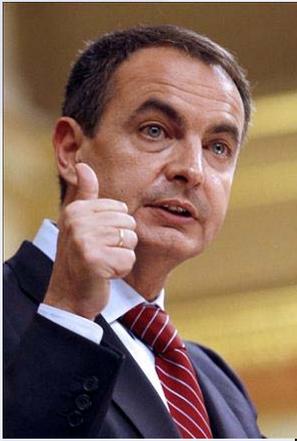


# XXXI Congreso Nacional de la Sociedad Española de Medicina Interna

**OVIEDO**  
17-20 Noviembre 2010

Auditorio-Palacio de Congresos  
"Príncipe Felipe"

# SESIONES CLÍNICO-PATOLÓGICAS EN EL SIGLO XXI: ¿tienen sentido?



# DEBATES





Dr. "Collina" Pujol



Dr. "Villa" Aranda



Dr. "Casillas" Ríos



# SESIONES CLÍNICO-PATOLÓGICAS EN EL SIGLO XXI: ¿tienen sentido?



*La visión global de la persona enferma*

*Ser médico*



**Incertidumbre**

*El especialista en incertidumbre*

# EL INTERNISTA Y LA INCERTIDUMBRE



*“A mi juicio, el ejercicio clínico siempre habrá que realizarlo con un cierto grado de **incertidumbre**. El internista suele poseer el necesario arte clínico para tomar decisiones idóneas en las situaciones complejas de multimorbilidad e **incerteza**.”*

Vigencia actual y futura de la Medicina Interna  
Prof. Cyril Rozman

# LA MEDICINA EN EL S. XXI

“época de soberbia tecnológica”  
J. Forteza



# A PESAR DE TODO...

## The Autopsy as a Performance Measurement Tool— Diagnostic Discrepancies and Unresolved Clinical Questions

A College of American Pathologists Q-Probes Study of 2479 Autopsies  
From 248 Institutions

Arch Pathol Lab Med—Vol 123, March 1999

*Richard J. Zarbo, MD; Peter B. Baker, MD; Peter J. Howanitz, MD*

**I. Major Unexpected Findings Contributing to the Patient's Death.**—These major findings include any principal underlying disease that contributed to the patient's death. They may or may not have been treated if known prior to the patient's death.

**II. Major Unexpected Findings That Did Not Contribute to the Patient's Death.**—These are major disease processes that may have eventually required treatment or contributed to the patient's death. Examples include the discovery of a malignant neoplasm, severe coronary artery atherosclerosis, cirrhosis, or atherosclerotic aortic aneurysm that did not contribute to the patient's death.

**III. Minor Unexpected Findings Contributing to the Death of the Patient.**—These are secondary findings related to a principal underlying disease, therapeutic intervention, or diagnostic procedure.

**IV. Other Minor Unexpected Findings That Might Have Eventually Required Treatment.**

# A PESAR DE TODO...

## The Autopsy as a Performance Measurement Tool— Diagnostic Discrepancies and Unresolved Clinical Questions

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Richard J. Zarbo, MD; Peter B. Baker, MD; Peter J. Howanitz, MD

Table 6. Aggregate and Intralaboratory Percentages of All Autopsies With at Least One Unexpected Finding, According to Classification

Category	Aggregate	Percentile Distributions of All Laboratories (%)		
		10th	50th	90th
I. Major unexpected findings contributing to death	39.7	0.0	40.0	71.4
II. Major unexpected findings not contributing to death	24.0	0.0	20.0	54.5
III. Minor unexpected findings contributing to death	17.3	0.0	13.3	40.0
IV. Other minor unexpected findings that might have eventually required treatment	31.8	0.0	26.7	66.7

Hospitales con residentes >> error tipo II, III y IV

# The Autopsy as a Performance Measurement Tool— Diagnostic Discrepancies and Unresolved Clinical Questions

A College of American Pathologists Q-Probes Study of 2479 Autopsies  
From 248 Institutions

Arch Pathol Lab Med—Vol 123, March 1999

Richard J. Zarbo, MD; Peter B. Baker, MD; Peter J. Howanitz, MD

**Table 8. Rate of Autopsies With Major Unexpected Findings That Contributed to the Patient's Death**

Authors, Year	Rate, %	No. of Autopsies Studied
Britton, <sup>27</sup> 1974	43	383
Fowler et al, <sup>8</sup> 1977	36	1000
Sandritter et al, <sup>28</sup> 1980	58	1096
Cameron and McGoogan, <sup>29</sup> 1981	39	1152
Pounder et al, <sup>24</sup> 1983	33	100
Scottolini and Weinstein, <sup>30</sup> 1983	31	100
Gough, <sup>10</sup> 1985	35	46
Schned et al, <sup>26</sup> 1986	25	111
Sarode et al, <sup>13</sup> 1993	32	1000
Goldman et al, <sup>9</sup> 1983*	22	100
	23	100
	21	100
Landefeld et al, <sup>12</sup> 1988†	23	175
	33	58
Veress and Alafuzoff, <sup>14</sup> 1994‡	36	1540
	42	1502
Szende et al, <sup>31</sup> 1994	43	2000
Nichols et al, <sup>32</sup> 1998	45	176
Present study	40	2479

\* Data collected from same institution for 3 separate years, 1960, 1970, and 1980.

† Data collected from 2 institutions.

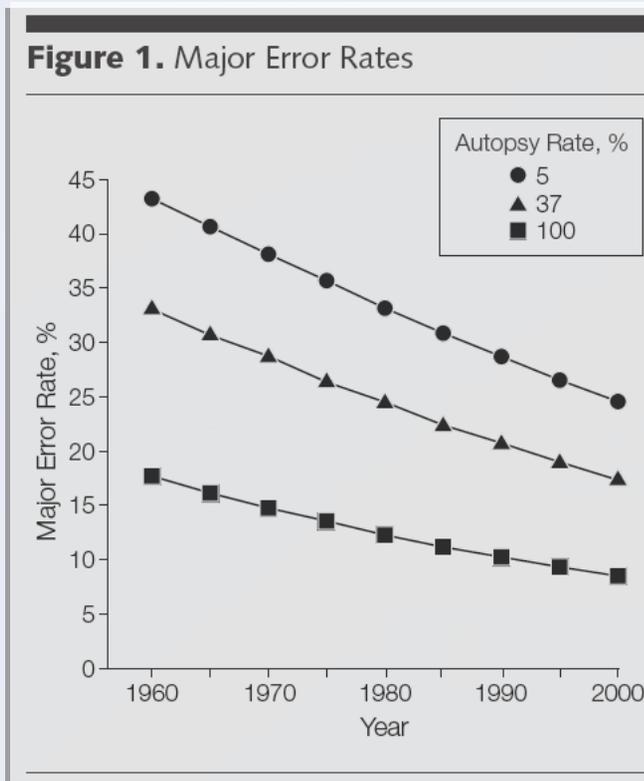
‡ Data collected from same institution for 2 time periods, 1977–1978 and 1987–1988.

Discrepancia media: 34 %  
sin cambios

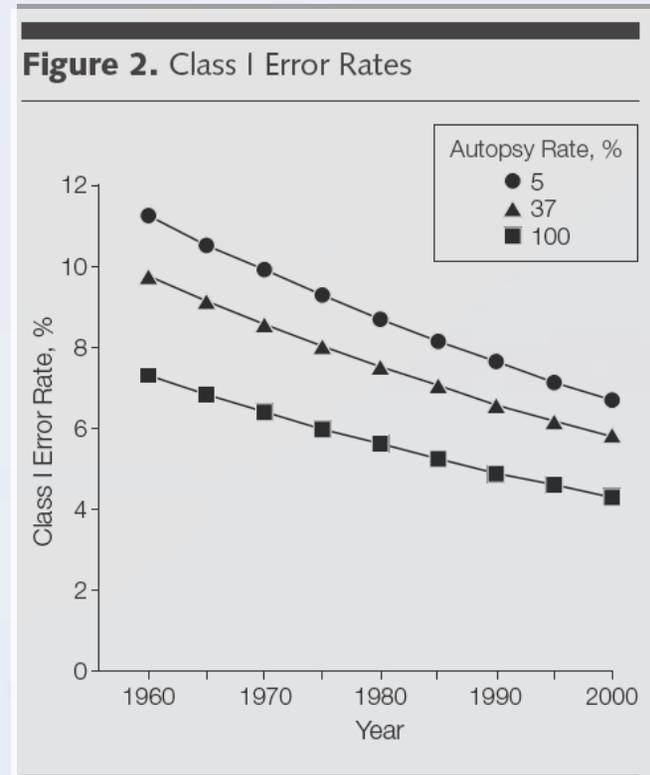
# Changes in Rates of Autopsy-Detected Diagnostic Errors Over Time

## A Systematic Review

JAMA, June 4, 2003—Vol 289, No. 21



↓ 19,4 % /década

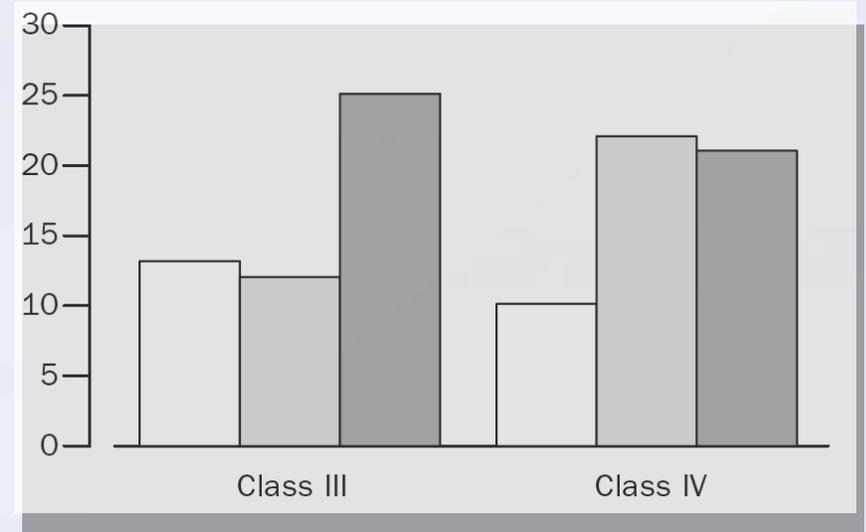
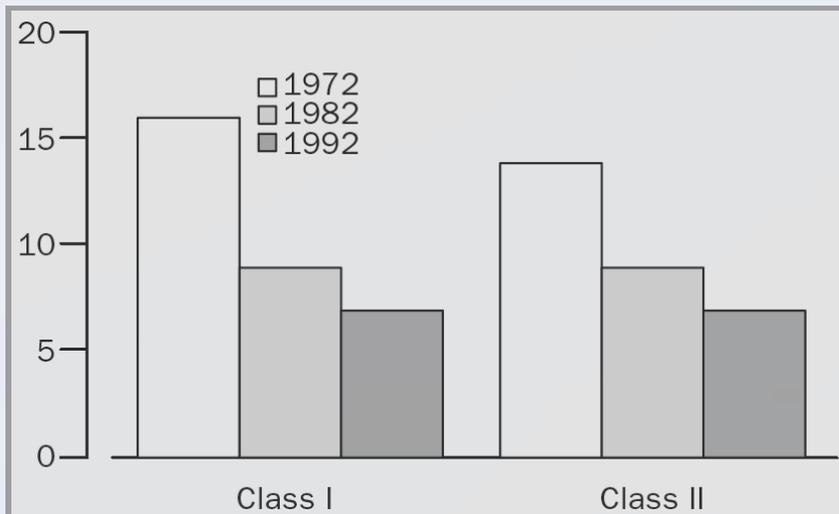


↓ 33,4 % /década

# Diagnostic errors in three medical eras: a necropsy study

Katharina Sonderegger-Iseli, Stefanie Burger, Jörg Muntwyler, Franco Salomon

Lancet 2000; **355**: 2027-31



Tasa autopsias : 90 %

# Análisis de concordancia entre diagnósticos clínicos y de autopsia en un hospital general

R. PUJOL FARRIOLS, M. BERNET VIDAL\*, J. CASTELLSAGUE\*\*, J. ESQUIUS SORIGUERA\*, E. RAGUER SANZ, V. YETANO LAGUNA

*Servicio de Medicina Interna y de \*Anatomía Patológica. Hospital General de Granollers. \*\*Departament d'Epidemiologia i Salut Pública. IMIM. Universitat Autònoma de Barcelona*

AN. MED. INTERN. (Madrid)  
Vol. 11, N.º 8, pp. 372-376, 1994

## CONCORDANCIA ENTRE DIAGNOSTICO CLINICO Y NECROPSICO, SEGUN PERIODO DE ESTUDIO

Concordancia	Total periodo n = 91	1986-1988 n = 38 (41,8%)	1989-1991 n = 53 (58,2%)	p			
	n	%	n	%	n	%	
Discrepancia trascendental	15	16,5	7	18,4	8	15,1	
Discrepancia menor	11	12,1	3	7,9	8	15,1	
Concordancia completa	65	71,4	28	73,7	37	69,8	NS

p: Significación estadística de la diferencia de proporciones entre los dos periodos.

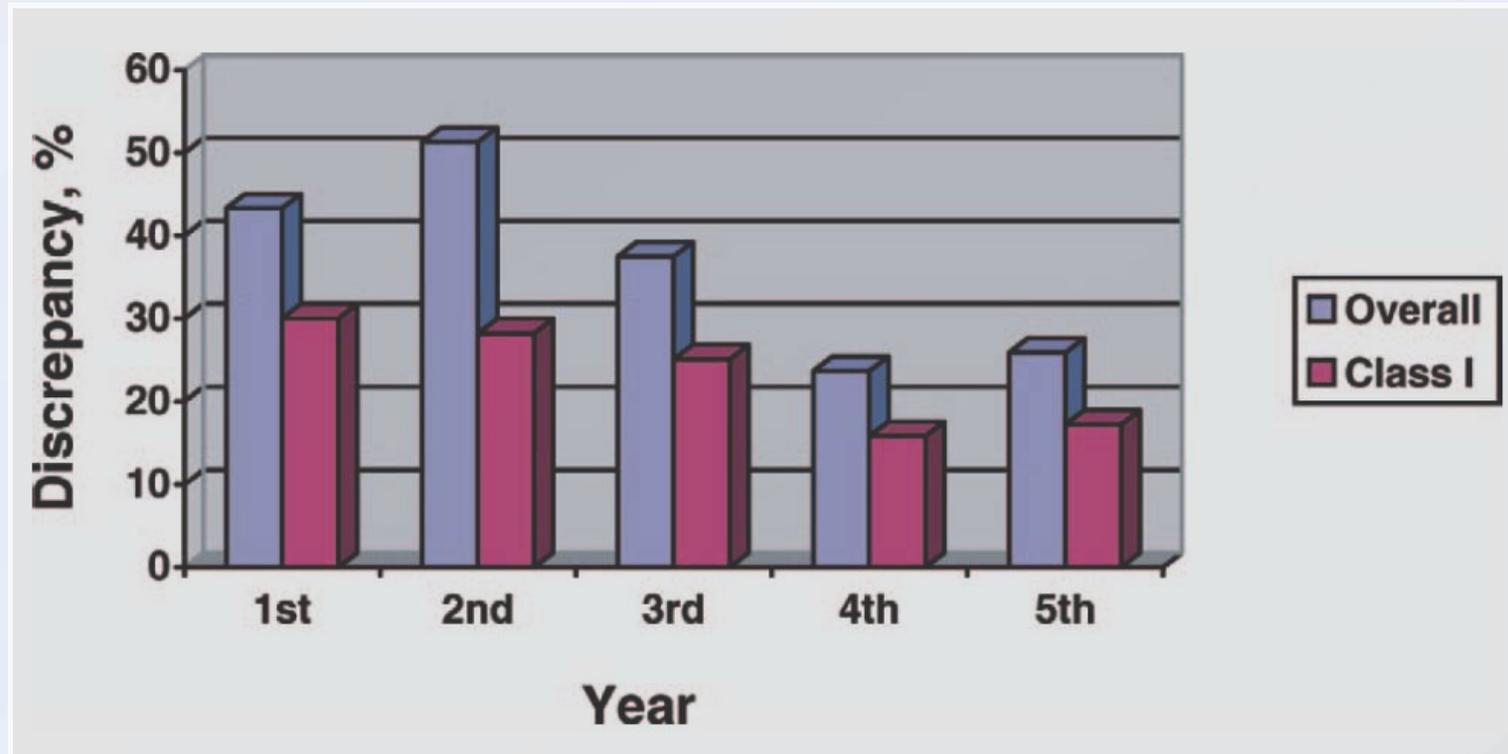
Enfermedad CV (5)  
•Embolismo P (3)

# Improvements in Clinical Diagnostic Accuracy After a 5-Year Systematic Analysis of Clinical and Autopsy Discrepancies

MIQUEL VADILLO, MD†  
RAMON P. PUJOL, MD, PhD  
XAVIER CORBELLA, MD  
TERESA GORRIZ, MD  
PERE RABASA, MD  
ROGER BERNAT, PhD  
Departments of Internal  
Medicine, Intensive Care,  
and Pathology  
Hospital Universitari de  
Bellvitge  
Barcelona, Spain

† Deceased.

Arch Pathol Lab Med—Vol 130, September 2006



• **CORRESPONDENCIA CLINICO-PATOLOGIA EN LAS AUTOPSIAS DE LOS ENFERMOS FALLECIDOS EN EL DEPARTAMENTO DE MEDICINA DEL HOSPITAL LA PAZ (1966-1992).**

Autor: SENDINO REVUELTA AFRICA †

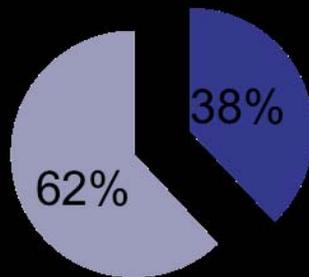
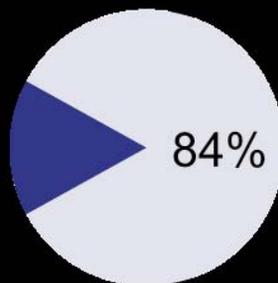
Año: 1995.

Universidad: AUTONOMA DE MADRID.

Centro de lectura: MEDICINA.

Centro de realización: DEPARTAMENTO: MEDICINA PROGRAMA DE DOCTORADO: MEDICINA.

2893 autopsias: 1966- 92  
111/año



19,3 % enfermedad fundamental

**INCERTIDUMBRE**



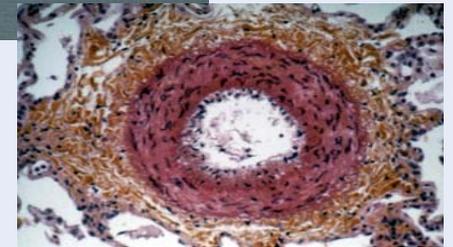
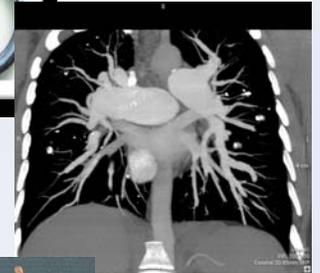
**TECNOLOGÍA**



**ERRORES DIAGNÓSTICOS**

# SESIONES CLÍNICO PATOLÓGICAS

- Clínico invitado:
  - Diagnóstico razonado
- Médico responsable:
  - Contraste de diagnósticos
  - Aportaciones de otros clínicos
- Patólogo:
  - Diagnóstico AP
- Concordancia clínico-patológica





# The NEW ENGLAND JOURNAL of MEDICINE

## CASE RECORDS *of the* MASSACHUSETTS GENERAL HOSPITAL

*Founded by* Richard C. Cabot

Nancy Lee Harris, M.D., *Editor*  
Jo-Anne O. Shepard, M.D., *Associate Editor*  
Sally H. Ebeling, *Assistant Editor*

Eric S. Rosenberg, M.D., *Associate Editor*  
Alice M. Cort, M.D., *Associate Editor*  
Christine C. Peters, *Assistant Editor*

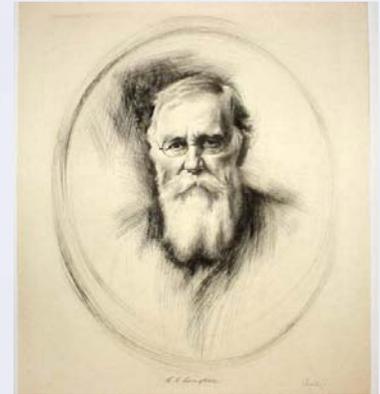
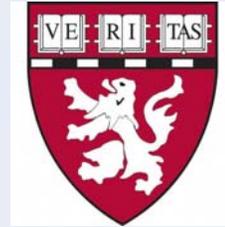


## Case 34-2010: A 65-Year-Old Woman with an Incorrect Operation on the Left Hand

David C. Ring, M.D., Ph.D., James H. Herndon, M.D., M.B.A.,  
and Gregg S. Meyer, M.D.



Dr. Walter Cannon



Prof. Christopher C. Langdell



Dr. Richard Cabot



Dr. James Homer Wright  
1869-1928

# Case Records of the Massachusetts General Hospital — Continuing to Learn from the Patient

Nancy Lee Harris, M.D.

✓ Diagnóstico autopsia

1934: 90 %



1994: 4 %

✓ Menos frecuente casos excepcionales

✓ Toma de decisiones

Aplicación individual nuevas técnicas diagnósticas / tratamientos

✓ Vigencia *case-method*

# THE ART OF DIAGNOSIS

## Solving the Clinicopathological Exercise

DAVID M. EDDY, M.D., PH.D., AND CHARLES H. CLANTON, M.D.

ings). (The symbol “|” is read as “given.”) To select the most likely diagnosis one must estimate this probability for all the possible diseases, taking into account all the signs and symptoms present in the case. The most direct way to do this is with Bayes’ formula, which in its simplest form can be written:

$$P(\text{disease}|\text{findings}) = \frac{P(\text{findings}|\text{disease}) \times P(\text{disease})}{P(\text{findings})}$$

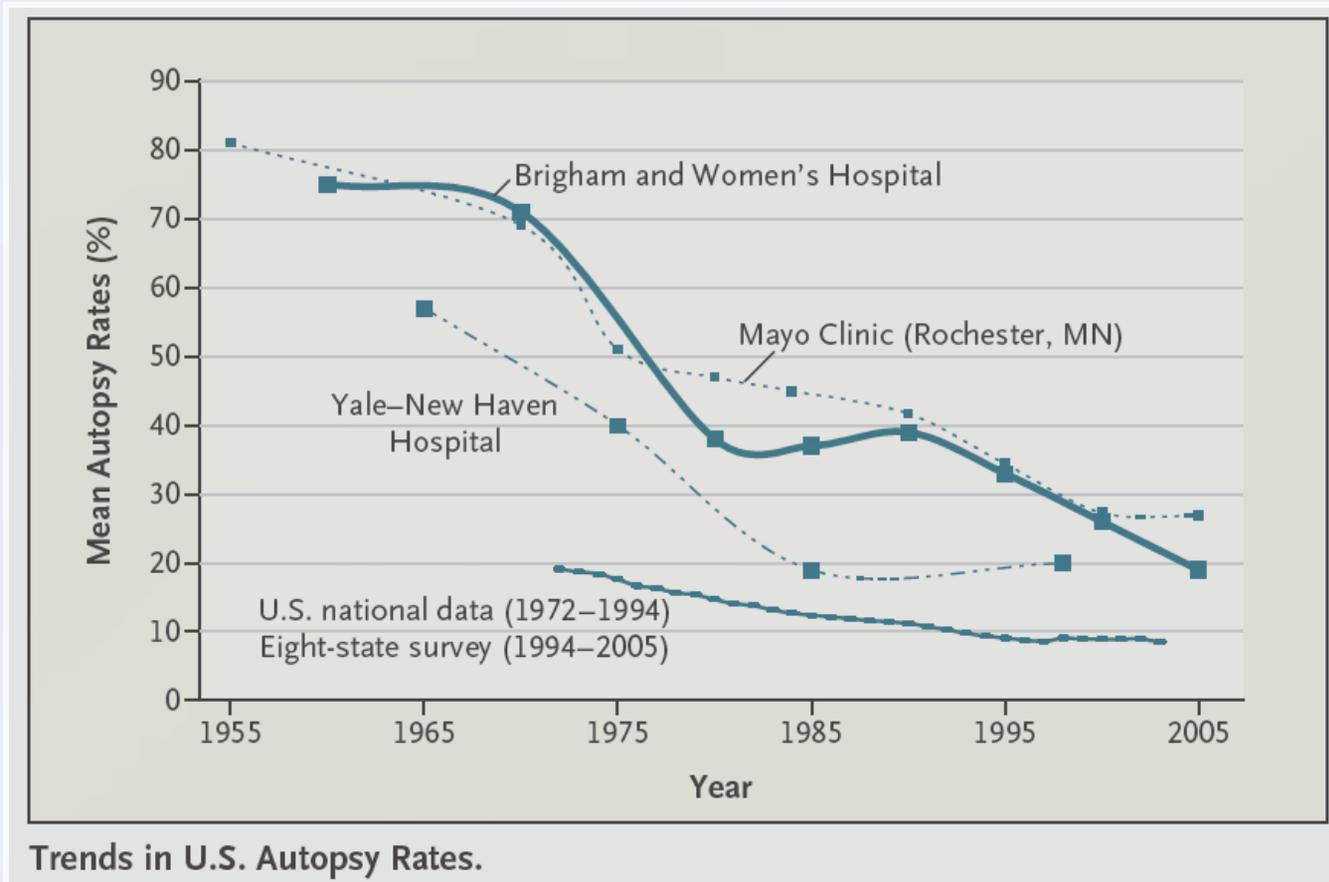
The difficulty of the diagnostic task can be appreciated by considering each component of this formula.

- 1) Aggregation of findings
- 1) Selection of a pivot
- 1) Generation of a cause list
- 1) Pruning the cause list
- 1) Selection of the clinical diagnosis
- 1) Validation of the clinical diagnosis

# DECLIVE DE LA AUTOPSIA

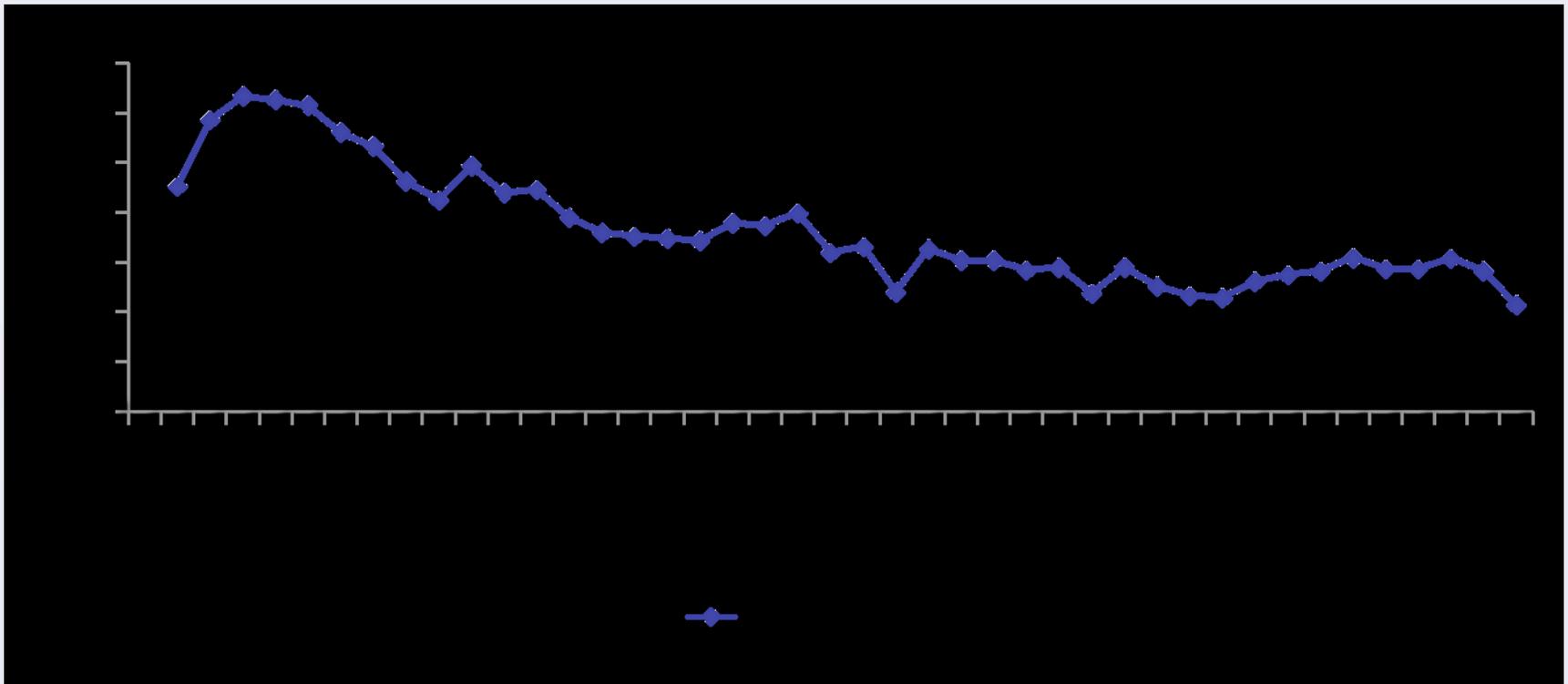
## The Vanishing Nonforensic Autopsy

Kaveh G. Shojania, M.D., and Elizabeth C. Burton, M.D.



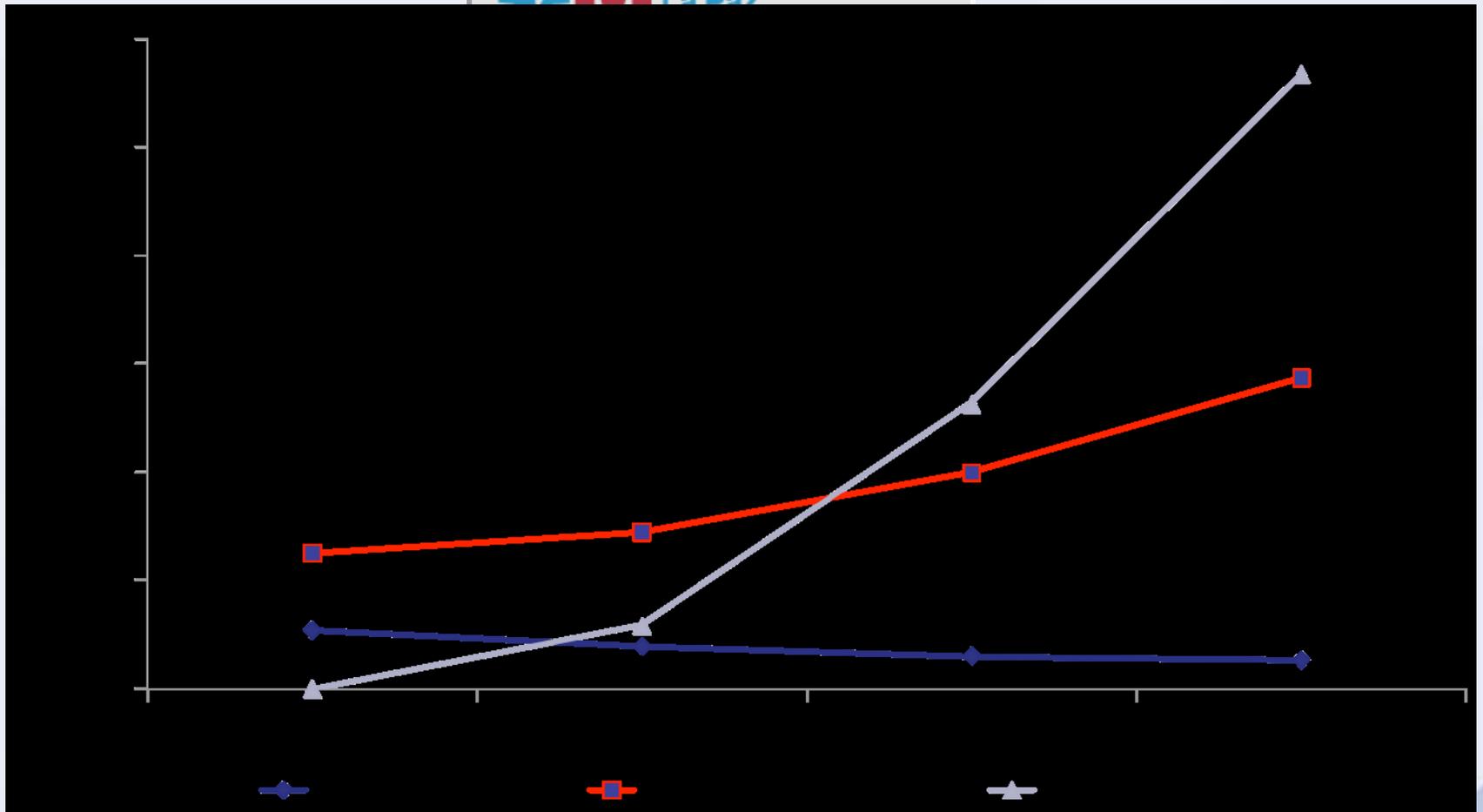
Trends in U.S. Autopsy Rates.

# DECLIVE DE LA AUTOPSIA

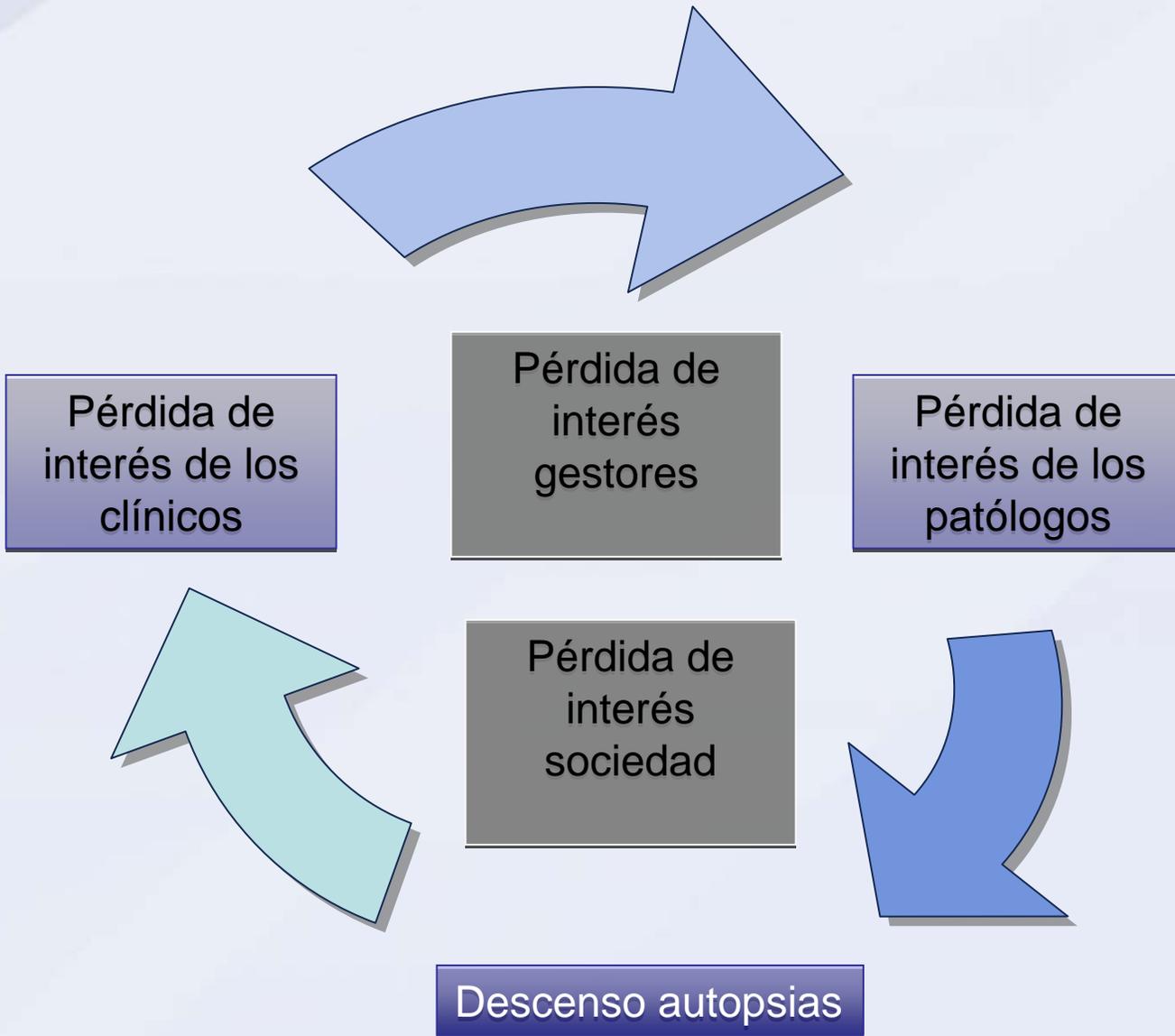


*Cortesía de la Dra. Carmen Morales. Departamento de Anatomía Patológica*

# DECLIVE DE LA AUTOPSIA



*Cortesía de la Dra. Carmen Morales. Departamento de Anatomía Patológica*



# ALTERNATIVAS A LA AUTOPSIA

## Ecopsia



Higado con textura característica por alteraciones postmortem (H). Litiasis y colecistitis crónica (V).

Rev Clin Esp. 1999 Oct;199(10):650-2.

### [The cost effectiveness of echography biopsy]

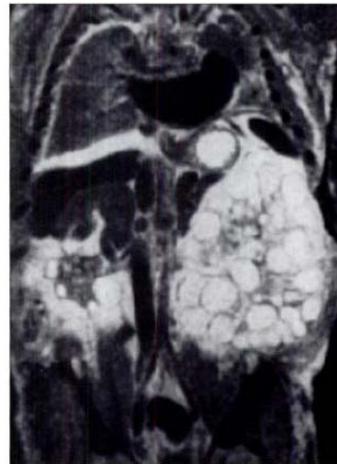
[Article in Spanish]

Fariña J, Millana C, Fernández-Aceñero MJ, López-Asenjo JA, Furió V, Aragoncillo P, Blanco ML, Iglesias JC, Salto RJ.

Servicio de Anatomía Patológica II, Hospital Clínico Universitario San Carlos, Madrid.

## Autopsia TC/RM

### Postmortem Fetal MR Imaging: Comparison with Findings at Autopsy



A



B

**Fig. 3.**—Male fetus of 23 weeks' gestation with bilateral multicystic dysplastic kidneys.

**A.** T2-weighted coronal MR image shows bilateral asymmetric cystic kidneys with left kidney being grossly enlarged. Note cysts are macroscopic and of varying size.

**B.** Gross specimen at autopsy shows multiple large cysts replacing left kidney.

# Diagnostic Utility of Postmortem Fine-Needle Aspiration Cultures

Miquel Aranda, MD; Carmina Martí, MD; Marianna Bernet, MD; Francesc Gudiol, MD; Ramon Pujol, MD

*Arch Pathol Lab Med.* 1998;122:650–655

Table 3.—Relative Sensitivity by Tissues\*

	FNAP			Autopsy		
	Sensitivity	Specificity	Relative Sensitivity	Sensitivity	Specificity	Relative Sensitivity
<b>Total</b>	80.9	66.7	...	87.2	44.4	...
Blood culture	34.0	84.4	42.0	61.7	55.6	70.7
Liver	21.3	97.8	26.3	31.9	86.7	36.5
Spleen	25.5	100	31.5	46.8	80.0	53.6
Lung (inferior right lobule)	59.6	80.0	73.6	68.1	82.2	78.1

\* Sensitivity for infection diagnosis based on fine-needle aspiration puncture (FNAP) and autopsy cultures. Relative sensitivity is the ratio between the sensitivity of each organ and the overall sensitivity.

La PAAF puede añadir información para el diagnóstico de infección en la autopsia clínica

# VIRTUDES DE LA AUTOPSIA CLÍNICA

- Estadísticas mortalidad.
- Salud pública
  - E. contagiosas
  - Riesgos ambientales
- Investigación
  - Descripción nuevas enfermedades
  - Nuevos patrones clínicos



*Fotos cortesía de la Dra. Carmen Morales.  
Departamento de Anatomía Patológica*

Partial List of Diseases Discovered or Critically Clarified Through Autopsy Since 1950\*

Cardiovascular lesions

Tricuspid valve disease due to metastasizing carcinoid tumor  
Understanding of congenital heart lesions leading to modern surgical treatment  
Arteromatous embolism  
Asymmetric cardiac hypertrophy  
Dissecting aneurysm and variations thereon  
Primary cardiomyopathy  
Subaortic muscular stenosis  
Rheumatoid disease of aorta and aortic valve  
Complications of cardiac surgery  
Diseases of conducting system  
Idiopathic hypertrophic subaortic stenosis  
Cardiomyopathies  
Mitral valve prolapse

Bronchopulmonary lesions

Alveolitis (diffuse alveolar damage, shock lung, respiratory distress syndrome)  
Oxygen toxicity  
*Pneumocystis* pneumonia  
Infantile respiratory distress syndrome (hyaline membrane disease)  
Legionnaire's disease  
Pulmonary alveolar proteinosis, desquamative pneumonia  
Diseases due to inhalation of industrial dusts: asbestosis, berylliosis, bagassosis, silo-filler's disease  
Lipid pneumonia  
Diffuse interstitial fibrosis

Hepatobiliary lesions

Viral hepatitis  
Alpha-1-antitrypsin disease and cirrhosis  
Jamaican bush-tea disease (veno-occlusive disease of liver)  
Infantile kernicterus  
Neonatal giant cell hepatitis and biliary atresia  
Vinyl chloride and angiosarcoma of liver  
Tumors and hyperplasias due to oral contraceptives  
Aflatoxin-induced liver disease and tumors

Renal diseases

Damage due to diethylene glycol as drug vehicle  
Renal effects of potassium deficiency  
Elucidation of various types of glomerulonephritis  
Necrotizing papillitis and interstitial nephritis due to phenacetin abuse  
Renal development malformation in polycystic diseases  
Renal vein thrombosis syndrome  
Scleroderma kidney  
Acute tubular necrosis injury (ATN)  
Atheromatous embolic renal disease

Blood, bone marrow, spleen lesions

Role of spleen in thrombocytopenia purpura; value of splenectomy  
Secondary hemochromatosis  
Syndrome of myeloid metaplasia  
Defibrination syndrome  
Effects of incompatible blood transfusion  
Aplastic anemia, granulocytopenia, thrombocytopenia as a complication of drug therapy

Gastrointestinal lesions

Whipple's disease  
Protein-losing enteropathy  
Congenital intestinal atresia  
Pancreatic cystic fibrosis  
Vascular insufficiency syndromes and hemorrhagic enteropathy  
Protein and potassium loss from villous adenoma

Endocrine lesions

Complications of diabetes mellitus in vessels, eye, nerves, kidneys  
Adrenal hypersecretion syndromes: aldosteronism (Conn's disease), hypercorticism  
Multiglandular endocrine syndromes, Zollinger-Ellison syndrome  
Hormone-secreting tumors in other organs: paraneoplastic syndromes

Nervous system lesions

Spongiform encephalopathy (Creutzfeldt-Jakob disease)  
Progressive multifocal leukoencephalopathy  
Adrenoleukodystrophy  
Subacute sclerosing panencephalitis  
Carotid artery insufficiency and thrombosis

# APORTACIONES DE LA AUTOPSIA CLÍNICA

# The Recent History of the Autopsy

*Rolla B. Hill, MD, Robert E. Anderson, MD*

Arch Pathol Lab Med—Vol 120, August 1996

## Partial List of Diseases Discovered or Critically Clarified Through Autopsy Since 1950\* (cont)

Werdnig-Hoffman disease and amyotonia congenita  
Retrolental fibroplasia  
Shy-Drager disease (hypotension-neuron disease)

Radiation effects  
Radiation syndromes  
Radiation fibrosis of various organs  
Bile duct carcinoma due to use of Thorotrast  
Bone and mouth cancer in radium workers  
Postradiation malignancy due to X-rays: thyroid, leukemia, skin  
"Transverse myelitis"

Miscellaneous lesions  
Hypervitaminoses  
Toxic shock syndrome  
Consequences of erythroblastosis fetalis  
Causes of perinatal death  
Lipid storage and other storage diseases, phenylketonuria, etc.  
Kwashiorkor  
Amniotic fluid embolism  
Collagen diseases or rheumatic diseases  
Disseminated sarcoid  
Disseminated fungal diseases  
Crush syndrome, endotoxin shock  
Complications of adrenal steroid therapy: ulcer, Cushing's syndrome, activation of tuberculosis, osteoporosis, infections  
Prognosis and spread of various cancers  
Methyl mercury poisoning  
Fetal alcohol syndrome  
Industrial, occupational, environmental diseases  
Complications of drug treatment, hospital-acquired infections  
Acquired immunodeficiency syndrome

\* From Angrist 1968; Cannon 1956; Gall 1968; Garcia and Wilmes 1983; Geller 1983.

# VIRTUDES DE LA AUTOPSIA CLÍNICA

- Papel formativo para el clínico:
  - Conocimiento de la fisiopatología
  - Identificación de nuevos patrones clínicos
  - Conocer efecto técnicas / terapias:
    - Ancianos / pluripatología
  - Correlación clínico-patológica
    - Calidad de diagnósticos: **descifrar la incertidumbre**
  - Piedra angular CCP
    - Método formación de estudiantes/residentes

# FORMACIÓN RESIDENTE

- Investigación
  - MBE
  - Estadística
  - Lectura crítica...
- Gestión
- Comunicación
- Trabajo en equipo
- Técnicas



Razonamiento clínico

# FORMACIÓN RESIDENTE



Figure 1-10 William Osler performing a postmortem dissection at the Blockley Mortuary, Philadelphia, around 1886.

*The Principles and Practice of Medicine (1892)*



Original contribution

## Resident physician opinions on autopsy importance and procurement

Mindy J. Hull MD<sup>a,\*</sup>, Rosalynn M. Nazarian MD<sup>a,1</sup>, Amy E. Wheeler MD<sup>b</sup>,  
W. Stephen Black-Schaffer MD<sup>a</sup>, Eugene J. Mark MD<sup>a</sup>

<sup>a</sup>Department of Pathology and Laboratory Medicine, Massachusetts General Hospital, Boston, MA 02114, USA

<sup>b</sup>Department of Internal Medicine, Massachusetts General Hospital, Boston, MA 02114, USA

72 % medicina (118) / 89 % (42) patólogos

### Utilidad de la autopsia:

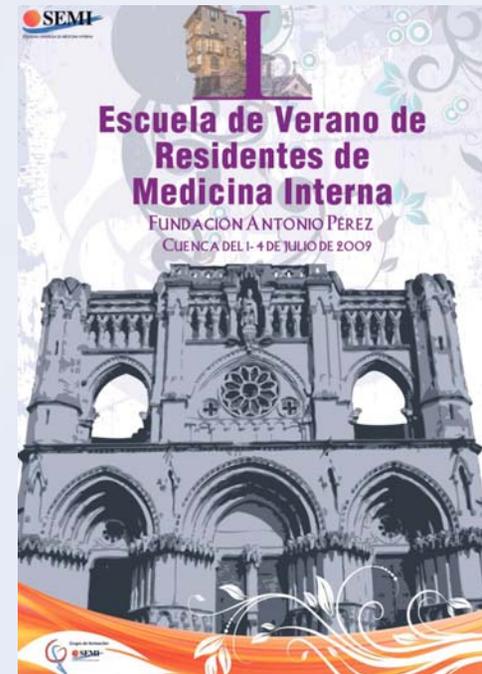
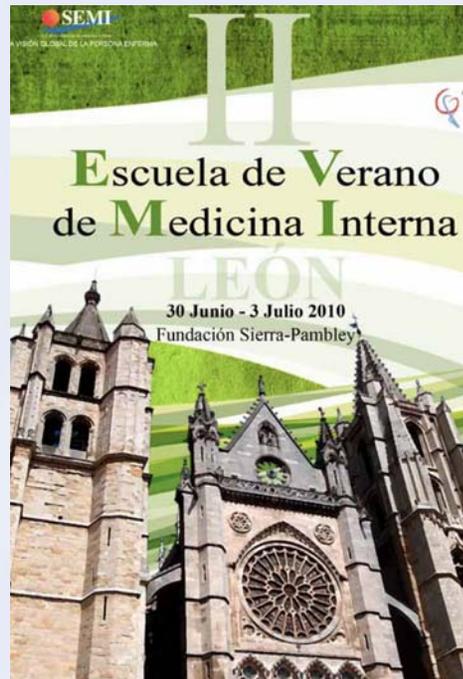
- Educación
- Respuestas clínicas
- Salud pública
- Investigación

### Carencias:

- Formación solicitud
- Relación clínico-patólogo

# LUCES Y FUTURO PARA LAS CCP

- ✓ Papel de los tutores
- ✓ SEMI / Grupo Formación





# Revista Clínica Española

www.elsevier.es/rce



## SESIÓN CLÍNICA

### Conferencias clinicopatológicas de la SEMI

**Coordinadores: Dres. R. Pujol Farriols y M. Aranda Sánchez**  
**Sesión 1: celebrada en el Hospital Marqués de Valdecilla. Santander**  
**15 de diciembre de 2005**

*Discurso clínico: J. Barbado Hernández*  
*Servicio de Medicina Interna. Hospital Universitario La Paz. Madrid.*

*Patólogo: J. Gómez Román*  
*Servicio de Anatomía Patológica. Hospital Marqués de Valdecilla. Santander.*



# SESIONES CLÍNICO- PATOLÓGICAS EN EL SIGLO XXI: ¿tienen sentido?

Sí, ahora más que nunca

*¡Las Sesiones Clínico Patológicas no están muertas,  
y si lo estuvieron, han resucitado!  
¡Aleluya!*

Agradecimientos:

Dr. C. Morales / Dr. Gutiérrez. Departamento Anatomía Patológica

Dr. F.J. Barbado. Servicio de Medicina Interna