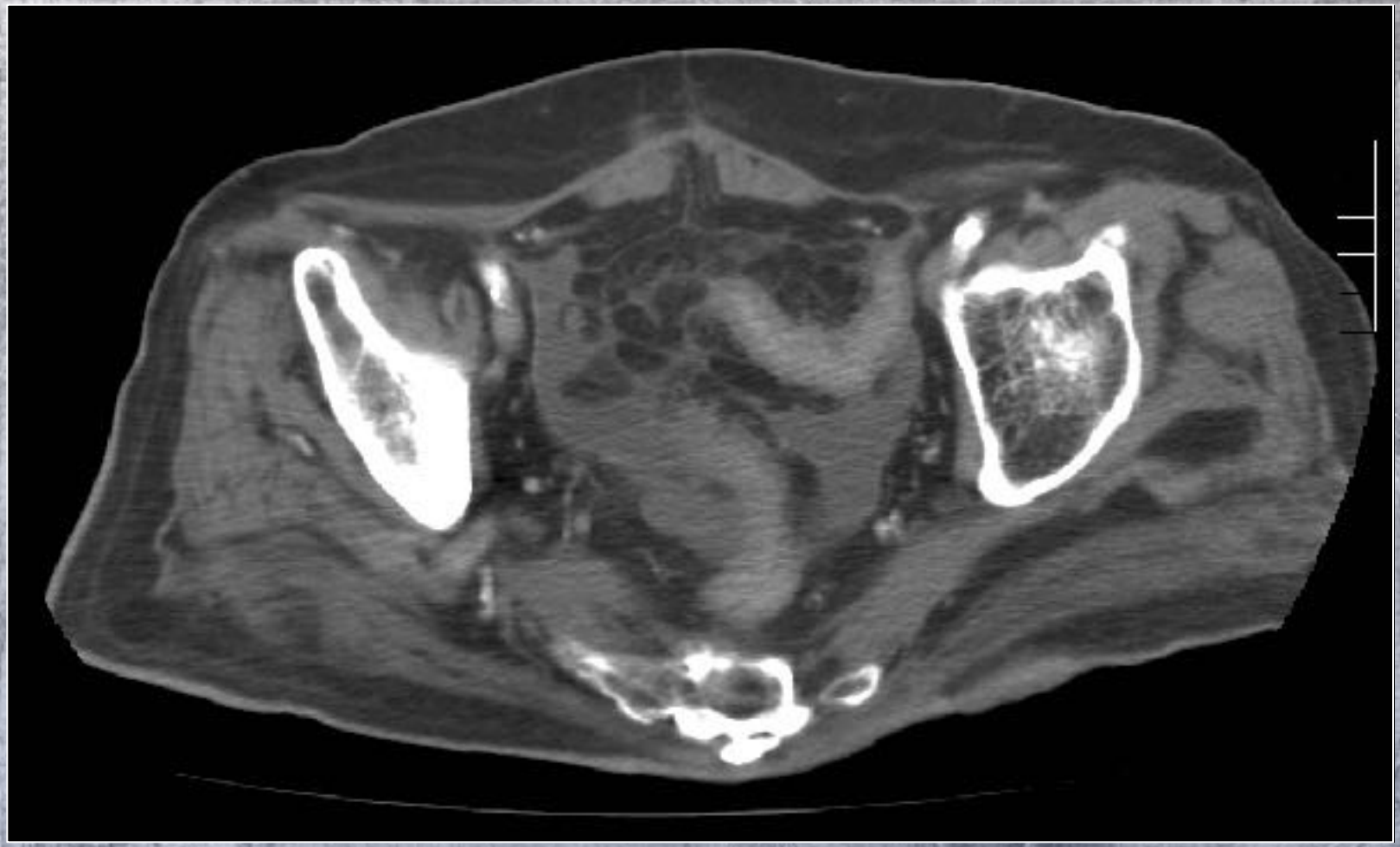
- Mesenterio-grasa perivascular edematoso.



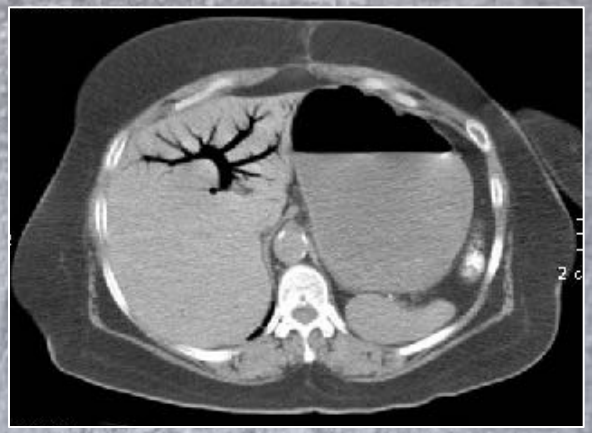


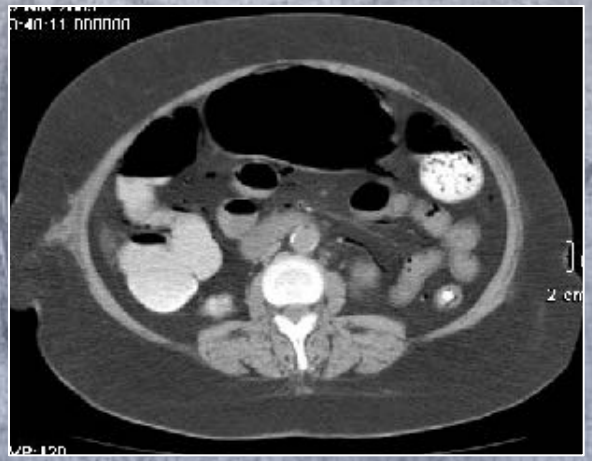
- Gas intramural. 30% de casos. Solo no específico. En casos de infarto, significa enfermedad irreversible. Previo a perforación.

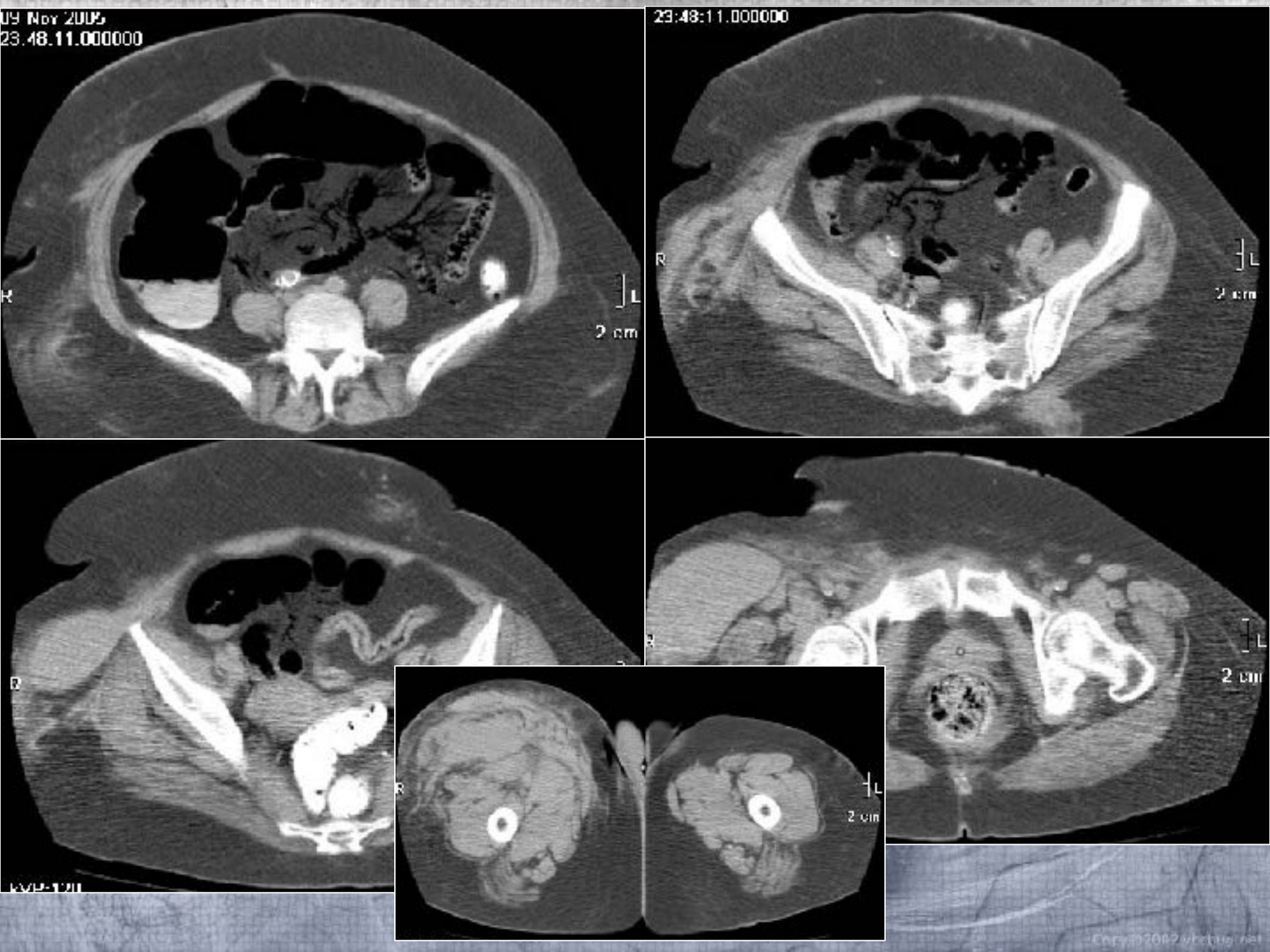
-Pequeña cantidad de ascitis.



-Mujer de 61 años, HTA, dislipemia, fumadora, intolerancia a glúcidos, IR leve, cardiopatía isquémica crónica con by-pass en el 94. Ingresada por IAM. Se realiza coronariografía. Se complica con hematoma de zona punción que aumenta de tamaño causando hipotensión.Oliguria, taquicardia y shock.

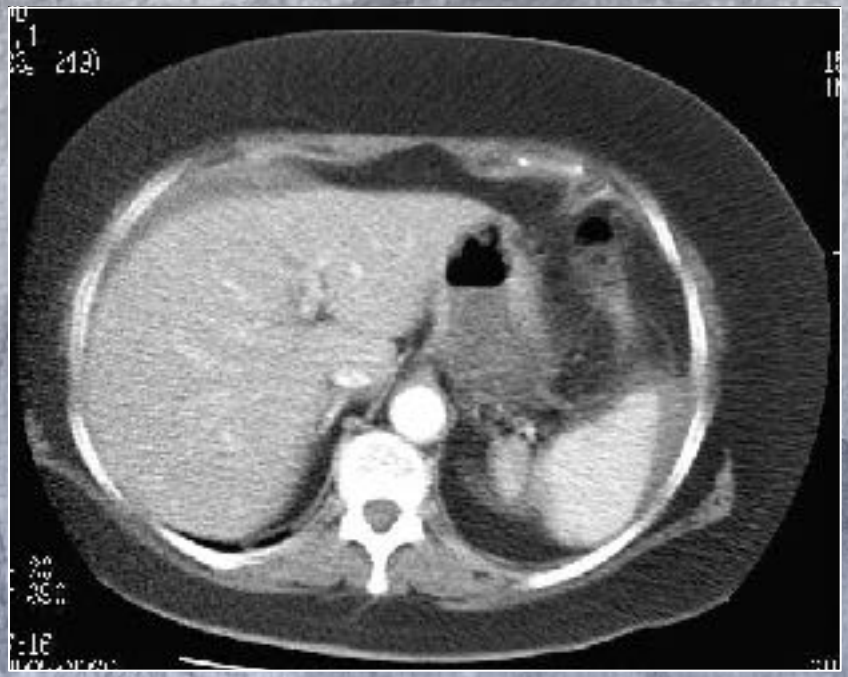


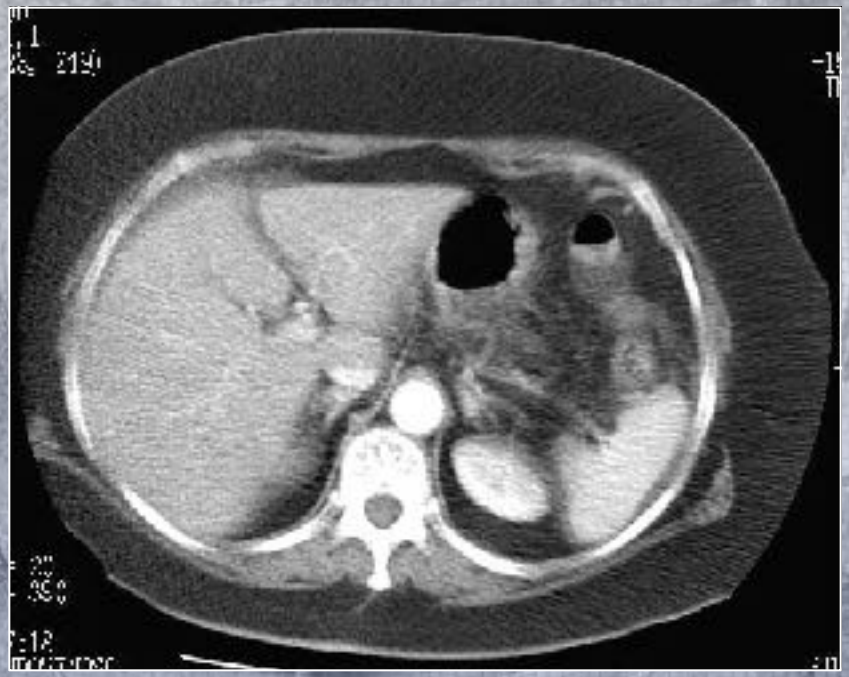


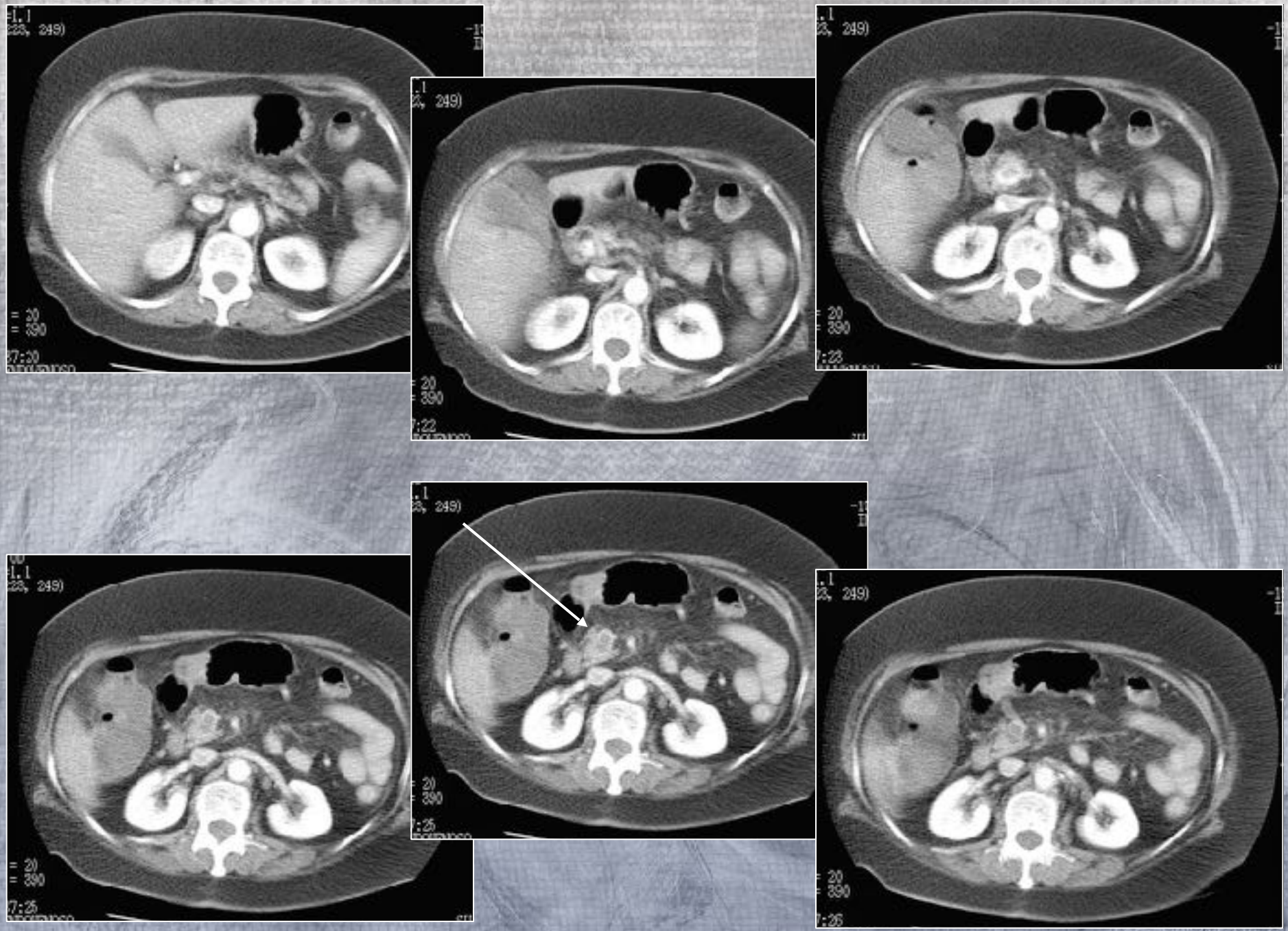

09 Nov 2005
23:48:11.000000
R
L
2 cm
23:48:11.000000
R
L
2 cm
R
L
2 cm
R
L
2 cm
R
L
2 cm

-Mujer de 69 años con dolor abdominal difuso de predominio en FII. No fiebre. Leucocitosis de 25.000 x 10^3 /mm^3. Antecedentes de HTA y dislipemia en tratamiento con fármacos.

Isquemia mesentérica aguda por obstrucción venosa. Idiopatica. Factores de riesgo: cirrosis, hipertensión portal, neoplasia, enfermedad inflamatoria, trauma, y estados de hipercoagulabilidad







CardioVascular and Interventional Radiology

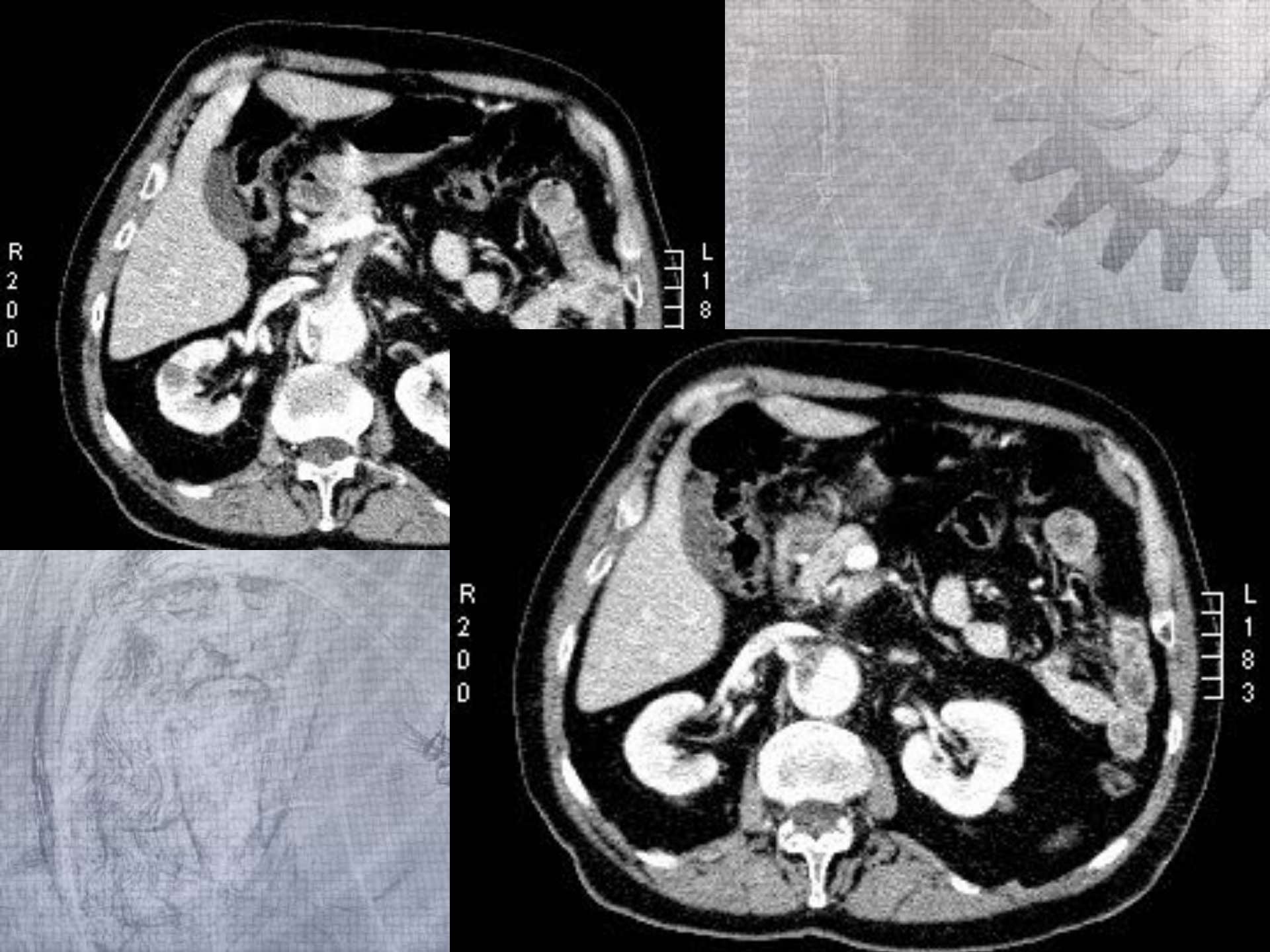
© Springer-Verlag New York, LLC, 2004
Published Online: 16 June 2004

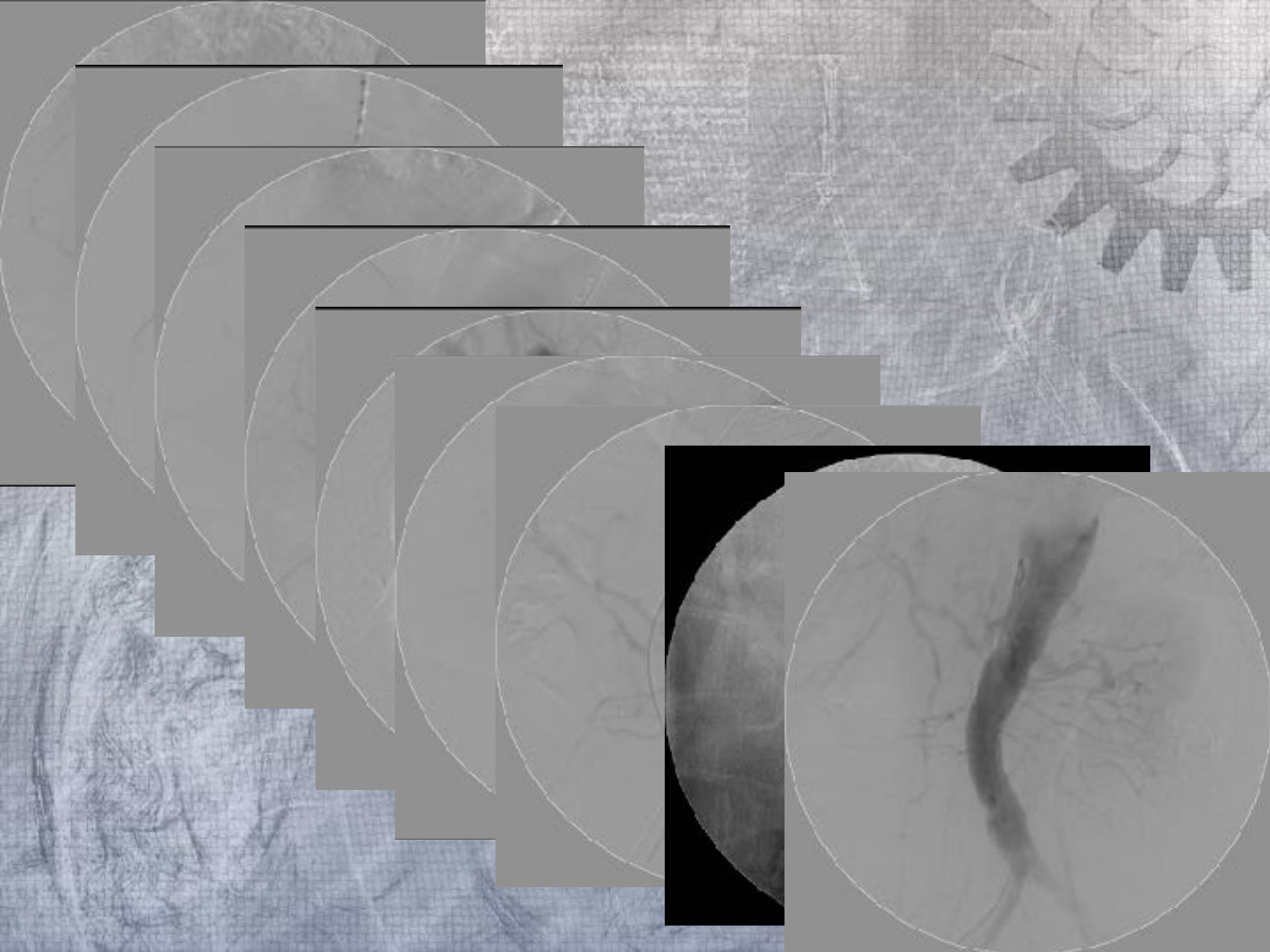
Cardiovasc Intervent Radiol (2004) 27:389–393
DOI: 10.1007/s00270-004-0461-2

Emergent Treatment of Acute Embolic Superior Mesenteric Ischemia with Combination of Thrombolysis and Angioplasty: Report of Two Cases

H. Wakabayashi,[1] Tsuyoki Shiode,[2] Michihiro Kurose,[3] Hiroki Moritani,[1] Shigeatsu Fujiki,[1]

- **No existieron complicaciones agudas en relación a la intervención**
- **El tiempo desde el inicio de los síntomas a la reperfusion parcial por trombolisis fue de 4.5 a 5.5 horas.**
- **En 1 paciente fue necesaria resección intestinal posterior (20 cm).**


R
2
0
0
L
1
8
R
2
0
0
L
1
8
3



R
1
8
8
L
1
8
8
R
1
8
8
L
1
8
8