

REVISTA ESPAÑOLA DE

# Patología



Publicación oficial de la  
Sociedad Española de Anatomía Patológica  
y de la Sociedad Española de Citología

17th EUROPEAN CONGRESS OF PATHOLOGY  
*and*  
XIX SPANISH CONGRESS OF PATHOLOGY

BOOK OF PROCEEDINGS:  
Keynote Lectures, Symposia,  
Short Courses and Special Sessions

17 CONGRESO EUROPEO DE PATOLOGÍA  
*y*  
XIX CONGRESO ESPAÑOL DE PATOLOGÍA

LIBRO DE PONENCIAS:  
*Conferencias Magistrales, Simposios,*  
*Cursos Cortos y Sesiones Especiales*

BARCELONA, SPAIN  
September 18-23, 1999

# REVISTA ESPAÑOLA DE Patología

Publicación oficial de la  
Sociedad Española de Anatomía Patológica  
y de la Sociedad Española de Citoloxía

## CONTENTS

### PREFACE

- A. Cardesa and G. Klöppel ..... 257

### KEYNOTE LECTURES

- KEYNOTE LECTURE 1: Small round cell tumors. A challenge for surgical pathology: Past and future ..... 259

A. Llombart-Bosch

- KEYNOTE LECTURE 2: Tumor-associated glycoconjugates and cell adhesion molecules: *In vivo veritas?* ..... 261

J. Roth

- KEYNOTE LECTURE 3: Oncogenes and tumor suppressor genes

Genetic analysis of tumor development ..... 263

E. Santos

- KEYNOTE LECTURE 4: The role of *Helicobacter pylori* infection in gastric pathology ..... 265

E. Solcia

### SYMPOSIA

#### SYMPOSIUM 1: Relevant topics in molecular pathology

- Cancer as a molecular disease of mucins and mucin glycosylation ..... 267

L. David, F. Carneiro and M. Sobrinho-Simões

- Molecular mechanisms in diffuse-type gastric carcinoma: Diagnostic and therapeutic aspects ..... 267

H. Höfler

- The RET protooncogene in the diagnostic molecular pathology of thyroid cancer ..... 268

P. Komminoth

- Human Papillomavirus detection and cervical cancer screening ..... 270

J.M.M. Walboomers

#### SYMPOSIUM 2: New entities in pathology of soft tissue tumors

- Adipocytic tumors: New entities and evolving concepts ..... 271

A.P. Dei Tos

- Tumors of uncertain histogenesis ..... 273

L. Guillou

- Small round cell tumors of childhood ..... 275

E. de Álava

- Vascular tumors ..... 277

T. Mentzel

- Fibrous and myofibroblastic tumors ..... 279

C.D.M. Fletcher

# REVISTA ESPAÑOLA DE Patología

## CONTENTS

### SYMPOSIUM 3: Advances in surgical pathology of the ovary

Laparoscopic surgery of the ovary: The pathologist's role	283
<i>S. Carinelli</i>	
Recent advances in mucinous tumors	284
<i>J. Prat</i>	
Simultaneous carcinomas involving the endometrium and ovaries	287
<i>X. Matias-Guiu</i>	
Recent advances in sex cord-stromal tumors	288
<i>I. Macedo Pinto</i>	
Neuroendocrine tumors of the ovary	289
<i>J. Kupryjañczyk</i>	

### SYMPOSIUM 4: Advances in liver pathology

Liver biopsy in 2000. The pathologist's view	291
<i>V.J. Desmet</i>	
Natural history of liver fibrosis	292
<i>P. Bedossa</i>	
Alcoholic and nonalcoholic steatohepatitis	293
<i>K. Zatloukal, C. Stumptner and H. Denk</i>	
Hemochromatosis: Recent molecular findings	294
<i>T.M. Cox</i>	
Stem cells in liver carcinogenesis	295
<i>S. Thorgeirsson</i>	
Hepatocellular carcinoma	297
<i>P.P. Anthony</i>	

### SYMPOSIUM 5: Advances in breast pathology

The role of metalloproteinases in breast lesions	299
<i>M.J. Merino</i>	
Molecular genetic analysis of epithelial hyperplasia and normal tissues in breast	300
<i>S.R. Lakhani</i>	
Multistep model of the genetic alterations leading to breast cancer	301
<i>M.J. van de Vijver</i>	
Myoepithelial differentiation in breast carcinoma	301
<i>G. Bussolati</i>	
The role of molecular prognostic factors in breast cancer	302
<i>I.O. Ellis</i>	
Newly described entities	304
<i>V. Eusebi</i>	

### SYMPOSIUM 6: Prognostic factors in non-Hodgkin's lymphomas

Molecular pathogenesis of germinal-center derived non-Hodgkin's lymphoma	305
<i>R. Dalla-Favera</i>	

# REVISTA ESPAÑOLA DE Patología

## CONTENTS

Prognostic factors in mucosa-associated lymphoid tissue .....	305
<i>D. de Jong</i>	
Prognostic factors in diffuse large B-cell lymphomas .....	306
<i>R. Gascoyne</i>	
Prognostic factors in mantle cell lymphoma .....	308
<i>E. Campo</i>	
SYMPOSIUM 8: Progress in bone marrow pathology	
Myelodysplastic syndromes .....	311
<i>F. Delacrétaz</i>	
Pediatric preleukemic disorders .....	313
<i>J.G. van den Tweel</i>	
Bone marrow involvement in non-Hodgkin's lymphoma according to the REAL classification .....	314
<i>C. de Wolf-Peeters</i>	
Philadelphia chromosome-negative (Ph <sup>1</sup> ) chronic myeloproliferative disorders. A synoptic approach .....	315
<i>J. Thiele</i>	
Chronic myelogenous leukemia. An update .....	316
<i>A. Georgii, G. Buesche, Th. Buhr, J. Thiele, R. Hehlmann</i>	
and the German Chronic Myelogenous Leukemia Study Group	
SYMPOSIUM 9: Selected topics in pediatric pathology	
Perinatal gastrointestinal pathology .....	318
<i>M. Malone</i>	
Gastric pathology in pediatric Crohn's disease .....	319
<i>M. Peuchmaur</i>	
Childhood gastrointestinal infections and infestations as seen in the tropics .....	320
<i>R. Kaschula</i>	
Examination of the placenta in late intrauterine death: What can we tell about cause and recurrence risk? .....	322
<i>T. Stallmach</i>	
SYMPOSIUM 10: Progress in laryngeal pathology	
Laryngeal precancerous lesions: Current diagnostic and prognostic considerations .....	325
<i>N. Gale</i>	
Clonality studies in multiple head and neck cancers: p53 mutations compared with LOH at 3p, 9p and 17p loci .....	326
<i>M.C.G.T. Van Oijen, G.W.A. Tjebbes, F.G.J. Leppers vd. Straat, M.G.T. Tilanus, G.J. Hordijk and P.J. Slootweg</i>	
Laryngeal spindle cell, verrucous and basaloid squamous carcinoma .....	327
<i>H.B. Hellquist</i>	
Adenocarcinomas and salivary gland neoplasms of the larynx .....	329
<i>M.A. Luna</i>	
Gene alterations in precancerous and cancerous lesions of the larynx .....	330
<i>A. Nadal</i>	
Squamous papilloma of the larynx .....	332
<i>L. Michaels</i>	

# REVISTA ESPAÑOLA DE Patología

## SYMPORIUM 11: Relevant topics in pathology of transplantation

The Banff 97 classification of renal allograft pathology <i>P. Furness</i>	334
A simplified classification system for acute renal allograft rejection (CCT) <i>R.B. Colvin</i>	335
Polyomavirus infection of renal allografts <i>V. Nickeleit, H.H. Hirsch, G. Thiel and M.J. Mihatsch</i>	336
Capillary C4d: A tool for the diagnosis of transplants at risk <i>H.E. Feucht</i>	338
Post-transplant lymphoproliferative disease <i>P.S. Randhawa</i>	338
What is borderline renal allograft rejection? <i>V. Nickeleit, M. Zeiler, G. Thiel and M.J. Mihatsch</i>	339

## SYMPORIUM 12: Selected topics in cardiovascular pathology

Directional coronary atherectomy specimens. What have we learned from them? <i>A.E. Becker</i>	341
The endothelium as a multifunctional organ: From sepsis to tumor metastasis <i>C.J. Kirkpatrick</i>	341
Arrhythmogenic right ventricular cardiomyopathy: Pathology and genetics <i>G. Thiene, C. Bassi, A. Angelini, F. Calabrese and M. Valente</i>	343
Pathology of large vessel vasculitides <i>P. Bruneval</i>	344
Myocarditis. How do we make a biopsy diagnosis? <i>U. Baandrup</i>	345

## SYMPORIUM 13: Environmental pathology

Environmental pathology of the nervous system <i>G.J. Krinke, W. Classen and T. Skipsky</i>	347
Test strategies for the identification of endocrine active chemicals. An industry point of view <i>H.P. Gelbe</i>	349
Pulmonary toxicity and risk assessment of pesticides contained in house dust and smoke <i>J. Pauluhn</i>	350
Adverse effects of environmental exposures may occur not only in the individuals directly exposed, but also in their progeny <i>L. Tomatis and U. Mohr</i>	352
Experimental adenocarcinoma of the esophagus: Implications in the sequence Barrett's esophagus-adenocarcinoma <i>M. Pera</i>	352
Biological investigations of environmental and occupational compounds using an alternative <i>in vitro</i> concept <i>M. Aufderheide, J.W. Knebel and W. Koch</i>	353

## SYMPORIUM 14: Advances in standardization of immunohistochemistry (sponsored by DAKO)

Tissue fixation and antigen retrieval <i>M. Werner</i>	355
Comparative immunostaining among 15 different detection systems <i>M. Gambacorta</i>	356

## CONTENTS

Standardization of reporting and quantitation .....	357
<i>H. Battifora</i>	
Automation in immunohistochemistry .....	358
<i>J.R. Riera</i>	
External quality assessment of immunocytochemistry: The experience of the UK National External Quality Assessment Scheme .....	360
<i>K. Miller</i>	
SYNOPSIS 15: Progress in bone pathology	
Genetic instability in osteoblastic bone tumors .....	362
<i>A. Roessner, K. Hauptmann, R. Schneider-Stock, U. Mittler and H.W. Neumann</i>	
The value of immunohistochemistry in the diagnosis of primary bone tumors .....	362
<i>J. Pringle</i>	
Core needle biopsy in the diagnosis of bone lesions .....	363
<i>E. Santini Araujo</i>	
Osteosarcoma of the bone .....	364
<i>K.K. Unni and D.C. Dahlin</i>	
The histological response to chemotherapy as a predictor of the oncological outcome of operative treatment of Ewing's sarcoma .....	365
<i>A.G. Huvos</i>	
Enchondroma versus low-grade central chondrosarcoma .....	365
<i>M. Calvo</i>	
Immunosuppression. Rare and not so rare osteoarticular infections .....	366
<i>J.C. Lorenzo</i>	
SYNOPSIS 16: Advances in prostate pathology	
Comparison of benign, premalignant and malignant lesions of the prostate in routine and consultation material ..	367
<i>B. Helpap, J. Köllermann and U. Oehler</i>	
Morphogenetic concepts of normal and abnormal growth in the human prostate .....	368
<i>H. Bonkhoff and K. Remberger</i>	
Atypical adenomatous hyperplasia, atypical small acinar proliferation and prostatic adenocarcinoma .....	369
<i>S. Hailemariam, J. Köllermann and B. Helpap</i>	
Angiogenesis in prostate cancer and prostatic intraepithelial neoplasia .....	371
<i>R. Montironi and R. Mazzucchelli</i>	
Molecular diagnosis of prostate adenocarcinoma with emphasis on screening programs .....	372
<i>C. Lopes and R. Medeiros</i>	
Benign and malignant stromal lesions of the prostate .....	374
<i>A. López Beltrán</i>	
SHORT COURSES	
SHORT COURSE 1: Tumors of the kidney in adults	
An overview of the renal cell carcinoma classification .....	377
<i>F. Algaba</i>	
Pediatric-type renal tumors in the adult .....	377
<i>L. Boccon-Gibod</i>	
Clear renal cell carcinoma: Present status and grading .....	379
<i>R. Montironi and A. Santinelli</i>	

# REVISTA ESPAÑOLA DE Patología

Papillary (chromophil) renal cell carcinoma .....	380
<i>J.F. Val-Bernal</i>	
Chromophobe renal cell carcinoma (differential diagnosis with clear/granular cell carcinoma and oncocytoma) .....	381
<i>S. Störkel</i>	
Unclassified renal cell carcinomas .....	382
<i>F. Algaba and T.M.S. Figueiredo</i>	
SHORT COURSE 2: Selected topics in infectious diseases	
HIV-1 related lymphoid proliferations .....	385
<i>S. Uccini</i>	
JC virus and glial cells: Viral strategies for cell cycle deregulation in progressive multifocal leukoencephalopathy .....	386
<i>A. Ariza</i>	
Human herpesvirus 8 and its diseases .....	387
<i>G. Cathomas</i>	
Prions and the immune system .....	389
<i>A. Aguzzi, S. Brandner, R. Frigg, A.J. Raeber, I. Hegyi, C. Röckl, M.B. Fischer, V. Pekarik, G.F. Huber, C. Musahl, H. Furukawa, M. Glatzel, P. Parizek and M.A. Klein</i>	
SHORT COURSE 3: Progress in non-neoplastic pulmonary pathology	
Mimics of asbestos-related disease .....	390
<i>R.L. Attanoos</i>	
Pathology of nonasbestos pneumoconiosis (silicosis and mixed dust pneumoconiosis) .....	392
<i>K. Honma</i>	
Perspectives of cellular sociology in chronic interstitial lung diseases .....	394
<i>K. Kayser, S. Zink, E. Hauck, V. Schulz and H.-J. Gabius</i>	
Etiology, pathogenesis and differential diagnosis of lung granulomatosis. An update .....	395
<i>H.H. Popper</i>	
Pulmonary emphysema revisited .....	396
<i>E. Álvarez-Fernández</i>	
SHORT COURSE 4: Short Course in honor of Christoph E. Hedinger:	
Progress in pathology of diseases of the extrahepatic biliary tract and the duodenum	
Lessons from duodenal biopsies .....	397
<i>M. Walker</i>	
Tumors of the ampulla: Pathogenesis and prognostic factors .....	398
<i>G. Zamboni and A. Scarpa</i>	
Duodenal neuroendocrine tumors .....	400
<i>P. Komminoth</i>	
Gangliocytic paragangliomas of the duodenum .....	402
<i>J. Lechago</i>	
Duodenal lesions in patients with polyposis .....	403
<i>K. Geboes</i>	
Extrahepatic biliary lesions .....	405
<i>G. Cathomas</i>	
Inflammatory and tumor-like lesions of the ampulla .....	407
<i>P. Bedossa</i>	

# CONTENTS

## SHORT COURSE 5: Progress in diagnostic cytology

Differential diagnosis in aspiration cytology of head and neck tumors <i>W. Olszewski</i>	409
Fine needle aspiration cytology of lymph nodes <i>M.E. Mendonça</i>	410
Aspiration cytology of soft tissue tumors <i>B. Hagmar and L. Walaas</i>	411
Aspiration biopsy of bone tumors <i>H. Galera-Davidson</i>	412

## SHORT COURSE 6: Pathology of the endometrium

Endometrial changes in modern hormonal treatment <i>C. Bergeron</i>	414
Endometrial pathology of tamoxifen <i>F. Nogales</i>	415
Advances in molecular biology in the endometrium <i>T. Löning, A.M. Bamberger and L. Riehdorf</i>	416
Aggressive forms of endometrial carcinoma <i>V.M. Abeler</i>	417
Mesenchymal tumors of the uterus <i>T.P. Rollason</i>	418

## SHORT COURSE 7: Molecular pathology

DNA analysis: Biological and morphological methods <i>G. Bevilacqua</i>	420
RNA analysis: Biological and morphological methods <i>G. Stanta</i>	421
Molecular biology of tumor progression <i>J. Costa</i>	422
Molecular detection of micrometastases: Its impact on the assessment of prognosis <i>A. Marchetti</i>	422
Viral genes in human tumors <i>S. Ramón y Cajal</i>	423

## SHORT COURSE 8: Recent advances and controversies in soft tissue pathology

Grading of sarcomas at the Mayo Clinic 75 years after Broder <i>A.G. Nascimento</i>	424
On the comparison of apples, oranges and sundry fruits: Problems with grading and prognostication in soft tissue tumors <i>J.M. Meis-Kindblom</i>	426
Immunohistochemistry of soft tissue tumors. An update <i>M. Miettinen</i>	427
Fine needle aspiration of soft tissue tumors in Sweden. A little goes a long way <i>W. Ryd</i>	428

REVISTA ESPAÑOLA DE  
**Patología**

Fine needle aspiration of soft tissue tumors: The Mayo Clinic perspective . . . . .	429
<i>A.G. Nascimento</i>	
Pathogenesis and prognostic parameters in synovial sarcoma . . . . .	430
<i>J.M. Lopes</i>	
When will cancer genetics and biology give us something clinically useful? . . . . .	430
<i>V.P. Collins</i>	
SHORT COURSE 9: Update on salivary gland tumors	
Malignancy in pleomorphic adenoma . . . . .	431
<i>S. Di Palma</i>	
Clear cell tumors . . . . .	432
<i>R.H.W. Simpson</i>	
Squamous and oncocytic metaplasia in salivary gland tumors . . . . .	433
<i>J.W. Eveson</i>	
Progression to low-grade and high-grade salivary gland tumors . . . . .	434
<i>J. Soares</i>	
Molecular biology and immunohistochemistry . . . . .	435
<i>H.B. Hellquist</i>	
SHORT COURSE 10: Metaplasia in the gut	
Overview of gastrointestinal metaplasias . . . . .	436
<i>J. Stachura</i>	
Metaplasia in Barrett's esophagus: A specific phenotype? . . . . .	437
<i>J.F. Fléjou</i>	
Intestinal metaplasia . . . . .	438
<i>N. Ectors</i>	
Metaplasia in the ileal reservoir . . . . .	439
<i>N. Shepherd</i>	
Metaplasia in the pancreas . . . . .	441
<i>J. Lüttges</i>	
Functional aspects of gastrointestinal metaplasias . . . . .	442
<i>N.A. Wright</i>	
SHORT COURSE 11: Pigmented lesions of the skin	
Problematic melanocytic nevi . . . . .	447
<i>P.H. McKee and F.R.C. Path</i>	
Spindle cell melanocytic tumors . . . . .	448
<i>W.J. Mooi</i>	
Dysplastic melanocytic nevus: Under- and overdiagnosis . . . . .	450
<i>F. Contreras</i>	
Nevoid malignant melanoma . . . . .	451
<i>N.S. McNutt</i>	
Immunohistochemistry and molecular biology in the management of melanocytic lesions . . . . .	452
<i>V.G. Prieto</i>	

## CONTENTS

### SHORT COURSE 12: Advances in diagnostic electron microscopy

Electron microscopy in analysis of skin diseases . . . . .	454
<i>W.H. Muss</i>	
The contemporary role of electron microscopy in the diagnosis of mitochondrial encephalomyopathies . . . . .	454
<i>K.C. Kyriacou and T. Kyriakides</i>	
Electron microscopy in the diagnosis of inherited connective tissue diseases . . . . .	457
<i>J.A. Grimaud</i>	
Electron microscopy of melanin-synthesizing tumors . . . . .	457
<i>J. Lloreta Trull</i>	

### SHORT COURSE 13: Pre- and postgraduate teaching in pathology

Modern communication systems for teaching and education . . . . .	461
<i>M. Dietel</i>	
New approaches to testing medical students . . . . .	462
<i>I. Damjanov</i>	
Devising examinations in pathology: Objectives and difficulties . . . . .	463
<i>C. Berry</i>	
Interpat: An interactive method for teaching pathology . . . . .	463
<i>F.J. Pardo-Mindán</i>	

### SHORT COURSE 14: Divergent differentiation in endocrine tumors

Mixed exocrine-endocrine tumors of the gastrointestinal tract . . . . .	465
<i>G. Klöppel and J. Lüttgas</i>	
Mixed exocrine-endocrine tumors of the gastrointestinal tract . . . . .	466
<i>C. Capella, F. Sessa, M. Cornaggia, S. La Rosa and S. Uccella</i>	
Divergent differentiation in neuroendocrine lung tumors . . . . .	467
<i>E. Brambilla</i>	
Divergent differentiation in thyroid tumors . . . . .	468
<i>M. Sobrinho-Simões, A.P. Soares, A.S. Rocha, E. Fonseca, M. Papotti, P. Komminoth and G. Bussolati</i>	

## SPECIAL SESSIONS

### SPECIAL SESSION 1: Telomeres and telomerases

General concepts and technical considerations . . . . .	471
<i>P. Bedossa</i>	
Telomerase activation in human tumors . . . . .	471
<i>F. Bosman, P. Yan and J. Benhantar</i>	

### SPECIAL SESSION 2: Relevant topics in immunopathology

Genetically determined primary immunodeficiencies: The role of thymic lesions in T-cell immunodeficiencies . . . . .	473
<i>C. Nezelof</i>	
Opportunistic tumors associated with acquired immune deficiencies . . . . .	475
<i>H.L. Ioachim</i>	
Cutaneous graft-versus-host disease . . . . .	477
<i>C. Monteagudo</i>	
New developments in the pathogenesis of systemic vasculitis . . . . .	478
<i>M.C. Cid</i>	

REVISTA ESPAÑOLA DE  
**Patología**

CONTENTS

Antineutrophil cytoplasmic autoantibodies in pathology: Major autoantigens and disease associations . . . . .	479
<i>A. Vizjak</i>	
Vascular pathology in systemic lupus erythematosus: Crossroads of immune complex vasculitis and vasculopathy, thrombotic microangiopathy and arteriosclerosis . . . . .	481
<i>D. Ferluga</i>	
<b>AUTHOR INDEX</b> . . . . .	485