Duodeno-pancreatectomía cefálica con abordaje de la arteria mesentérica superior por vía posterior: estudio de bordes quirúrgicos y afectación ganglionar

M. Gómez Dorronsoro,

M. R. Mercado Gutiérrez, C. Zazpe Ripa, J. Herrera Cabezón

Complejo Hospitalario de Navarra A

FACTORES PRONÓSTICOS: PÁNCREAS

CIRUGÍA

R0 N0

R0 in Pancreatic Cancer Surgery

Surgery, Pathology, Biology, or Definition Matters?

Markus W. Büchler, MD, Jens Werner, MD, and Jürgen Weitz, MD

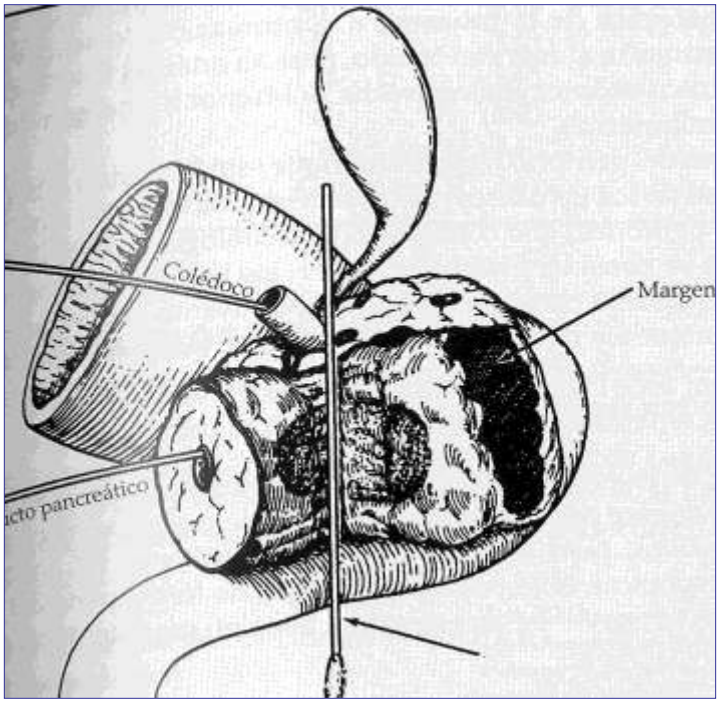
Annals of Surgery 2010;251(6)

Resecciones “curativas” R0 con supervivencia a los 5 años del 20%

AC páncreas es una enfermedad sistémica de inicio

La cirugía no es tan radical como se supone: R0 (80%-20%)

Royal College of Pathologists 2002. Campbell F : *Minimum dataset for histopathologic reporting of pancreatic, ampulla of Vater and bileduct carcinoma.*



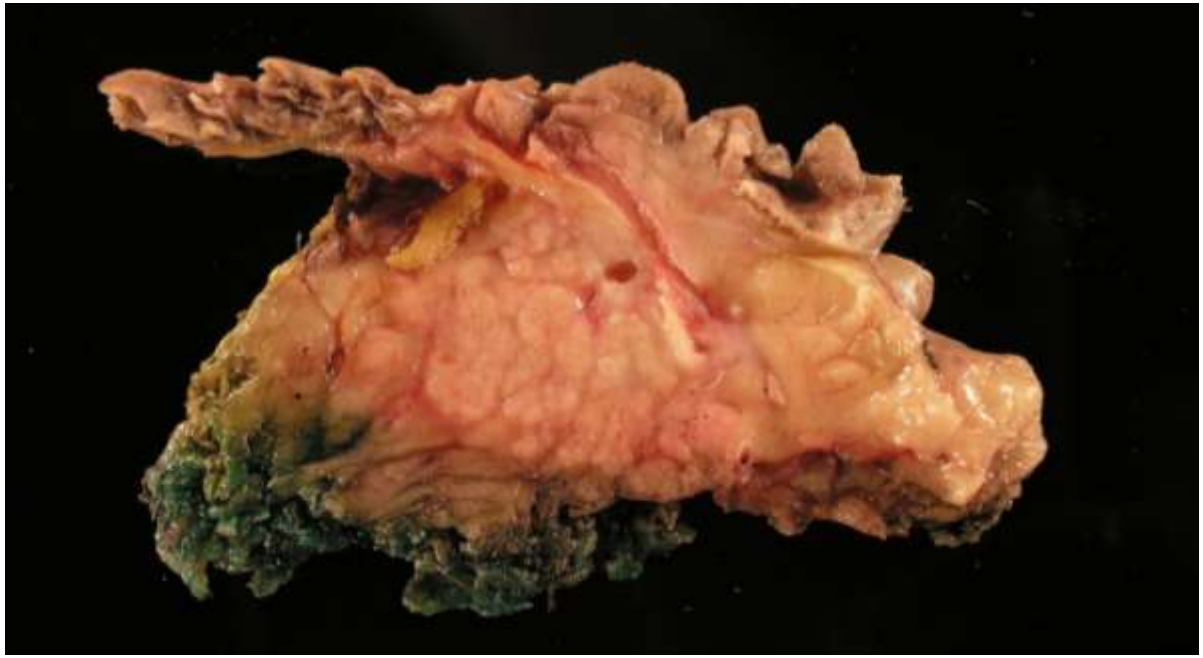
Protocol for the Examination of Specimens from Patients with Carcinoma of the Exocrine Pancreas

Protocol applies to all epithelial tumors of the exocrine pancreas. Endocrine tumors and tumors of the ampulla of Vater are not included.

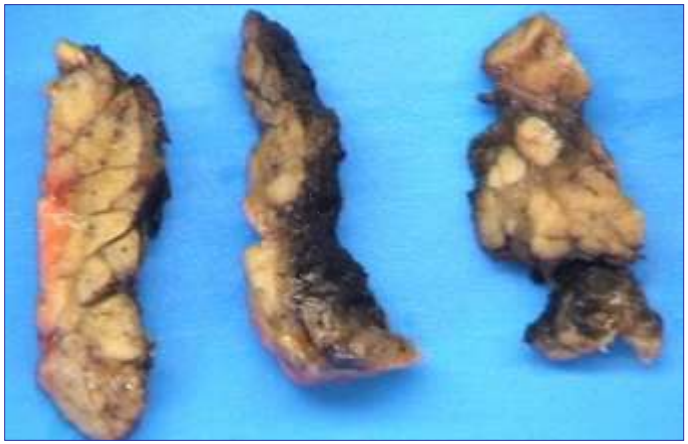
CAP Pancreas (Exocrine) Protocol Revision I

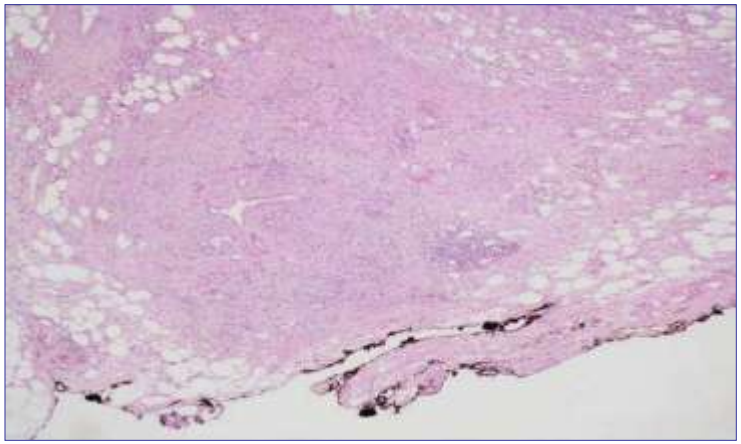
Based on AJCC/UICC TNM, 7th edition
Protocol web posting date: October 2009

Version Code
The definition of the version code can be found at www.cap.c



R0 ⩾ 1mm





Verbeke CS. *Redefining the R1 resection in pancreatic cancer. BrJSurg 2006;93:567*

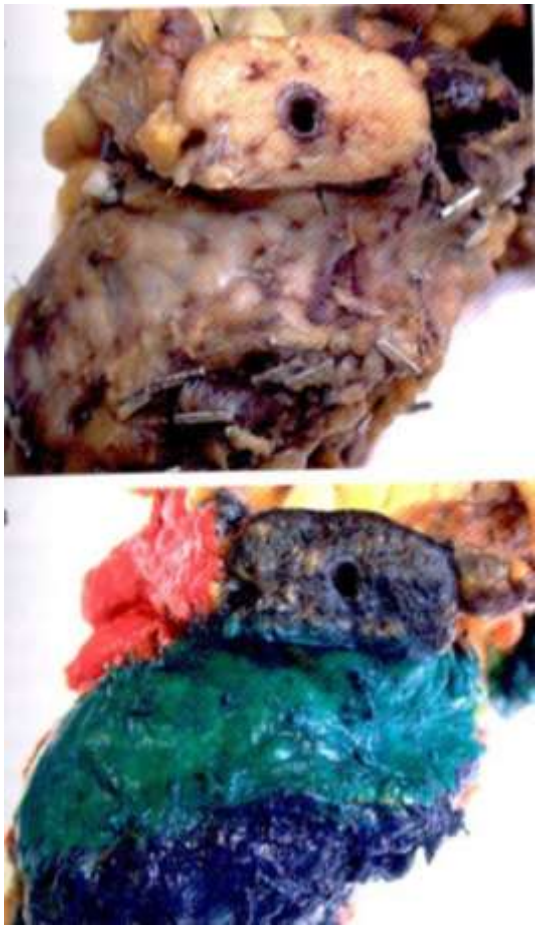
Campbell F.*Clasification of R1 resection for pancreatic cancer: the prognostic relevance of tumor involvement within 1mm of resection margin. Histopathol 2009;55:277*

Histopathology 2008, 52, 787–796. DOI: 10.1111/j.1365-2559.2007.02915.x

REVIEW

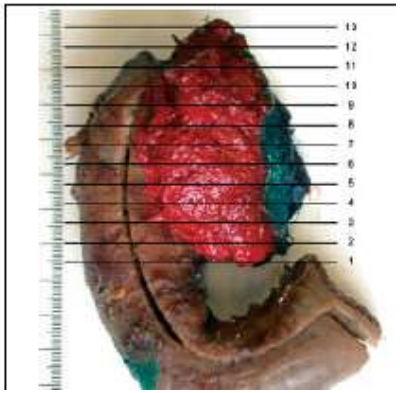
Resection margins and R1 rates in pancreatic cancer – are we there yet?

C S Verbeke
Department of Histopathology, St James's University Hospital, Leeds, UK



a Anterior CRM

b Posterior CRM



Falta un consenso internacional que defina:

- en qué consiste la afectación microscópica de los márgenes
- qué es el margen de resección circunferencial en la PD
- un protocolo estandarizado para el estudio patológico de la pieza quirúrgica

MEDICINA CLINICA

www.elsevier.es/medicinaclinica

Conferencia de consenso

Recomendaciones para el diagnóstico, estadificación y tratamiento del cáncer de páncreas (parte II)

Recommendations for diagnosis, staging and treatment of pancreatic cancer (Part II)

Salvador Navarro[a,*], Eva Vaquero[b], Joan Maurel[c], Josep Antoni Bombí[d], Carmen De Juan[e], Jaime Feliu[f], Laureano Fernández Cruz[g], Angels Ginés[h], Enrique Girela[i], Ricardo Rodríguez[j] y Luis Sabater[k], en representación del Grupo Español de Consenso en Cáncer de Páncreas, el Club Español Biliopancreático (CEBP), Grupo Español Multidisciplinar de Cáncer Digestivo (GEMCAD), Sociedad Española de Diagnóstico por Imagen del Abdomen (SEDIA), Sociedad Española de Endoscopia Digestiva (SEED) y la Sociedad Española de Anatomía Patológica (SEAP)♦

Med Clin (Barc) 2010:124 (14) :643-655

1. Falta de un consenso internacional que defina en qué consiste la afectación de los márgenes
2. Uso de una nomenclatura confusa para los márgenes de resección
3. Ausencia de una estandarización en la técnica de disección
4. Variación en la extensión y muestreo de la pieza quirúrgica
5. Dificultad para distinguir los diferentes carcinomas de esta pieza

Importancia del informe AP

- patrón de crecimiento del tumor
- examen histológico adecuado

Determinar el % de resecciones R1
más que la Cirugía

Virchows Arch (2009) 454:125–131
DOI 10.1007/s00428-008-0711-9

REVIEW AND PERSPECTIVE

Retroperitoneal margin of the pancreaticoduodenectomy specimen: anatomic mapping for the surgical pathologist

Mahmoud A. Khalifa · Vlad Maksymov · Corwyn Rowsell

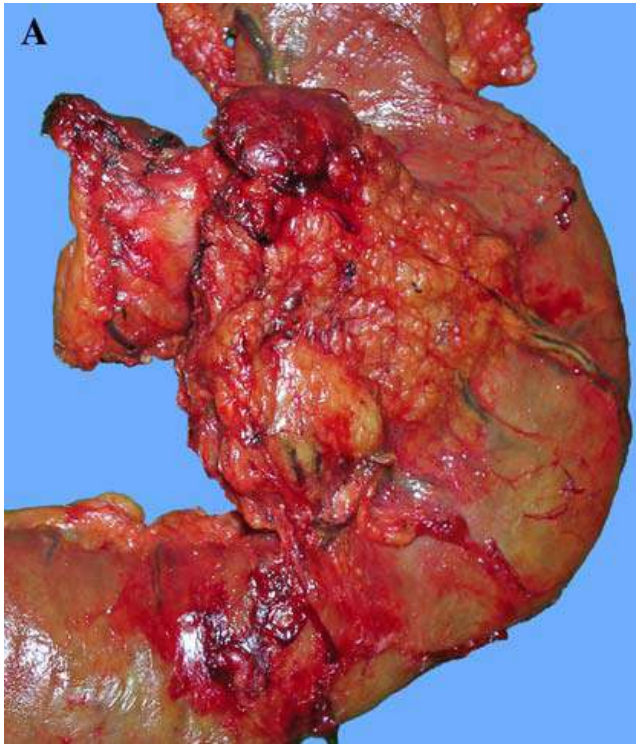


Table 1 Components of the retroperitoneal surgical margin

Component	Nature	Assessment	Related structures
Uncinate process	Dissection	Permanent only	Posterior wall fat
Uncinate margin	Resection	IOC and permanent	SMA
Groove	Dissection	Permanent only	SMV/PV
Medial aspect (when present)	Dissection	Permanent only	Posterior wall fat
Superior and inferior	Dissection	Permanent only	Abdominal fibroadipose tissue

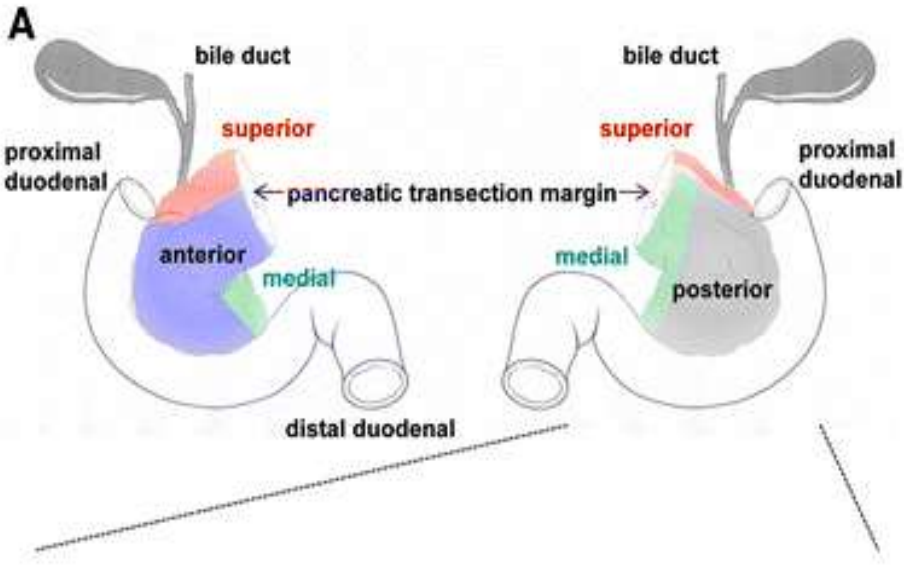
Table 2 Summary of the terms used in our proposed mapping

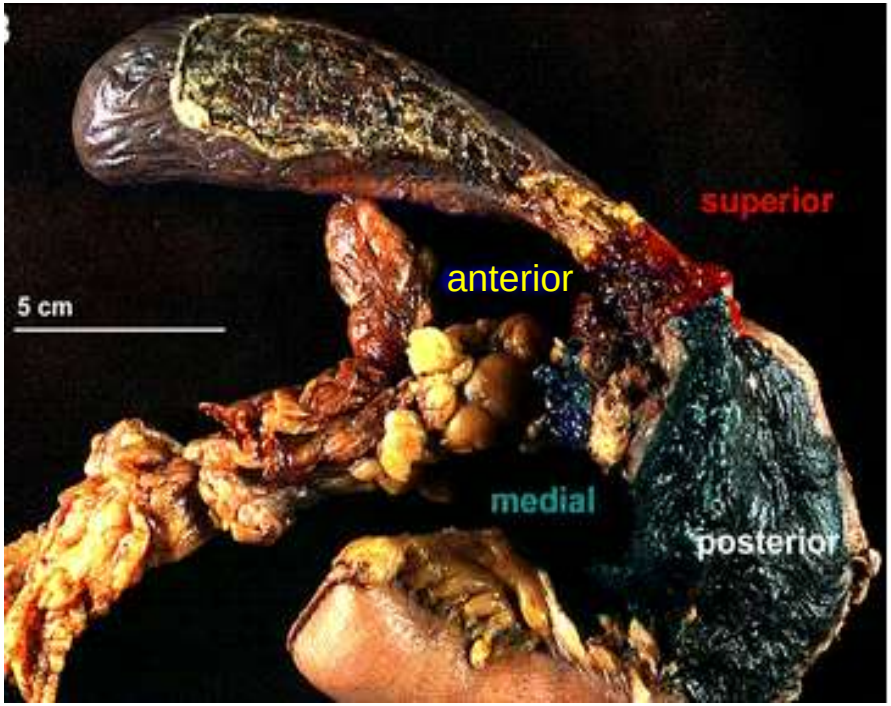
Terms used in our proposed mapping	Corresponding terms used by others
Retroperitoneal margin	• Soft tissue margin directly adjacent to the proximal 3–4 cm of SMA [2, 4, 10, 11] • Circumferential resection margin: posterior [9] • Peripancreatic adipose tissue behind the head of the pancreas located dorsally and laterally to the SMA [12]
Uncinate process margin	• Medial margin [5] • Circumferential resection margin: medial [9]
Uncinate margin	• SMA margin [14]
The groove (vascular bed)	•Generally included in the "posterior/dorsal" margin
Medial aspect of the retroperitoneal margin (not in every case)	• Generally included in the "posterior/dorsal" margin

Annals of Surgical Oncology 15(6):1651–1660
DOI: 10.1245/s10434-008-9839-8

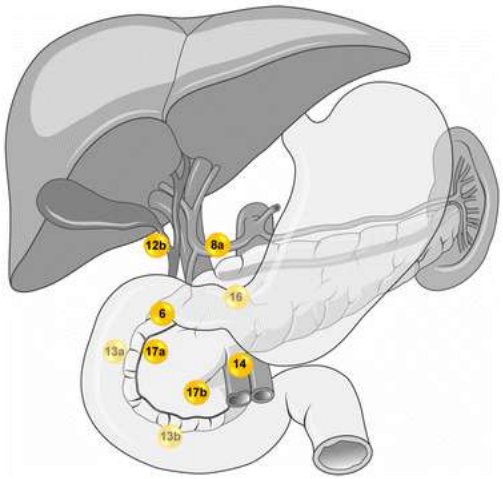
Most Pancreatic Cancer Resections are R1 Resections

Irene Esposito, MD,[1,3] Jörg Kleeff, MD,[2,4] Frank Bergmann, MD,[1] Caroline Reiser, MD,[2,4] Esther Herpel, MD,[1] Helmut Friess, MD,[2,4] Peter Schirmacher, MD,[1] and Markus W. Büchler, MD[2]





Margen positivo: tumor a una distancia menor o igual a 1 mm



Media: 24 ganglios

(19-30)

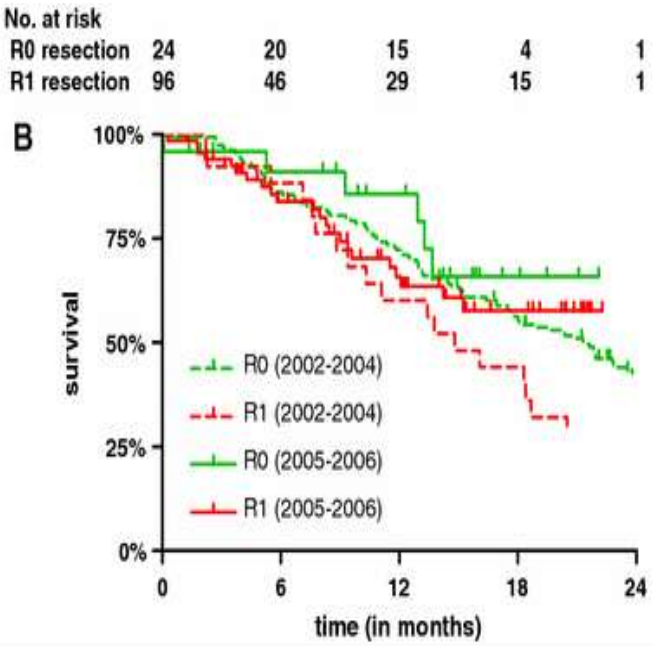
Table 3 Tumor margin characteristics of 111 c (2005–2006)

Characteristic	Value, n (%)
R classification	
R0	27 (24%)
R1	84 (76%)
RM involvement	
Posterior	39 (47%)
Medial	57 (68%)
Anterior surface	8 (10%)
Superior	0
Transection (pancreas)	3 (4%)
Bile duct	4 (5%)
Stomach/duodenum	3 (4%)
Number of margins	
1	56 (68%)
2	22 (26%)
3 or more	5 (6%)
Type of involvement	
Direct extension	78 (93%)
Locoregional spreading	6 (7%)

RM, resection margin.

2002- 2004

R0 86%



Most Pancreatic Cancer Resections are R1 Resections
Ann Surg Oncol 2008;15:1651-660

FACTORES PRONÓSTICOS : PÁNCREAS

CIRUGÍA

R0 N0

Ann Surg Oncol 2008;15:165-74

Impact of Total Lymph Node Count and Lymph Node Ratio on Staging and Survival after Pancreatectomy for Pancreatic Adenocarcinoma: A Large, Population-Based Analysis

Mark B. Slidell, MD, MPH,[1] David C. Chang, MPH, MBA,[2] John L. Cameron, MD,[2] Christopher Wolfgang, MD, PhD,[2] Joseph M. Herman, MD, MSc,[3] Richard D. Schulick, MD,[2] Michael A. Choti, MD, MBA,[2] and Timothy M. Pawlik, MD, MPH[2]

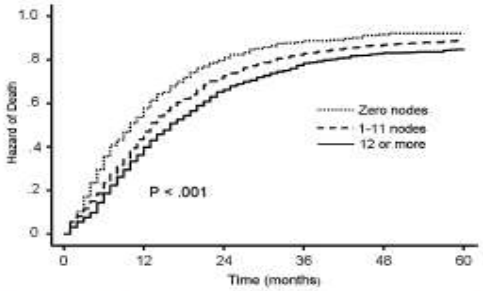


FIG. 4. When all patients (n = 3868) were stratified by the total number of lymph nodes examined, patients who had fewer than 12 lymph nodes examined had significantly worse long-term survival compared with patients who had at least 12 nodes removed. However, patients who had no lymph nodes evaluated had the worst overall outcome.

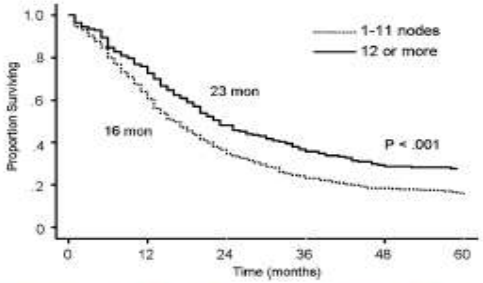


FIG. 5. Patients with N0 disease who had 1–11 lymph nodes examined had a shorter median survival (16 months) compared with N0 patients who had at least 12 lymph nodes examined (23 months) (P < .001).

Mínimo de 12 ganglios linfáticos, para una correcta estadificación

Modern Pathology (2009) 22, 107–112

The number of lymph nodes identified in a simple pancreatoduodenectomy specimen: comparison of conventional *vs* orange-peeling approach in pathologic assessment

N Volkan Adsay[1], Olca Basturk[2], Deniz Altinel[1], Fayyaz Khanani[4], Ipek Coban[1], Donald W Weaver[4], David A Kooby[4], Juan M Sarmiento[4] and Charles Staley[4]

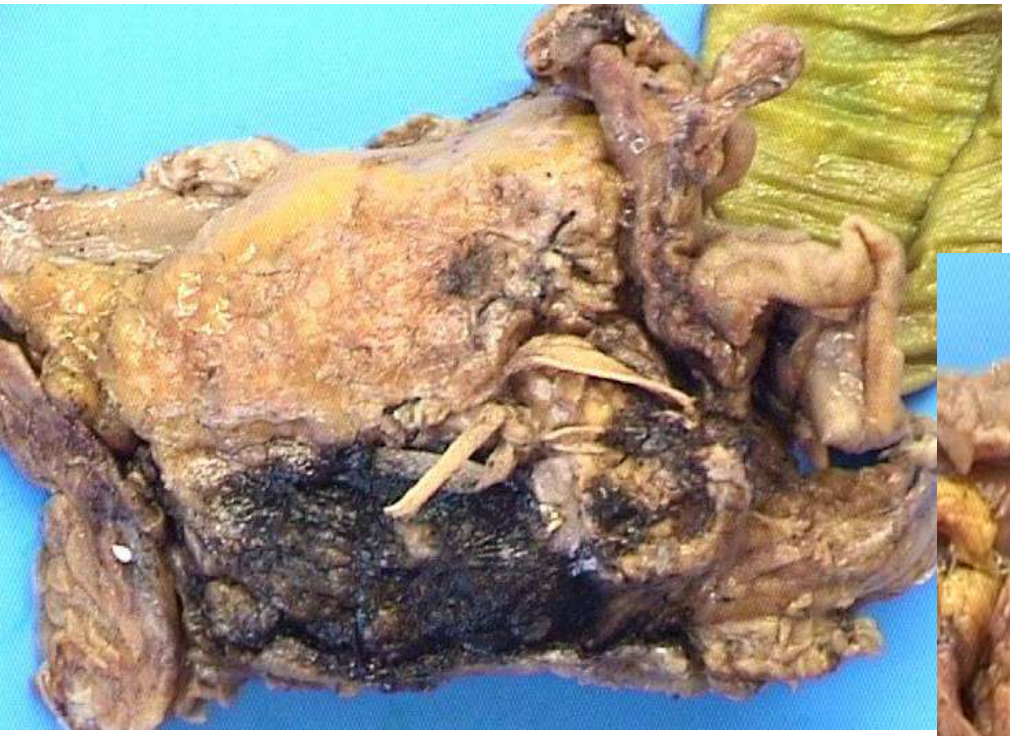
World J Surg. 2010 Apr;34(4):768-75.

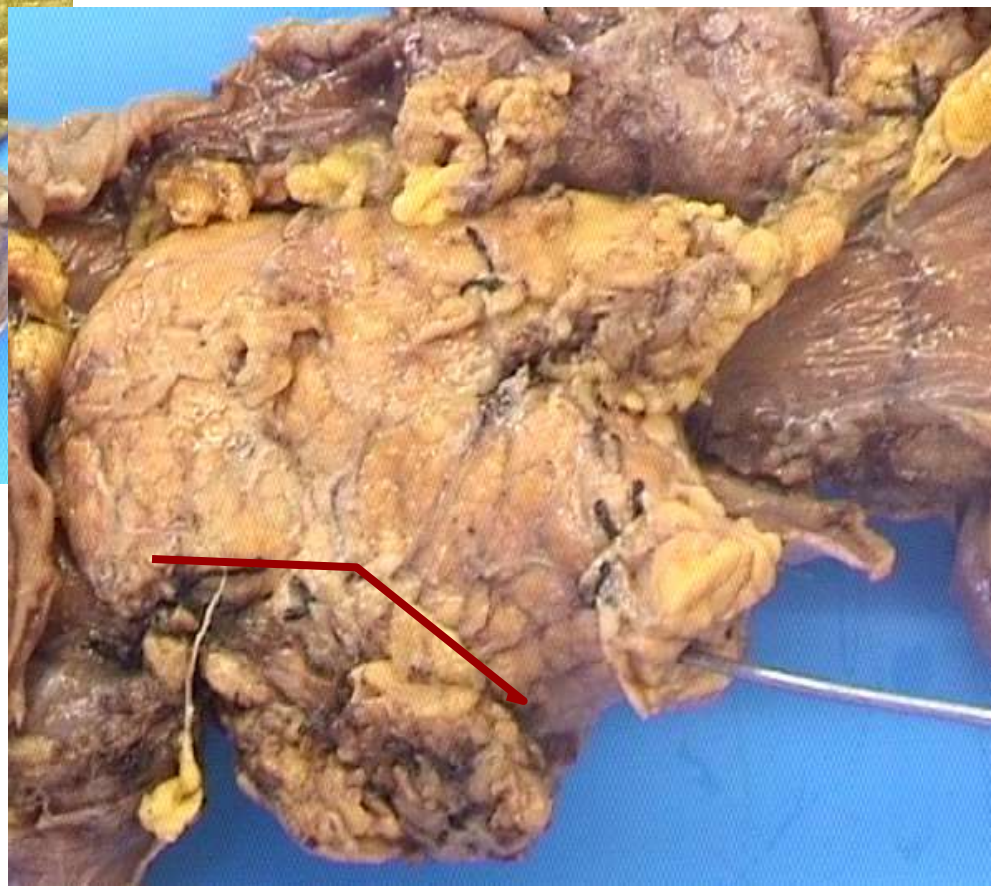
Lymph node ratio versus number of affected lymph nodes as predictors of survival for resected pancreatic adenocarcinoma.

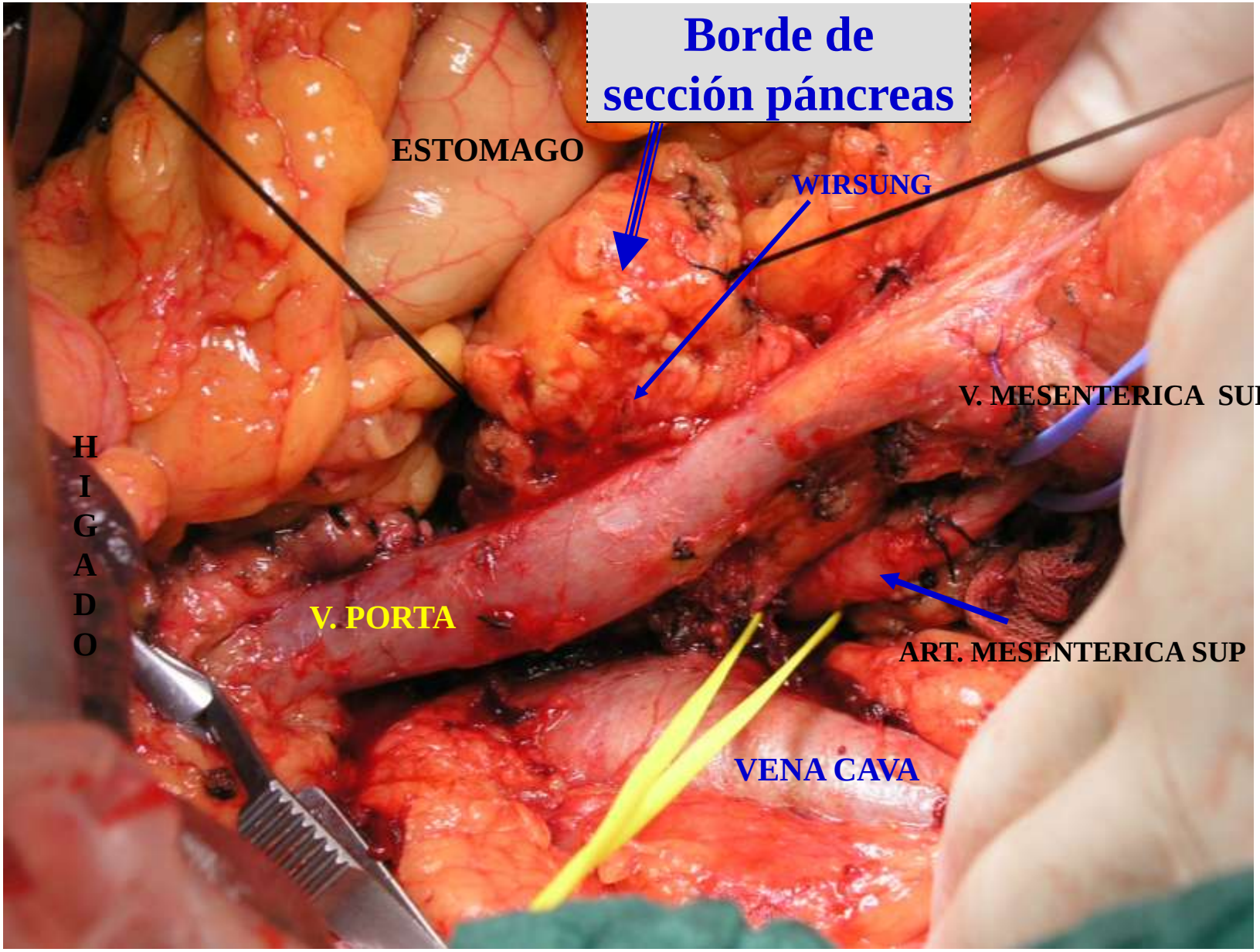
Bhatti I, Peacock O, Awan AK, Semeraro D, Larvin M, Hall RI.

2008

Duodeno-pancreatectomía cefálica con abordaje de la arteria mesentérica superior por vía posterior






Borde de sección páncreas
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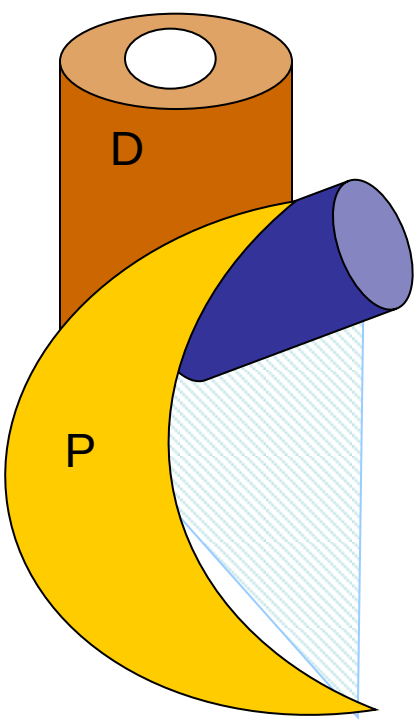
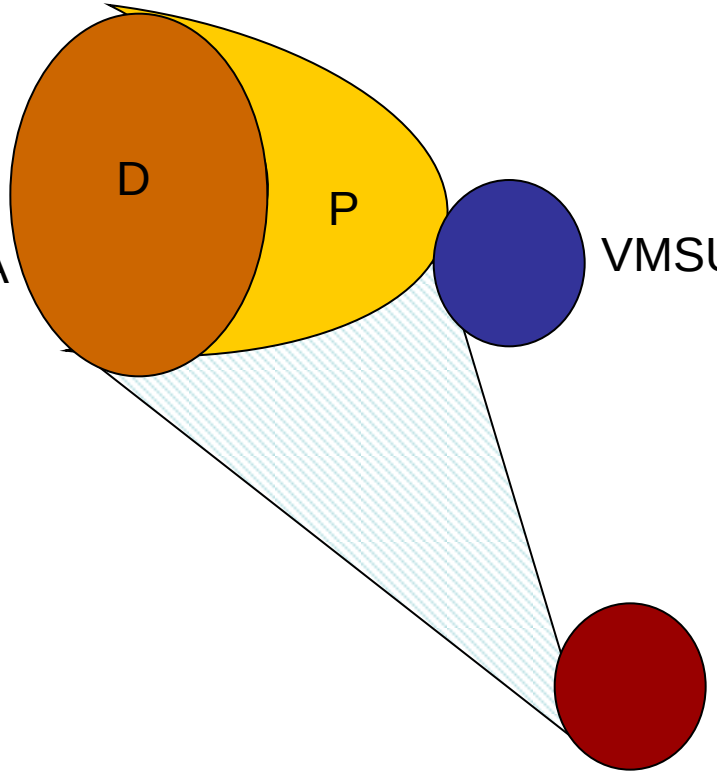
V. MESENTERICA SUP
HIGADO
V. PORTA
ART. MESENTERICA SUP
VENA CAVA



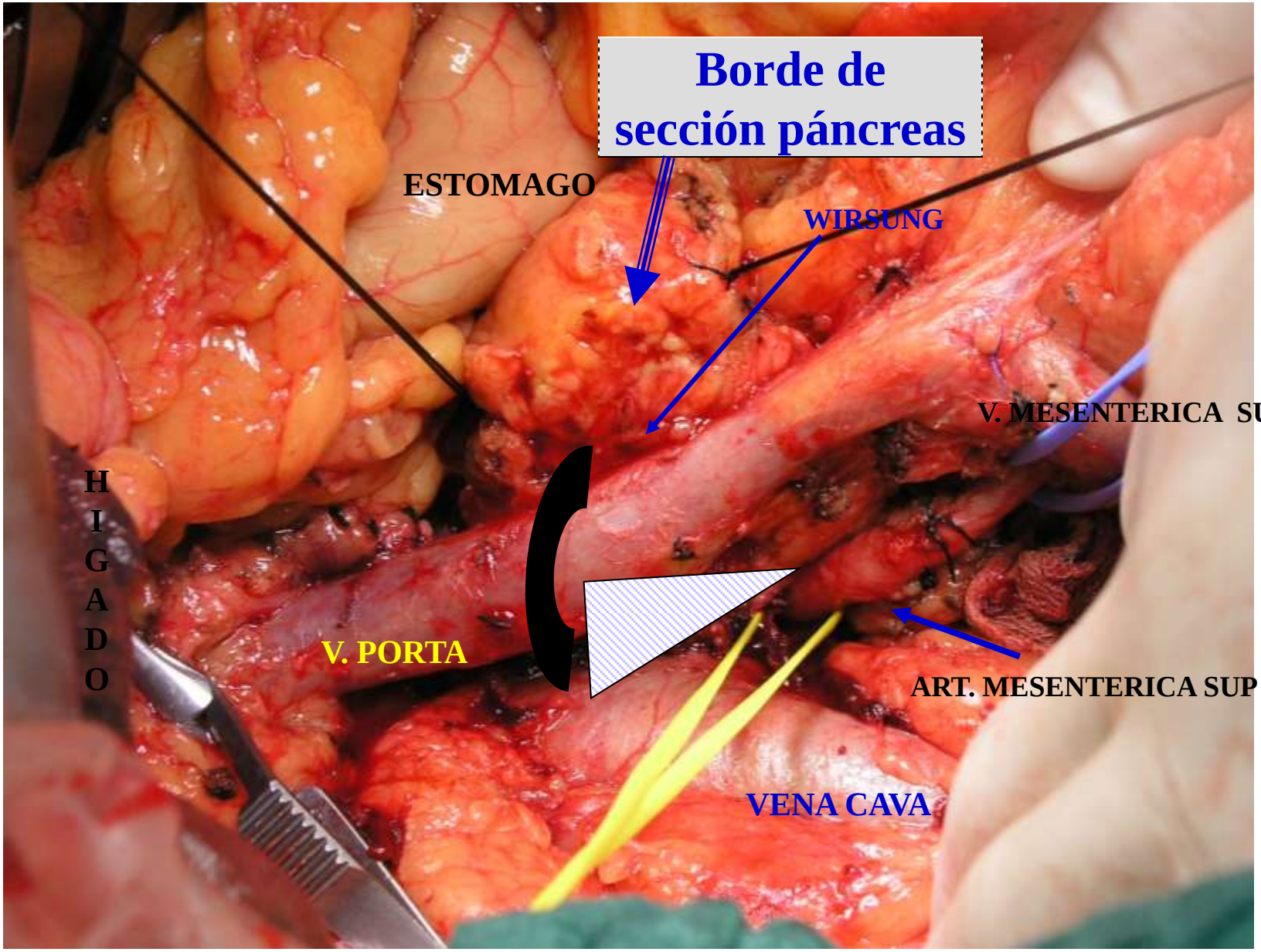
VENA
MESENTÉRICA
SUPERIOR



VMSUP

ARTERIA

MESENTÉRICA
SUPERIOR


Borde de sección páncreas
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V. PORTA
ART. MESENTERICA SUP
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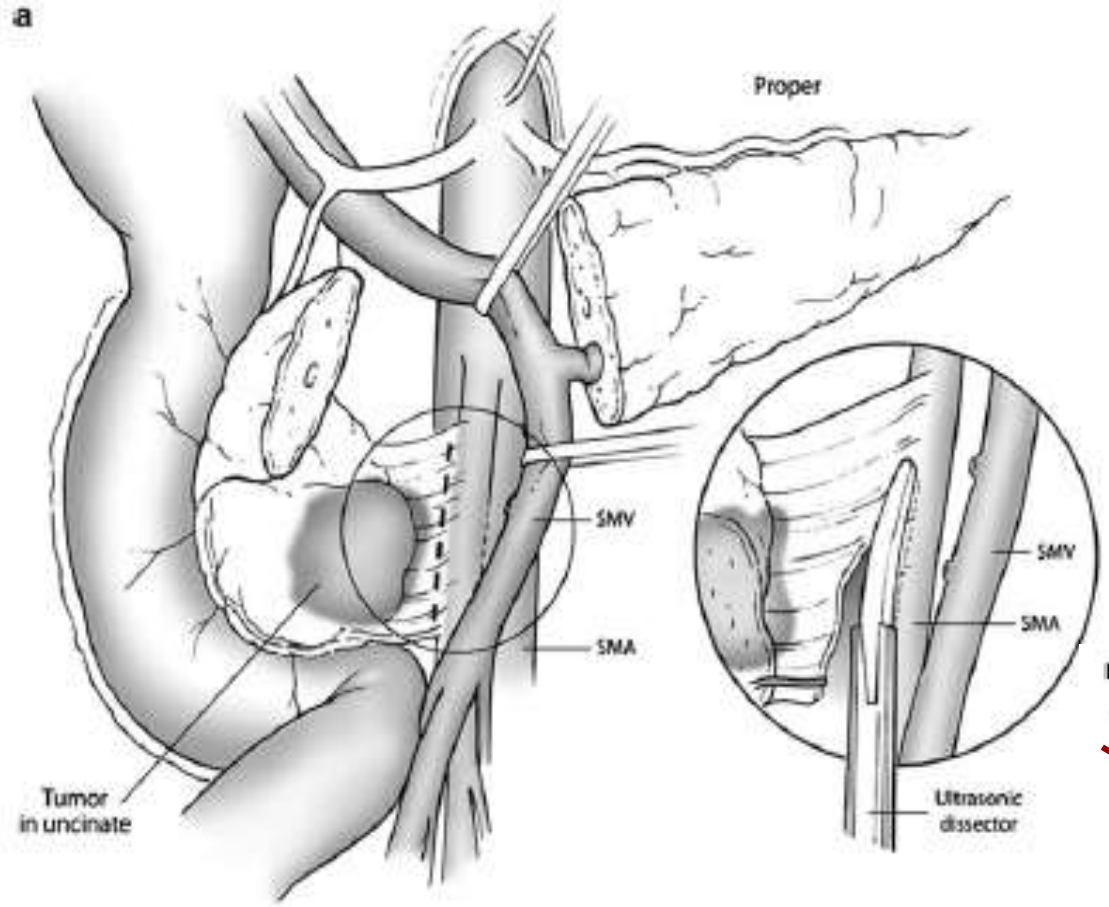
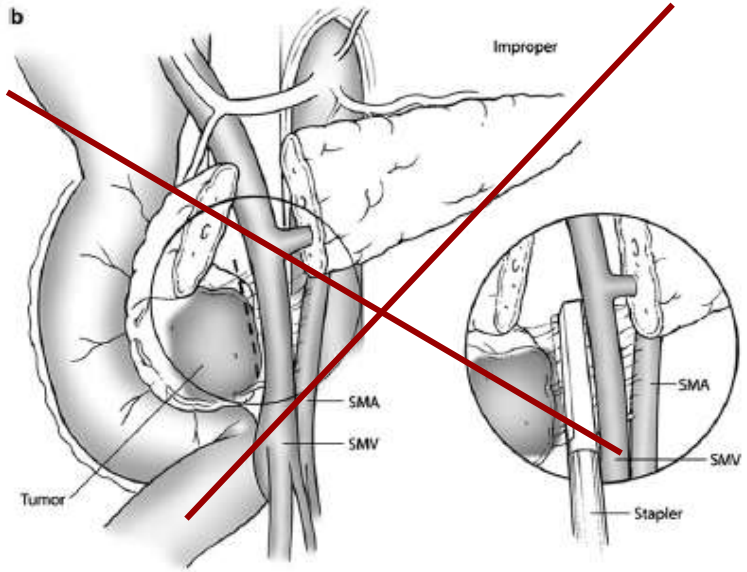




Ann Surg Oncol (2011) 18:337–344
DOI 10.1245/s10434-010-1282-y

Annals of
SURGICAL ONCOLOGY
OFFICIAL JOURNAL OF THE SOCIETY OF SURGICAL ONCOLOGY

ORIGINAL ARTICLE – PANCREATIC TUMORS

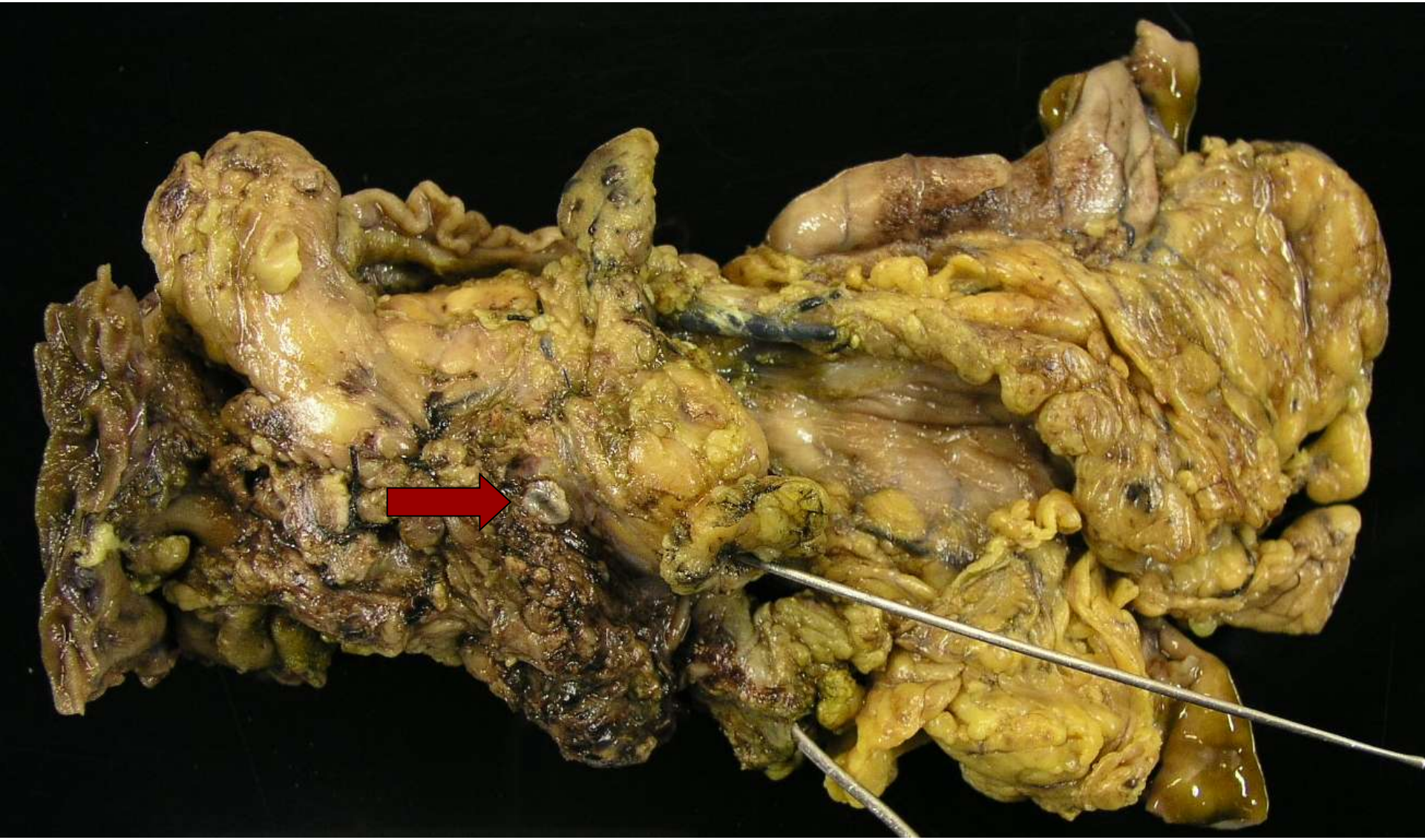
Standardization of Surgical and Pathologic Variables is Needed in Multicenter Trials of Adjuvant Therapy for Pancreatic Cancer: Results from the ACOSOG Z5031 Trial

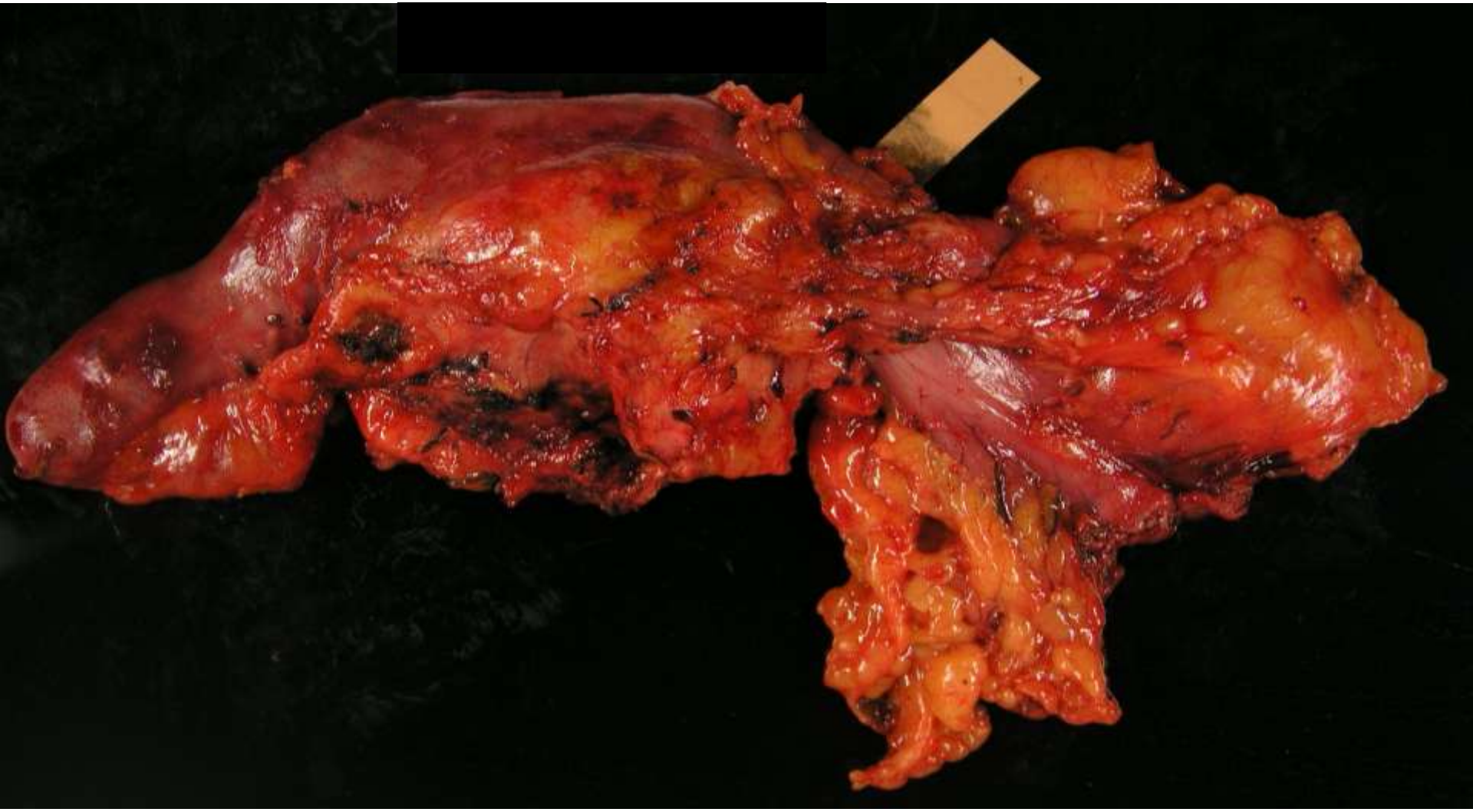
Matthew H. G. Katz, MD[1], Nipun B. Merchant, MD[2], Steven Brower, MD[3], Megan Branda, MD[4], Mitchell C. Posner, MD[5], L. William Traverso, MD[6], Ross A. Abrams, MD[7], Vincent J. Picozzi, MD[8], Peter W. T. Pisters, MD[1] and The American College of Surgeons Oncology Group

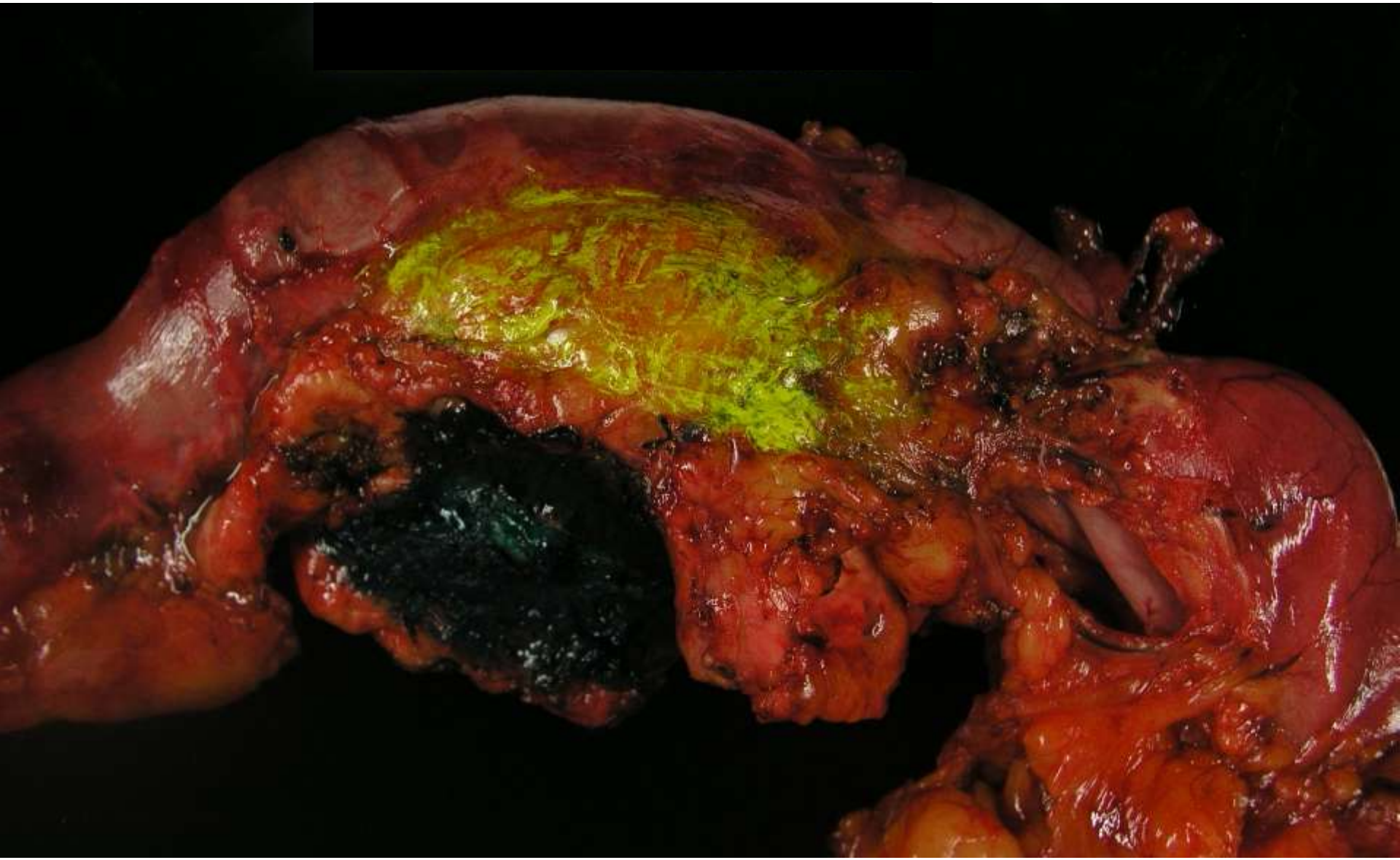
2008

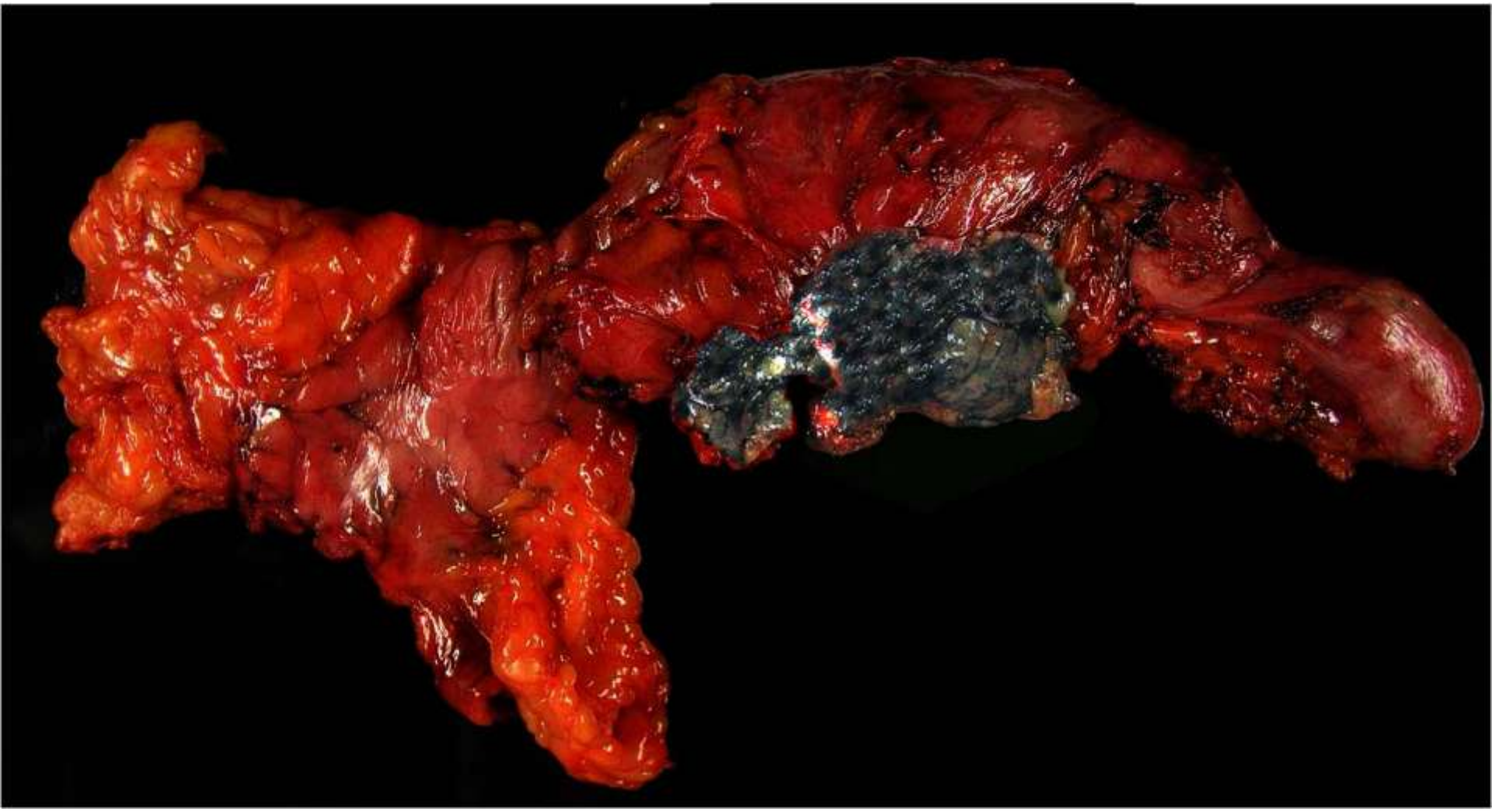
Duodeno-pancreatectomía cefálica con abordaje de la arteria mesentérica superior por vía posterior

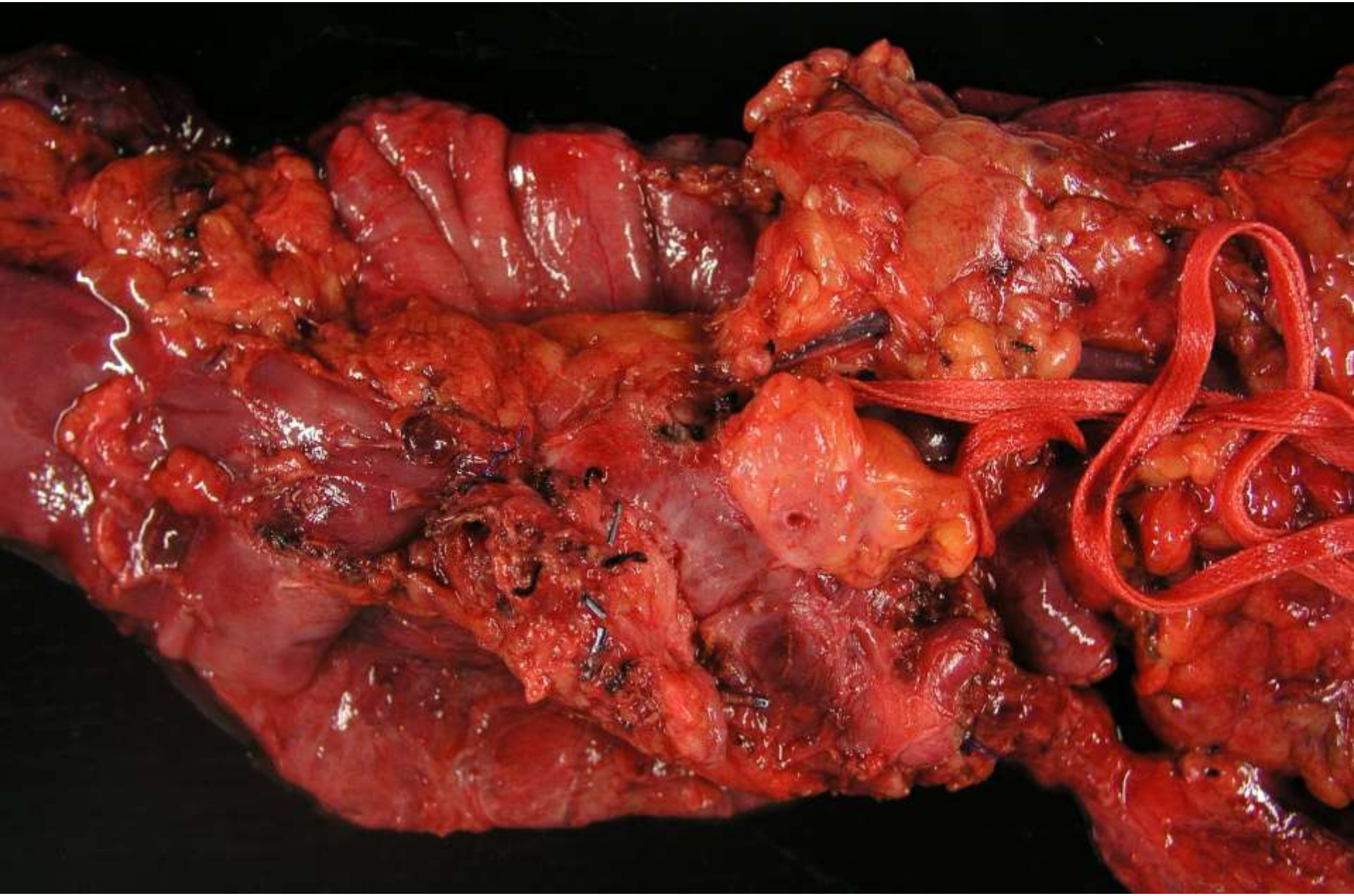
	PD	Carcinoma	Media de ganglios	Borde afecto	Media de cortes
Histórico	50	35	**7,65**	28,8% (10)	17
Abordaje posterior	55	45	**21,35**	35% (16)	27

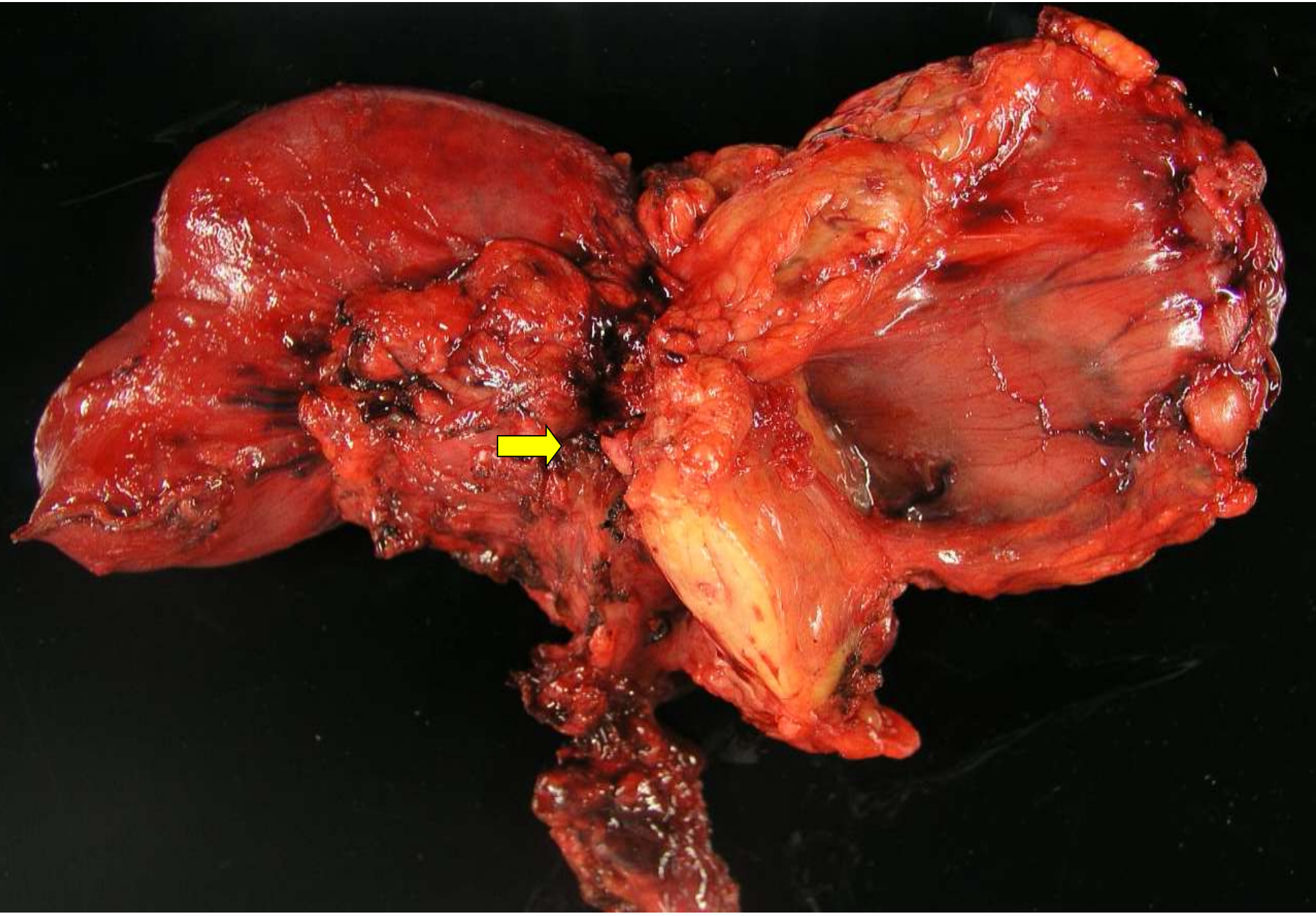










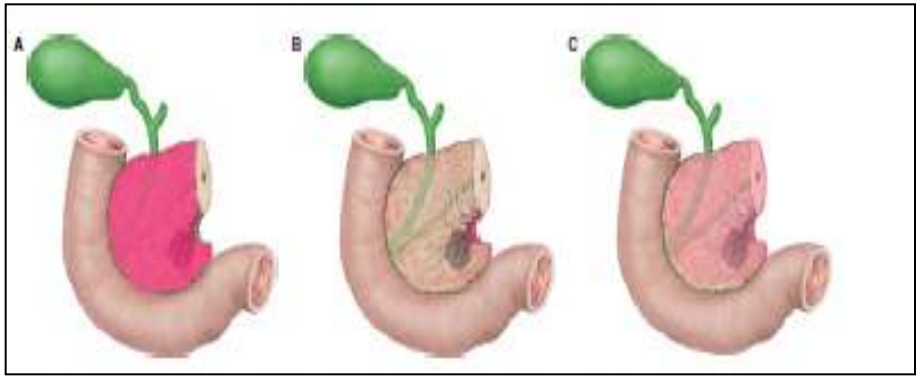


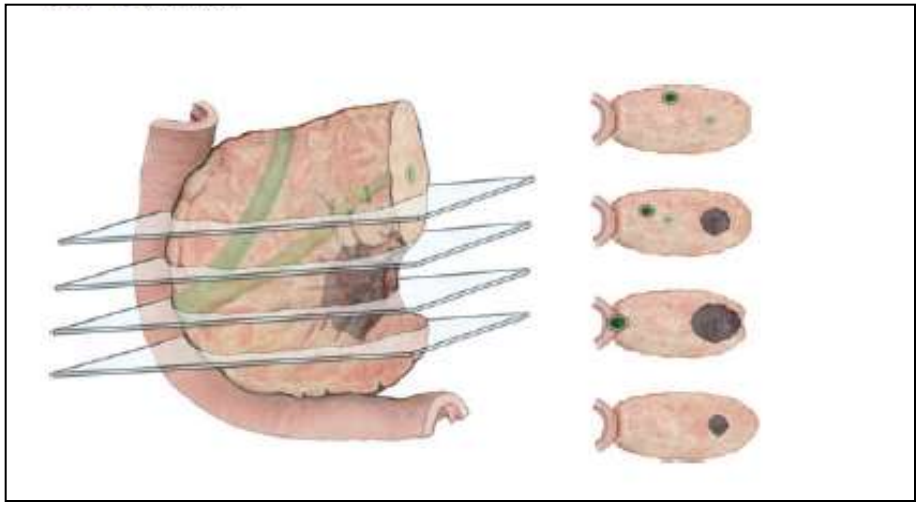
Histopathology 2008, 52, 787–796. DOI: 10.1111/j.1365-2559.2007.02915.x

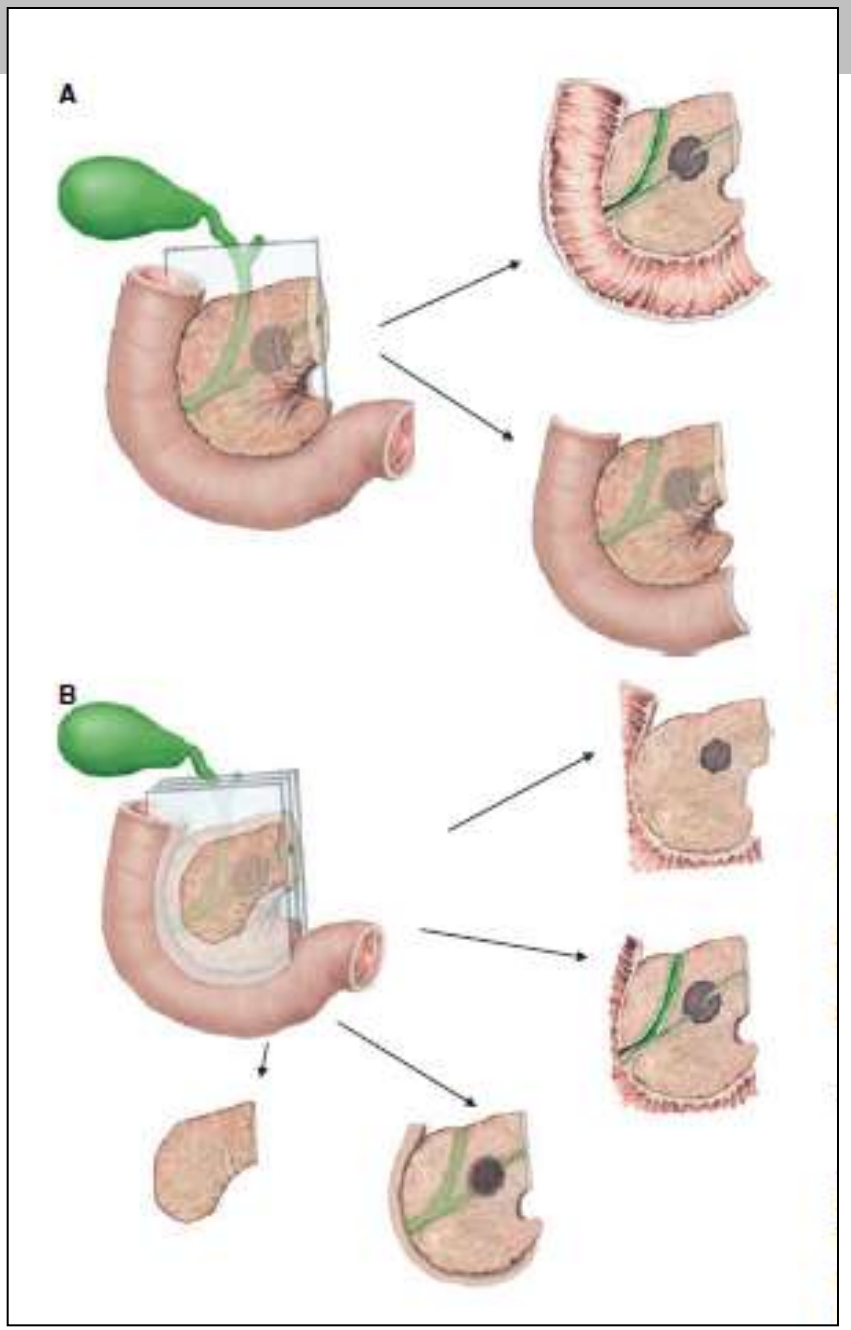
REVIEW

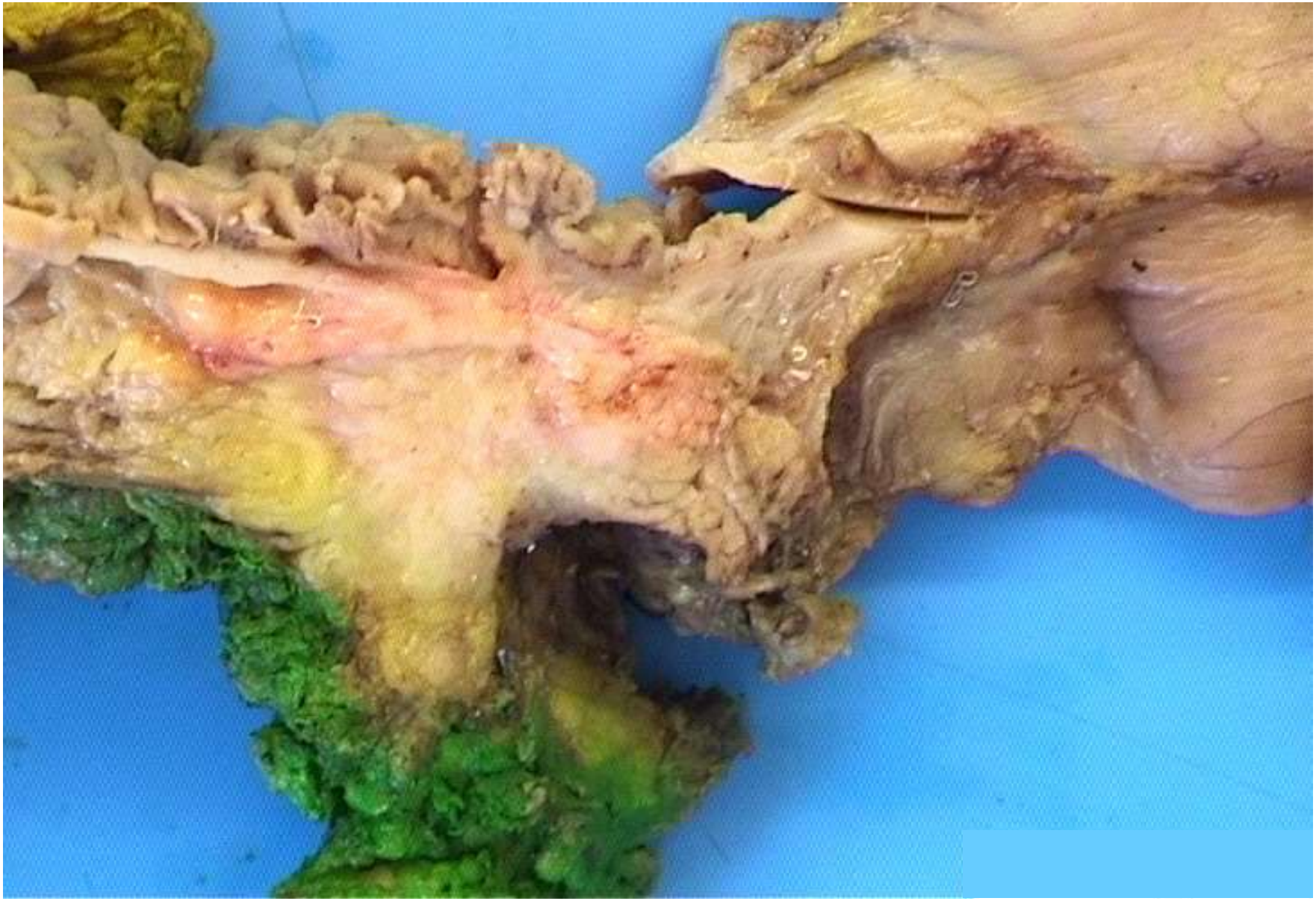
Resection margins and R1 rates in pancreatic cancer – are we there yet?

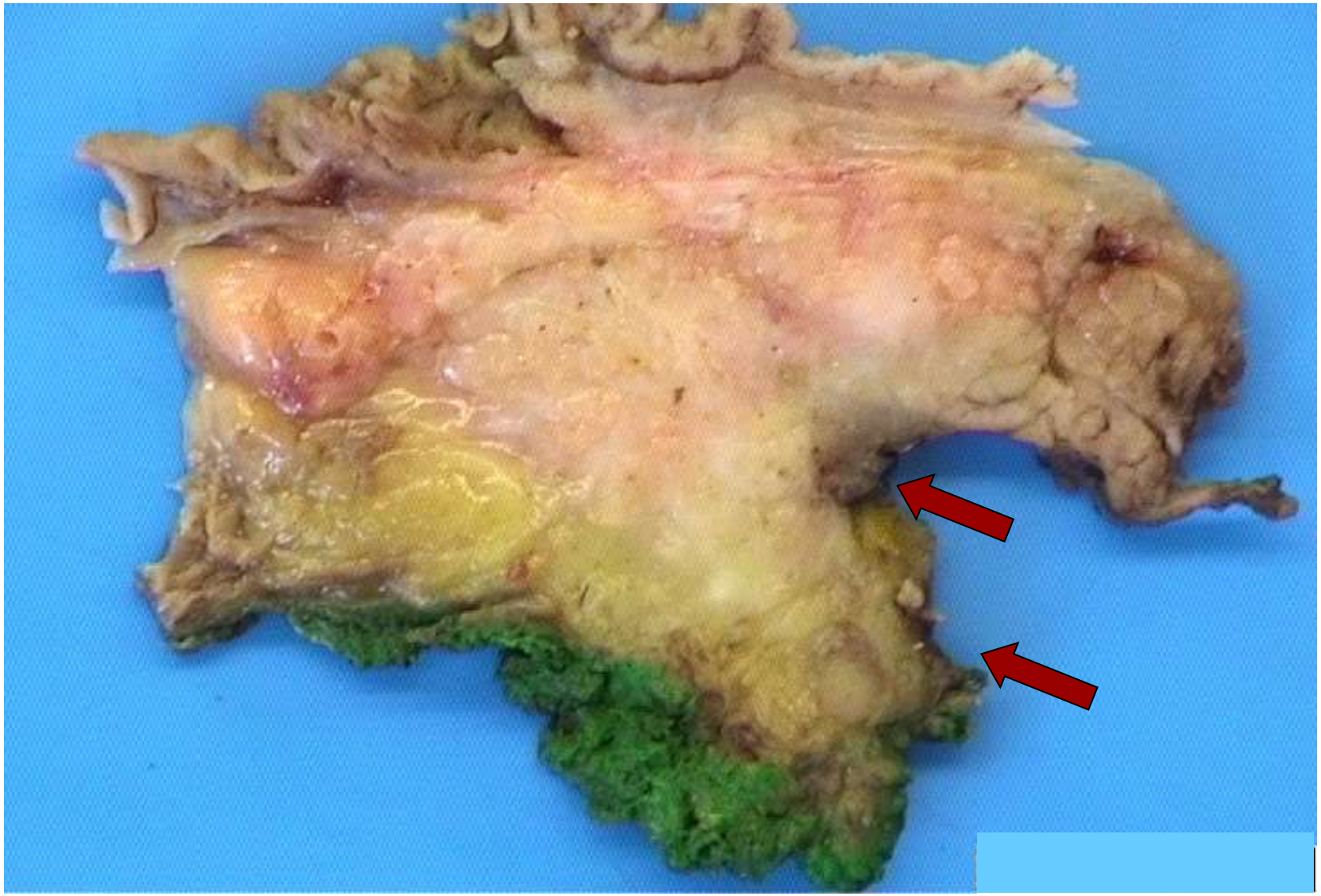
C S Verbeke
Department of Histopathology, St James's University Hospital, Leeds, UK

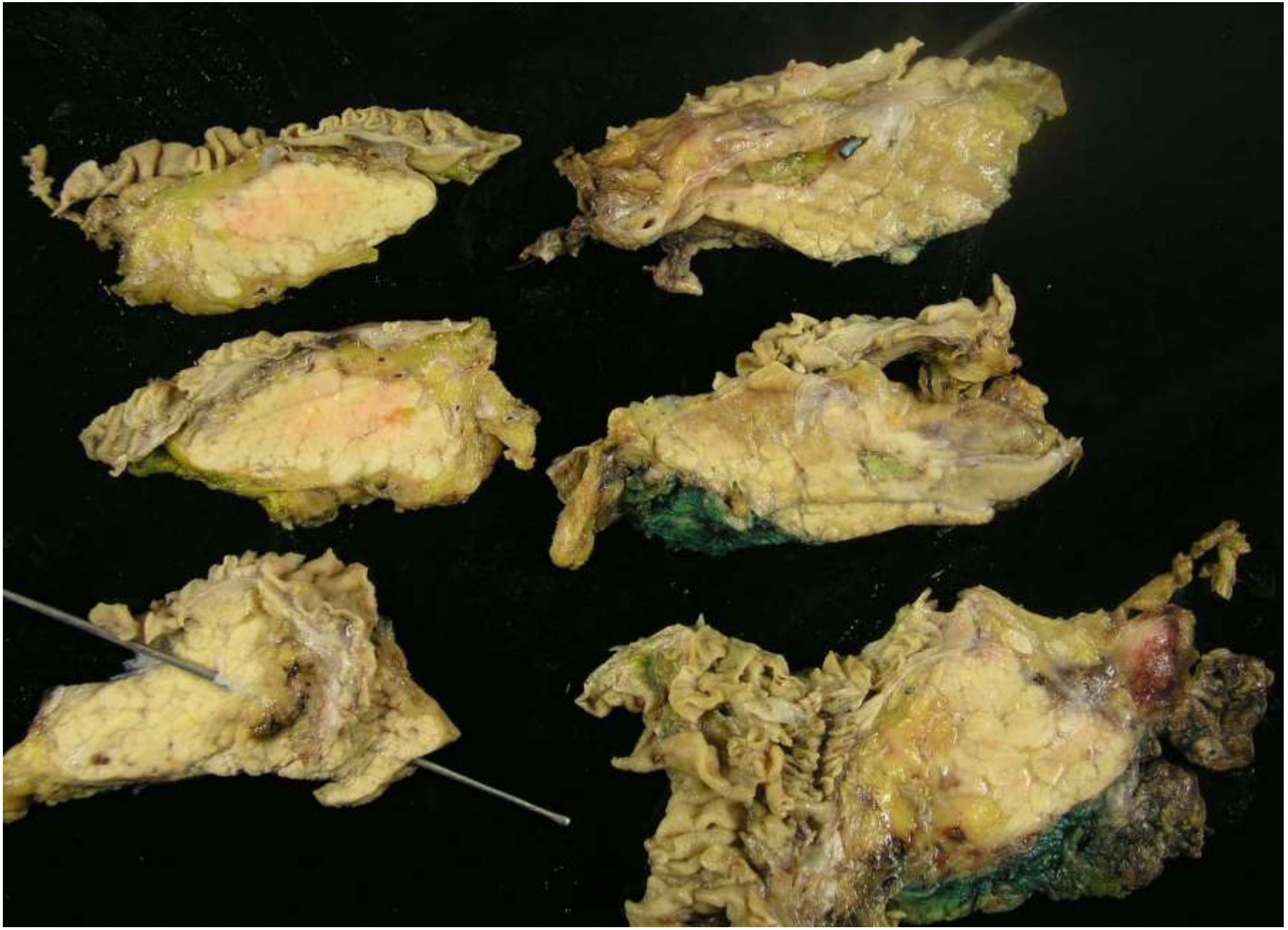


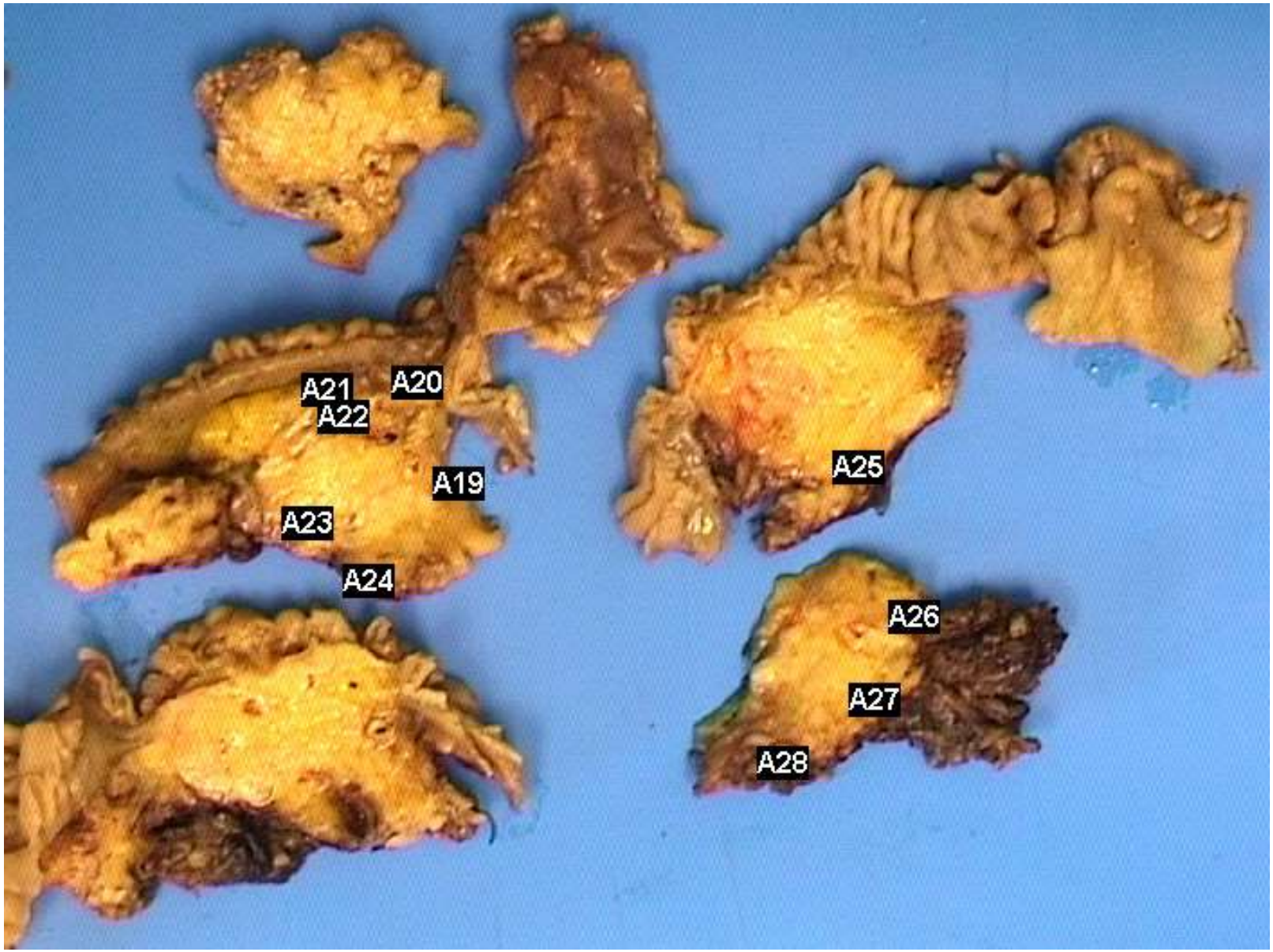








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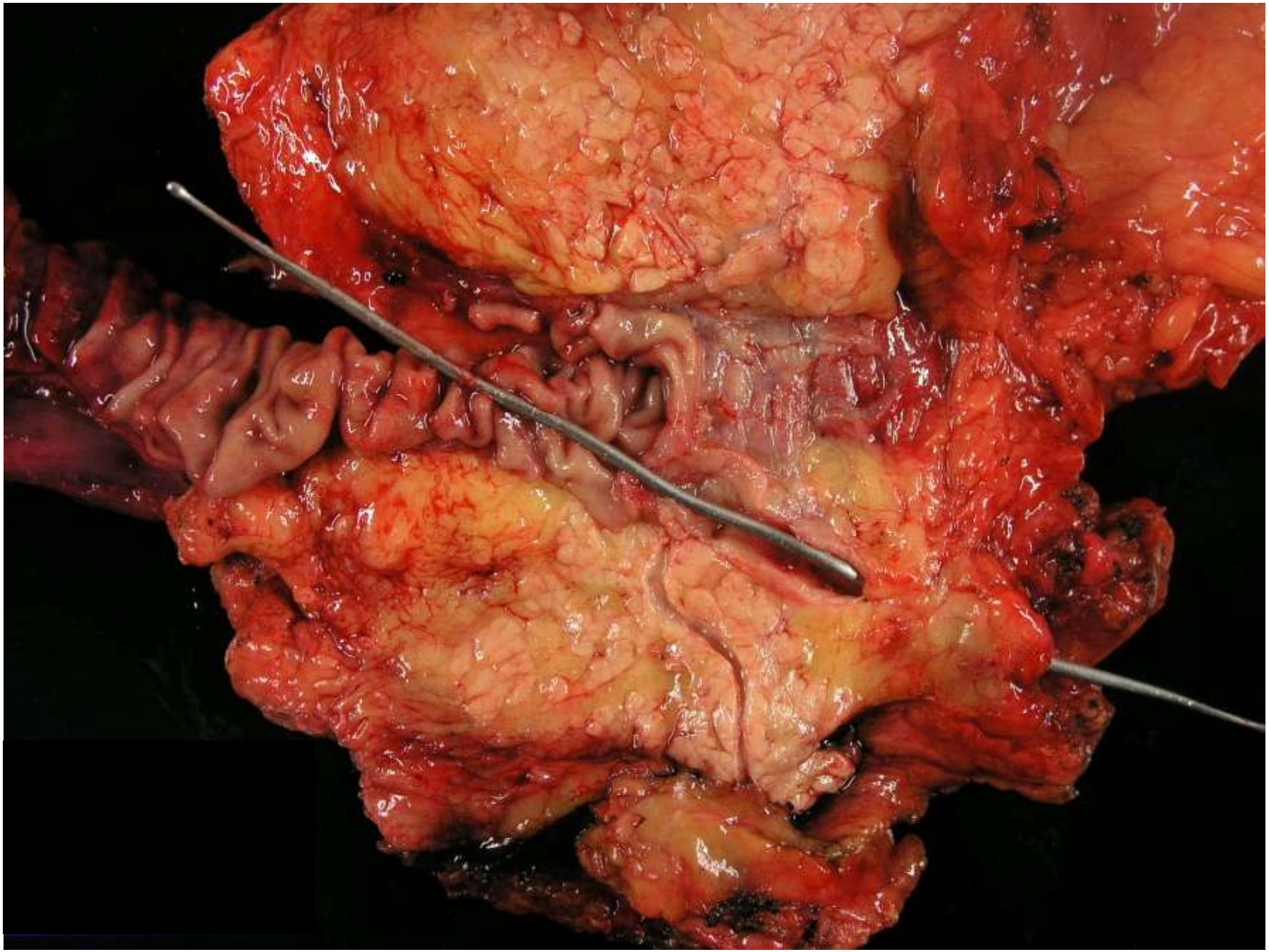
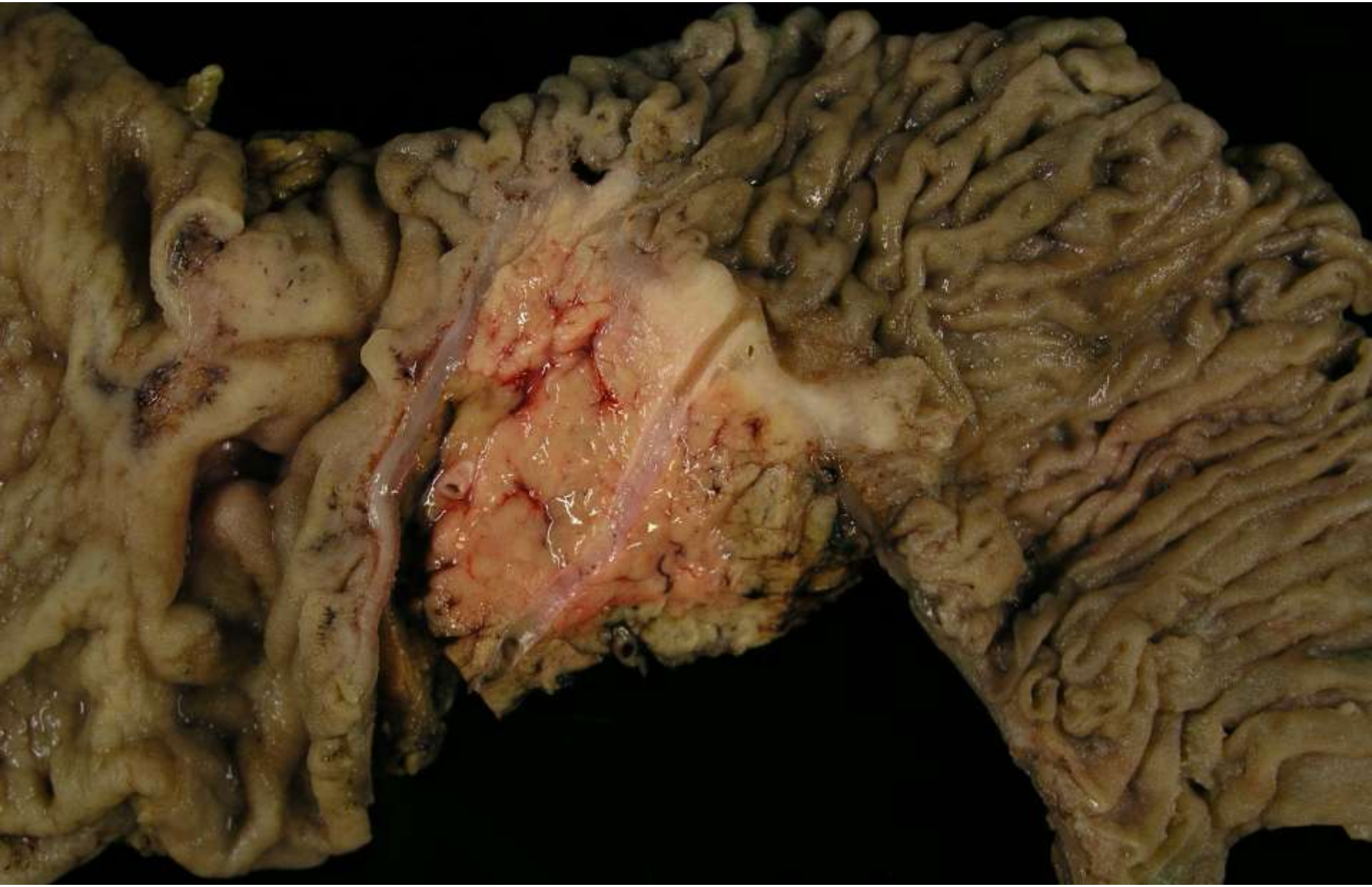
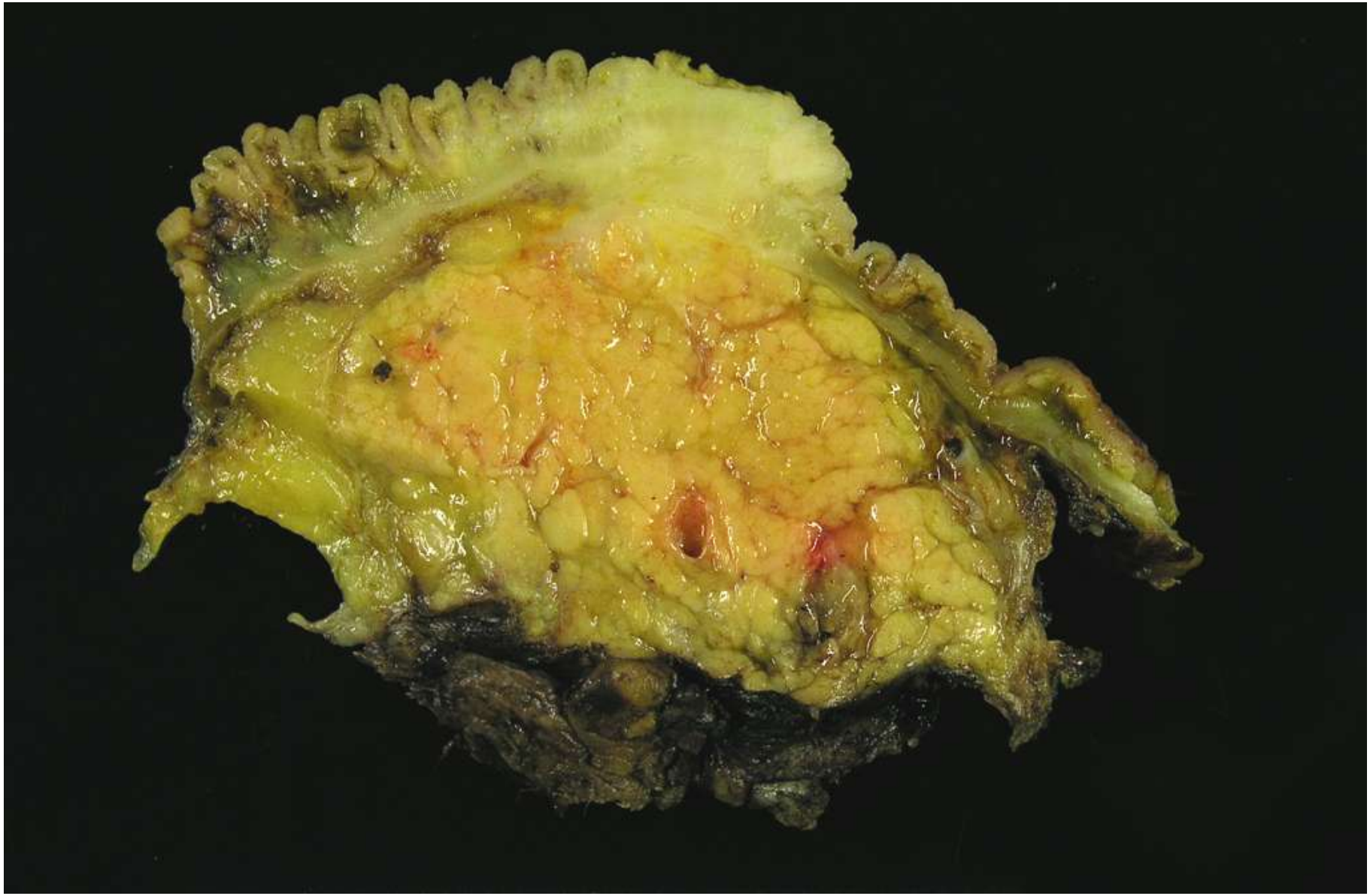
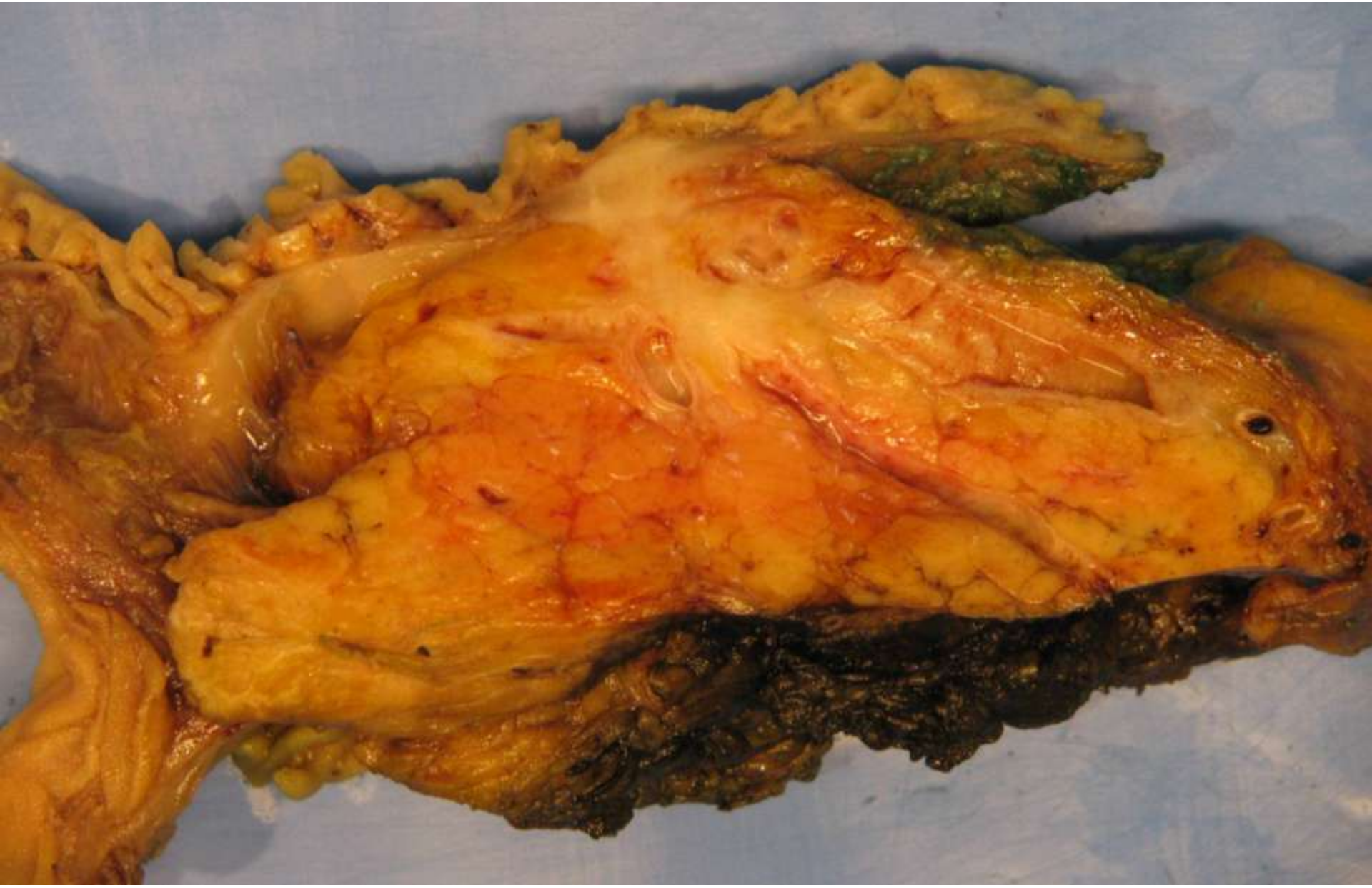
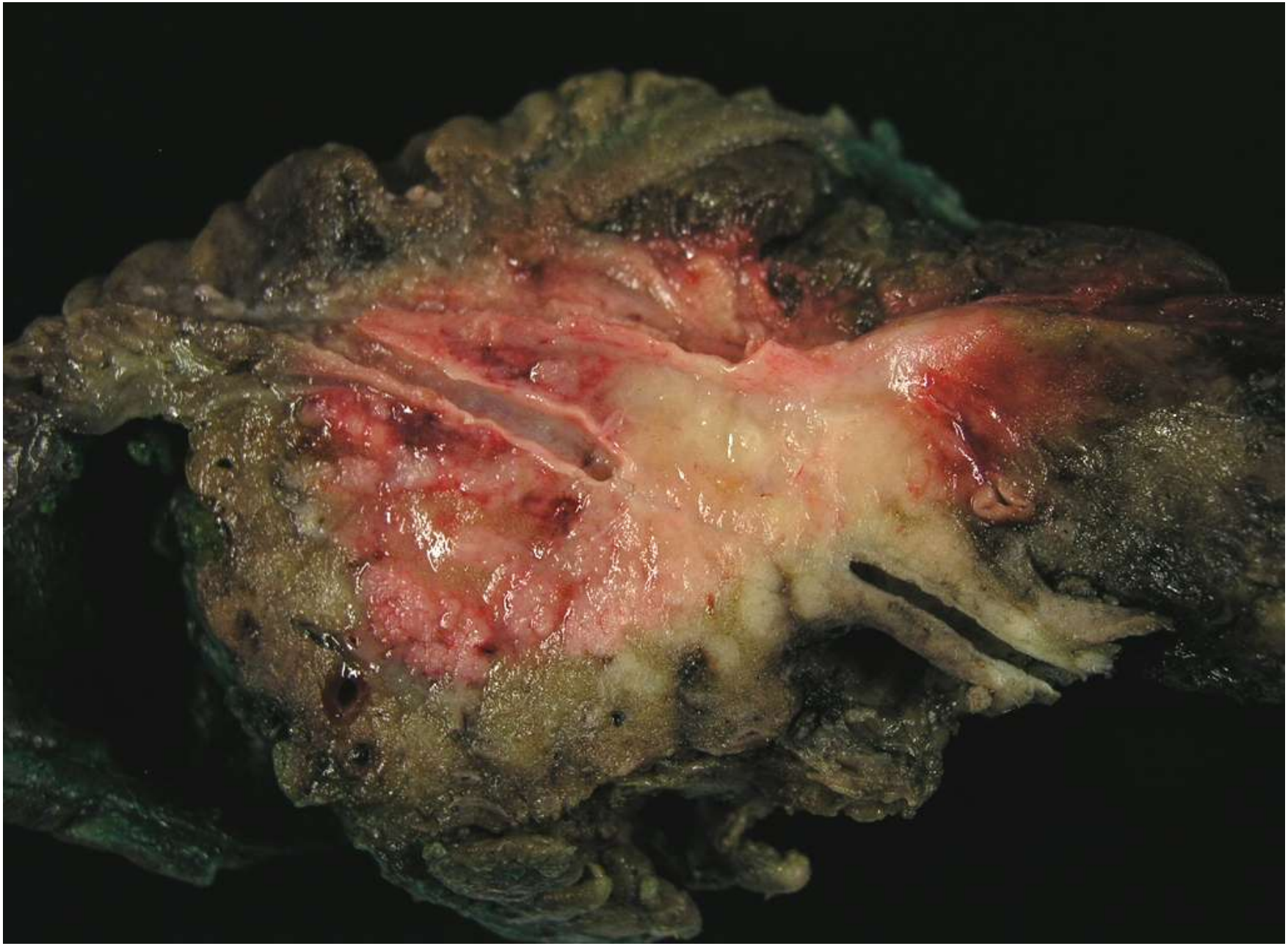
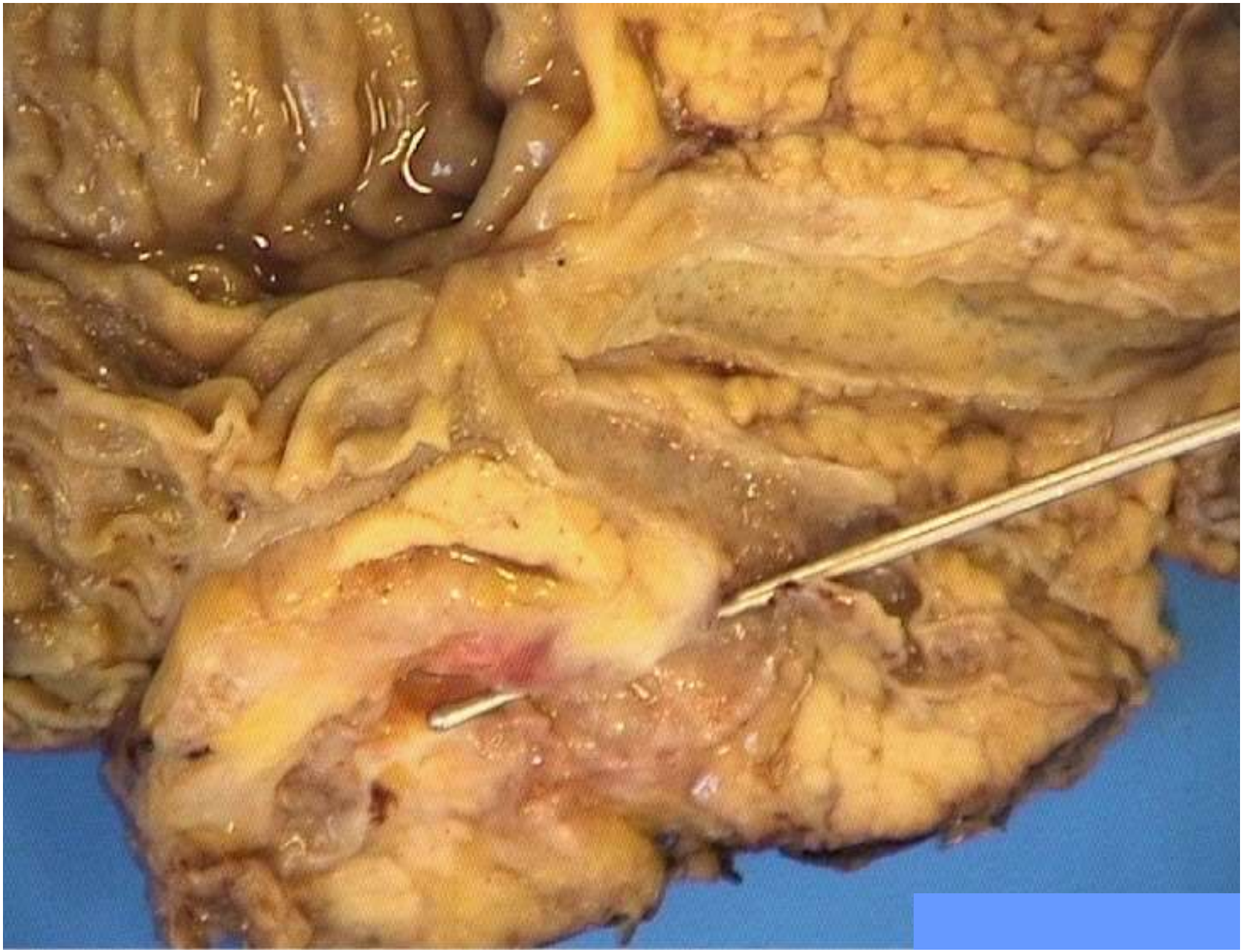








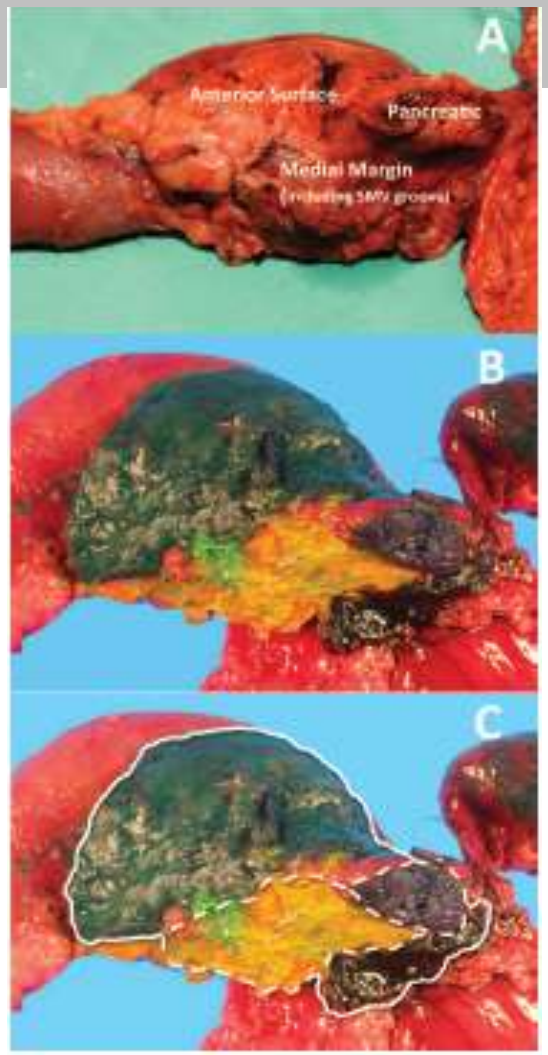




Positive Mobilization Margins Alone Do Not Influence Survival Following Pancreatico-Duodenectomy for Pancreatic Ductal Adenocarcinoma

Nigel B. Jamieson, MRCS,† Alan K. Foulis, MD,‡ Karin A. Oien, PhD,†‡ James J. Going, PhD,†‡ Paul Glen, MD,* Euan J. Dickson, MD,* Clem W. Imrie, FRCS,* Colin J. McKay, MD,* and Ross Carter, MD**

Ann Surg 2010;251: 1003–1010)

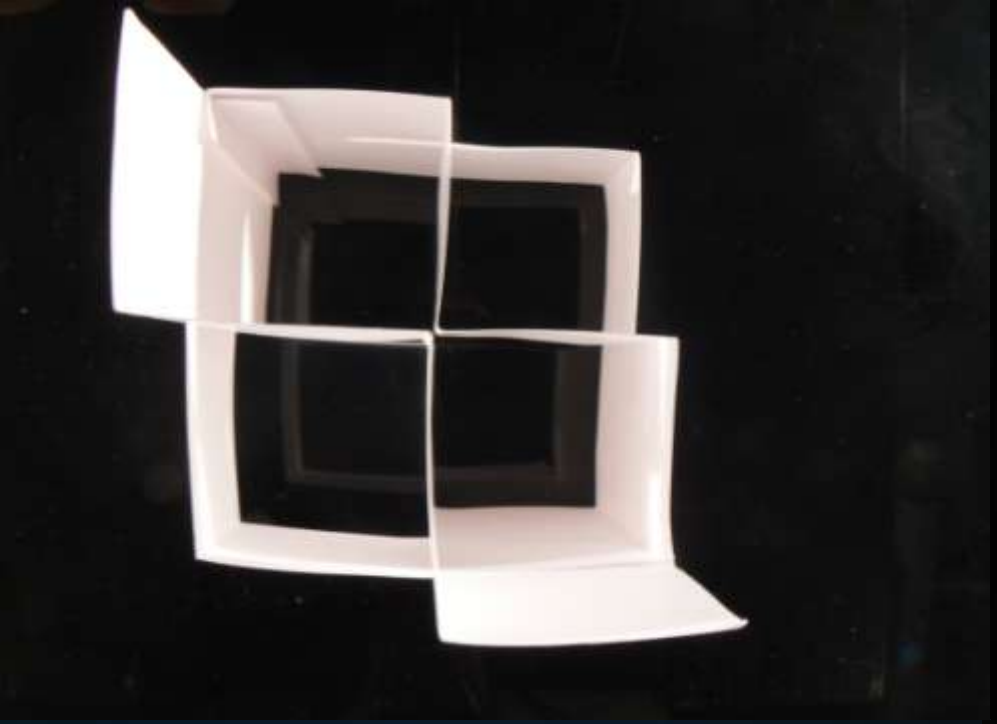


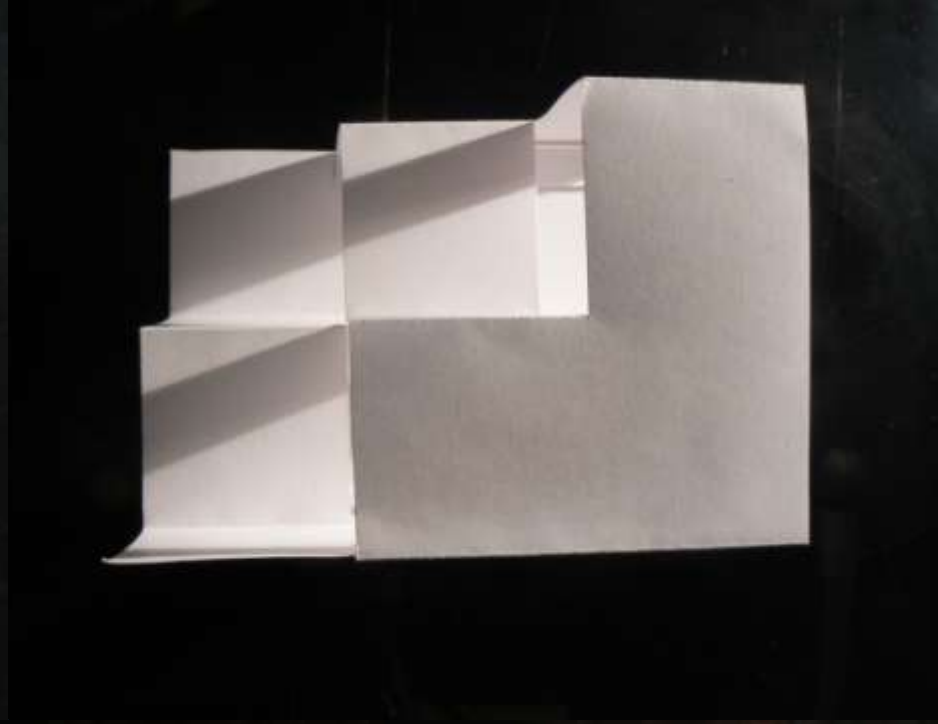
- **148** pacientes con PD. Incidencia de R1 fue del **73.6%**
- R1: factor predictivo independiente de evolución

- Los pacientes con R1 tras PD en los “márgenes de mobilización” (margen posterior y superficie anterior, bien aislados o combinados) tuvieron una evolución similar a los pacientes con R0

- **R1 con afectación de los márgenes de resección, sí mostraban una disminución significativa en la supervivencia**

La importancia de un examen sistemático y exhaustivo de los márgenes de resección de las piezas de duodeno-pancreatectomía





Muchas gracias