

the AFIP LETTER



Armed Forces Institute of Pathology
Washington, D.C. 20306-6000

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The Director's Message

The Armed Forces Institute of Pathology (AFIP) was founded in 1862, when Surgeon General William A. Hammond directed Major John Hill Brinton to establish a military medical museum. Since then, the Institute has become an international resource which provides knowledge of pathology for military and civilian medicine by conducting programs in consultation, education, and research.

Our organization now consists of over 700 military and civilian personnel with professional, technical, and administrative skills that are at the "cutting edge" in the study of pathology. We can apply almost every technique available for the study of the effects of disease on tissue. During the next several years the AFIP will strive to continue to make significant new contributions to the practice of military medicine.

We will refine our consultation service to new levels of quality in terms of thoroughness, relevance, and timeliness. In doing so, we will employ improved techniques in managing our records and transmitting information. We will constantly evaluate and update our laboratory procedures, and we will explore the potential of telepathology.

The AFIP, with its depth and breadth of expertise in pathology, will contribute in a collaborative way to the study of significant medical problems confronting military and other governmental agencies - problems such as

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Change of Command Ceremony

With a crowd of over 300 on hand, outgoing AFIP Director CAPT Robert F. Karnei, Jr., MC, USN, turned the reins of command over to Col Vernon W. Armbrustmacher, USAF, MC, on Thursday morning, June 27. The ceremony also honored CAPT Karnei as he retired from the Navy after 32 years of distinguished service. Among the honored guests in attendance were Enrique Mendez, Jr., M.D., Asst. Secretary of Defense for Health Affairs, and LTG Frank Ledford, Jr., MC, USA, the Army Surgeon General.

In his remarks, Colonel Armbrustmacher noted that change will be the big challenge to the AFIP in the coming years. "The Institute itself

cannot exist in isolation, but has essential resources and skills necessary to study larger problems in collaboration

with other organizations," he said. "Areas of particular importance are neoplasia, environmental pathology, DNA identification, tele-pathology and the study of infectious diseases." During the retirement ceremony, RADM Harold Koenig, MC, USN, Deputy Secretary for Health Service Operations, Health Affairs, presented CAPT Karnei with the



AFIP Director Col Vernon W. Armbrustmacher, USAF, MC, addresses staff and guests at the ceremony.

Meritorious Service Medal. His 32-year Navy career then came to an end when, following a tradition reserved for a retiring ship's Captain, he was "piped ashore" for the last time.

John Hill Brinton Award Goes To Dr. Marc Micozzi



Marc S. Micozzi, M.D., Ph.D., Associate Director of the National Museum of Health and Medicine of the AFIP was selected as the

recipient of the 1991 John Hill Brinton Award. The award, which is named for the museum's pioneering first curator is designed to recognize the achievements of an outstanding scientific investigator at AFIP under the age of forty. Winners of the Brinton Award are competitively chosen by select committee of the AFIP's Scientific Advisory Board.

A cancer researcher who focuses on the relations between diet and various forms of the disease, Dr. Micozzi received the Brinton Award for a research paper he published from a series of studies on retinoids, carotenoids and cancer. These studies were done as part of an approved AFIP research protocol for collaborative studies with the National Cancer Institute and the U.S. Department of Agriculture Human Nutrition Research Center.

Commenting on AFIP's support for his work, Dr. Micozzi said:

"From the earliest stages of this project, I had the benefit of the Institute's in-house review process. The consultations with people from the Department of Environmental and Drug-Induced Pathology as well as the Department of Dermatopathology were very helpful. The degree of academic freedom and support that researchers enjoy at the AFIP is outstanding." Dr. Micozzi's study, "Carotenoid

Analyses of Selected Raw and Cooked Foods Associated With a Lower Risk for Cancer" was published in the Journal of the National Cancer Institute, one of the leading publications in cancer research. The study was also reported by the National Institutes of Health Radio News Service, Executive Health Reports and the American Society of Preventive Oncology. The Society has decided to hold its 1992 annual meeting in Washington and the National Museum of Health and Medicine of the AFIP will co-host this event.

Describing his reaction to receiving the Brinton Award, Dr. Micozzi remarked:

"This award constitutes a recognition of the important work being done as part of the Museum's continuing program of scientific research. This award has provided a shot in the arm to all the young investigators in the Museum. I expect that some of these women and men will receive their own Brinton Awards in the years ahead."

NON-MELANOCYTIC TUMORS OF THE SKIN ATLAS OF TUMOR PATHOLOGY: Third Series, Fascicle 1

by George F. Murphy and David E. Elder

Armed Forces Institute of Pathology, Washington, DC, 1991
ISSN 0160-63441

Since the last AFIP Fascicle on Tumors of the Skin, three decades have witnessed revolutionary advances in dermatopathology. The new fascicle concerning non-melanocytic tumors of the skin has sought to capture the spirit of these advances and display them in a form that is "user friendly." (The volume covering melanocytic tumors will appear soon as Fascicle 2.) In Fascicle 1, major subject categories include tumors of: epidermal

keratinocytes; cutaneous eccrine, apocrine, and pilosebaceous adnexae; hematopoietic cells; fibrohistiocytic, neural, vascular, and smooth muscle lineage; and metastatic neoplasms to skin.

Up-to-date technologies relevant to practical diagnostic issues are described and illustrated, e.g., in situ hybridization for detection of specific HPV types and Southern blot analysis for determination of gene rearrangements in cutaneous lymphoma. Ample use of differential diagnostic tables and charts facilitate rapid and efficient extraction of essential information and criteria, e.g., keratoacanthoma vs. cup-shaped squamous cell carcinoma, differential diagnosis of verrucous epidermal hyperplasia, differential diagnosis of spindle cell malignancies of skin, and benign lymphoid hyperplasia vs. lymphoma cutis. The numerous photomicrographs are generally grouped in clusters that

illustrate progressive magnifications or important histologic, side-by-side comparisons. Attempts have been made to simplify nomenclature, in spite of the extraordinary proliferation of "new entities" that has typified the last few decades in dermatopathology.

Areas that readers may find particularly useful include: extensive discussion of adnexal carcinoma; comprehensive and technologically up-to-date evaluation of lympho-proliferative neoplasia; detailed description and illustration of Kaposi sarcoma, including evolutionary stages; new diagnostic details for neuroendocrine carcinoma; and cutaneous and subcutaneous neoplasia in children.

The quality of both clinical and microscopic illustrations is outstanding in this first fascicle of the Third Series of the AFIP Tumor Atlas. Dermatologists as well as pathologists will find it indispensable.

NEW AFIP DIRECTOR LOOKS TO THE FUTURE

Cites streamlining, efficiency as keys to success

Note: On 27 June 1991, Col Vernon W. Armbrustmacher, USAF, MC, was installed as the 30th Director of the AFIP. In a wide-ranging interview, he talks about his management philosophy and the future of the Institute.

Q. What would you say are your general management philosophies?

A. We must streamline our organization to promote communication among our experts. This allows us to take full advantage of their expertise because the solutions to most problems require collaboration.

Q. With the Department of Defense facing budget constraints, what will the AFIP do to maintain its worldwide reputation in pathology?

A. First, quality will be achieved by constantly measuring and evaluating what we do. This allows us to adjust our organization and procedures to meet the constantly changing requirements. Second, we will focus on several important programs that will support the needs of military and federal medicine. Such programs are the study of the pathology of environmental diseases, infectious diseases, and neoplasia. We will also investigate new techniques such as telepathology, DNA identification, and the correlation of clinically obtained images such as CT scans, MRI, and ultrasound with the gross and microscopic pathologic changes.

Through support from DoD in maintaining our special medical and historical collections, and support from HHS (represented on our Board of Governors) and private funds raised by the National Museum of Health and Medicine Foundation (directed by Dr. C. Everett Koop), we will re-establish a program of public education on medical issues through exhibits in a facility on



the Mall in Washington, D.C.

The Department of Veterans Affairs is most interested in developing with us a state-of-the-art program of quality assurance and continuous quality improvement in anatomic pathology for the Veterans Affairs Hospital Laboratories.

Q. One of the major missions of the AFIP is consultation. Each year, we assist military, federal, and civilian pathologists from around the world by consulting on their diagnoses. In fact, we average over 45,000 consultations

each year. Over the last number of months, the Institute began charging civilians for this service. What's the status of the civilian fee-for-consultation program? Has it been a success?

A. Our consultation program is the basis of our repository, and that's the backbone of our scholarly work, in terms of education, investigation, and

research. Because of restrictions in government funding, our staff was not going to grow to keep up with the demand for outside consultations. The American Registry of Pathology, therefore, initiated the fee-for-consultation on cases from civilian sectors. This has helped defray some of the costs of civilian consultations and resulted in a modest drop in volume of cases. We are always interested in accessioning well-documented cases

which have research and educational value. In these cases we do not charge.

Q. What about merging departments? Any plans there?

A. We have an excellent staff that has in-depth expertise in all areas of pathology. Whether each group of experts needs to be designated as a department is a question we have to look at because of the administrative overhead that each department generates. We will continue to look at logical ways of merging departments

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INTERVIEW, continued from page 3

into larger groups whenever that makes sense.

Q. Turning to training, what about our numerous short and long courses? Are there any plans for expanding them?

A. Our 3 to 5 day intensive courses in sub-specialty areas of pathology are very successful. We want to continue these. We're trying to make our course offerings more national in scope and more accessible to military personnel. During the next several years we'll be introducing courses in cities away from the AFIP, particularly focusing on a city in which there is a large military medical population. We're also looking into developing these seminars on highly specialized subjects in conjunction with regional military and

university experts. In-house, we'll begin to expand our fellowship programs at the AFIP. The American Registry of Pathology will be able to fund a gradually-increasing number of fellowships starting with the next fiscal year.

Also, we will develop our collections of pathologic material - the Yakovlev Collection of serially sectioned human and animal brains, for example, by introducing others that will constitute a study center for advanced pathology. The largest recent addition is the Carnegie Collection of serially sectioned human embryos, which is relevant to every sub-specialty in pathology. We think that this center for advanced study, focused around these very important collections, will become a major resource for both military and civilian medicine.

Q. Finally, overall, how does the AFIP benefit the international pathology community?

A. Our senior staff have long been involved in international programs, and they attract international visitors to the AFIP for lectures and visits, both for the purpose of teaching and training. We are proud of the ability of many of our staff to attract international attention to their work. We are a World Health Organization center and have long-standing ties with the WHO in the field of pathology, developing standardized systems of classifications for tumors. Lastly, these very special collections I've mentioned are an international resource. To varying degrees they will attract foreign scholars to come to study, and they, in turn, make a significant contribution to our expertise. □

DIRECTOR'S MESSAGE, continued from page 1

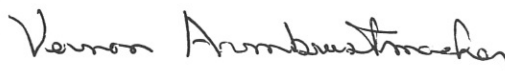
AIDS, the identification of remains, and the impact of the environment on the public health. Indeed, the actual endpoint of many of these studies requires and depends upon the analysis of tissue, whether animal or human, whether a surgical biopsy or an autopsy study. We will contribute to the solution of many of these problems.

Finally, we are proud of our contributions to military and civilian medical education. These activities are based on support from the Department of Defense and our civilian counterpart, the American Registry of Pathology (ARP). We will continue to design educational opportunities that are based on our unique resources such as our large national repository of surgical and autopsy case material and many unique collections.

The collections of the National Museum of Health and Medicine (NMHM) of the AFIP will be preserved by the AFIP. Our goal is to establish a nationally recognized exhibit facility

for public education in health and medicine based on non-DoD government support and private funds raised by the National Museum of Health and Medicine Foundation, led by Dr. C. Everett Koop. We believe this idea is timely and much needed.

I am grateful and proud to have the opportunity to participate at this level in shaping the role of such a unique and valuable organization. Through the dedication of every member, the American Registry of Pathology (ARP), the Surgeon General of the Army, and the Board of Governors, we cannot fail to enrich the capabilities and the prestige of military medicine.



VERNON W. ARMBRUSTMACHER
Col, USAF, MC
The Director

Announcing an Exciting New Seminar

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and
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MARIE VALDÉS-DAPENA, M.D., RECALLS GROWTH OF PEDIATRIC PATHOLOGY

Ash Lecturer provides personal insights

Speaking before a group of over 250 health care professionals at the Seventh Annual James Earle Ash Lecture on May 29, Marie Valdés-Dapena, M.D., recalled her early years as a pediatric pathologist. "I figured what I was doing back in 1945 was like trying to fix a Rolex watch with a brick," she noted, referring to the difficulties of performing infant autopsies with adult-sized instruments. She went on to describe the great advances made in pediatric pathology over the last 45 years.

Professor of Pathology and Pediatrics at the University of Miami School of Medicine, Dr. Valdés-Dapena's main area of research has been in the study of Sudden Infant Death Syndrome (SIDS). Her interests also include the importance of the postmortem conference with parents.

She has served the National SIDS Foundation since its inception in 1962 in a variety of roles, including the presidency and chairman of the board of trustees. A study of over 1,000 SIDS cases which she participated in contributed to a greater understanding by the medical community of its epidemiology and pathology.

Currently the Director of the Division of Education in the Department of Pathology at the University of Miami, the Pottsville, PA, native recalled her personal perspectives of the growth and development of pediatric pathology. During a slide presentation, she harkened back to 1945 when she was beginning her internship and residency at Philadelphia General Hospital (PGH).

The Temple University School of Medicine graduate, then known as Molly Brown, had intended to become a radiologist - until she met her future husband. "Tony was a second year pathology resident," she noted, "and he

felt it would be nice if we could work together. And so I became a pathologist." The busy doctors were married on the grounds of PGH after both had finished work for the day.

Dr. Valdés-Dapena recalled the customary 1940's practice for the families of newly-admitted patients to be given about 13 forms to sign,



including one which gave permission for an autopsy. "In these days, this would be unthinkable," she said, noting that over 2,000 autopsies per year were done by five residents and one pathologist.

During the 1930's and 40's, "there was very little that could be done" to treat sick infants, she noted. As a consequence few cared about the importance of infant autopsies, and she was selected to do them by default. Despite her early problems of "ignorance and lack of adequate equipment," she developed numerous skills during her residency.

Her career then took her to Fitzgerald Mercy Hospital in Darby, PA, where the "baby boom" was well underway. "There were more deliveries

there than at PGH, and I found myself with a lot of work to do regarding stillborns and newborn babies," she said. During this time, she began collecting information for what would be a book on fetal and neonatal histology.

"Early on I began to recognize the fact that one of my biggest problems was that I didn't know how tissues of infants should look under a microscope. There were lots of textbooks about how adult tissues should look, but not one for infants. So I began to collect slides, specimens and other information," she said. Valdés-Dapena has recently published a perinatal autopsy manual in conjunction with the AFIP.

In 1951, Dr. Valdés-Dapena returned to academia when she took a pathologist position at Women's Medical College of Pennsylvania, eventually rising to the rank of Associate Professor in the Department of Pathology. In 1959, a long-standing interest in the diseases of infants and children drew her back to pediatric pathology. She served as an apprentice to Dr. James Arey at St. Christopher's Hospital, a unique 150 bed tertiary care academic center for the practice of pediatric medicine.

Arey and Valdés-Dapena recently contributed 7,000 photographs of pediatric pathology specimens to the AFIP. Collected from more than 40 years of work, the photos will be incorporated into the AFIP's newly formed Human Developmental Anatomy Center. Valdés-Dapena worked, studied, and taught at St. Christopher's for 17 years. In 1976, she moved to Miami and became the first director of the Pediatric Pathology Section within the University of Miami School of Medicine's Department of Pathology.

Concluding her lecture, the mother of 11 and grandmother of 16 said of pediatric pathology: "We've arrived, we've grown up. We've come a long way from being nothing at all to what we are today."

JOINT HIV RESEARCH EFFORT INAUGURATED

■ With the visit of **COL David S. Burke, MC, USA**, and **LTC Chester Roberts, MSC, USA**, Division of Retrovirology, Walter Reed Army Institute of Research (WRAIR) on 12 March 1991, a new AFIP/WRAIR joint research effort on the pathology of human immunodeficiency virus (HIV) and related lentiviral infections was inaugurated at the AFIP. **LtCol Allen Burke, USAF, MC**, and **Jorge Ribas, DVM**, of the Department of Cardiovascular Pathology, received a FY 91 grant for over \$417,000 from the U.S. Army

Medical Research and Development Command. This grant funds the creation of dedicated laboratories at the AFIP for the detection of HIV nucleic acids and antigens in autopsy tissues from asymptomatic, early HIV-infected people who have died of causes unrelated to HIV infection, and to support HIV vaccine development studies.

Dr. Florabel Mullick is the Director for AIDS Research and Education at the AFIP, and the AFIP Representative to the Military Medical Consortium for Applied Retrovirology Research (MMCARR). The establishment of these laboratories has extensive military implications, given the mandate and funding by the U.S. Congress to the U.S. Army to study early HIV infection and develop related vaccines and immunotherapy.



Standing from left to right and surrounding Dr. Florabel Mullick, Associate Director, AFIP, are COL D. Burke, MAJ David Anderson, WRAIR, LtCol A. Burke, LTC Renu Virmani, Chair, Dept. of Cardiovascular Pathology, and Dr. J. Ribas.

■ **Maj Melissa L. Rosado de Christenson, USAF, MC**, Chief, Pulmonary and Mediastinal Radiology, and **Dr. James Smirniotopoulos**, Asst. Chairman and Chief, Neuroradiology, Department of Radiologic Pathology, were guest lecturers at the 4th Convencion de Radiologia de Puerto Rico, held in San Juan, Puerto Rico, 3-5 May 1991. Among their topics, Maj de Christenson spoke on "Mediastinal

Masses and the Pleura," and Dr. Smirniotopoulos reviewed "Differential Diagnosis of Supratentorial Masses."

■ **Col Kenton Hartman, USAF, MC**, Associate Director, Center for Advanced Pathology, and **MAJ Victor Weedn, MC, USA**, Deputy Medical Examiner, OAFME, addressed the Erie County (NY) Sheriff's Foundation about DNA Identification Techniques on 16 May 1991.

■ On 16 May 1991, **Maj Joye Carter, USAF, MC**, Deputy Medical Examiner, Office of the Armed Forces Medical Examiner (OAFME) headed a team to Panama and Honduras to help investigate an army helicopter accident in which three fatalities occurred.



■ **Dr. Leslie H. Sobin**, Chair, Division of Gastrointestinal Pathology and Head of the WHO Collaborating Center for International Histological Classification of Tumors, was in Geneva in May to chair the annual meeting of the Tumor, Nodes, Metastasis (TNM) Project of the International Union Against Cancer. Dr. Sobin also served as consultant to the World Health Organization regarding the role of standardized tumor classifications in the execution of national cancer plans. He then lectured in Nancy, France, on tumor classification at a meeting of the Committee on Data for Science and Technology of the International Council of Scientific Unions. This committee is concerned with promoting international access to standardized classifications in biology.

SYMPOSIUM "TRANSGENIC ANIMAL MODELS IN BIOMEDICAL RESEARCH," SET FOR NOVEMBER 4-5

A Symposium, "Transgenic Animal Models in Biomedical Research," will take place November 4-5, 1991, at the National Institutes of Health, Bethesda, MD. The program will be divided into 6 major sections: 1) production of transgenic animals, 2) neoplasia, 3) diabetes mellitus, 4) atherosclerosis and thrombosis, 5) developmental abnormalities, and 6) gene therapy. For more information, contact Dr. George Migaki, Registry of Comparative Pathology, Armed Forces Institute of Pathology, Washington, DC 20306-

6000. Telephone (202) 576-2452 or fax at (202) 576-2164. Reservations will be accepted through October 11, 1991, with attendance limited to 100.



Repository and Research Services

Responsibility for maintaining the microscopic slide repository of the AFIP, which consists of over 50 million slides, was recently transferred from the Records Repository to the Materials Repository. This change consolidated responsibility for the maintenance of all pathologic materials, to include slides, paraffin blocks, and formalin-fixed specimens, into one division. The Records Repository retained responsibility for the maintenance of the pathologic case folder and its retrieval and information release duties were expanded.

With the help of our student volunteers from Rock Terrace High School, located in Rockville, Maryland, Materials Repository personnel have transferred approximately half of the microscopic slide repository from its temporary location in Rockville, Maryland, and uploaded it into the new robotic horizontal carousels at the new National Pathology Repository Building at the Walter Reed Forest Glen Annex in Silver Spring. This has been a monumental effort and the help of student volunteers from Rock Terrace has been very much appreciated. We hope to complete the move of the entire slide repository by the end of September.

A reminder: Contributors should never send cases directly to a particular department. This only results in delays. For prompt processing, all cases should be sent directly to the following address:

Receiving and Accessions Division
AFIP-RRR
Armed Forces Institute of Pathology
Washington, D.C. 20306-6000

HISTOTECHNOLOGY NOTES

The Veterinary Histopathology Laboratory

The Veterinary Histopathology Laboratory responsible for accomplishing work for the Department of Veterinary Pathology is unique within the AFIP. Unlike any other of the laboratories in the Institute, which usually handle one organ system in one species (humans), the Veterinary Laboratory handles innumerable species and all organ systems (including some not found in humans). On any given day the laboratory may handle, in addition to domestic animal species, a variety of laboratory, wild and exotic animals, including reptiles, birds, fish, and invertebrates (oysters, clams, etc.).

Because of the variety of animal species and organ systems involved, and because the Department receives a large number of infectious disease cases, laboratory personnel must be

proficient in a wide range of special histochemical stains and techniques. The laboratory's four technicians support 14 pathologists, more than any other laboratory of its size in the Institute. In addition, it supports the only residency in the Department of Defense for veterinary pathologists, giving laboratory personnel an educational as well as technical role.

The Department of Veterinary Pathology is at the forefront of investigating the effects of environmental disasters on wildlife. Following the *Exxon Valdez* oil spill, the laboratory grossed, cut and stained tissue specimens from over 200 sea otters. "There is no doubt in my mind that the staff of our laboratory is the most versatile in the Institute," said COL John Pletcher, Chairman, Department of Veterinary Pathology, "many of our most notable cases are submitted to us because of the reputation of our laboratory response."

Pulmonary Blastomas

Michael N. Koss, M.D., Liselotte Hochholzer, M.D., and Timothy O'Leary, M.D.

Pulmonary blastoma is a rare lung tumor composed of immature mesenchyme and/or epithelium that morphologically mimics embryonal pulmonary structure. The prognosis of these tumors is poor, and the clinical course is not readily predicted from histologic appearance. In this report, the clinical, gross, microscopic, and immunopathologic features of 52 cases are described, and prognostically important correlates are determined. Twenty-eight patients were women, and 24 were men. There was a unimodal age peak in the fourth decade; only two patients were younger than 10 years old, and both had biphasic blastomas. Forty-one percent of patients were asymptomatic. Chest radiography typically showed a peripheral or midlung mass without predilection for any lobe. Microscopically, tumors could be divided into two classes: those composed solely of malignant glands of embryonal appearance (well-differentiated fetal adenocarcinomas [W DFA], 28 cases) and those with a biphasic appearance (24 cases). The malignant epithelium contained cytokeratin, carcinoembryonic antigen, milk fat globulin, and often chromogranin; vimentin, actin, and less frequently desmin and myoglobin were present in malignant stromal cells. More often W DFA was a smaller tumor (< 5 cm) than biphasic tumors ($P \leq 0.001$). It was more likely to be asymptomatic ($P \leq 0.001$), and it was less likely to show pleural effusion by chest radiography ($P \leq 0.01$) or giant or bizarre tumor cells ($P \leq 0.001$) or frequent (≥ 30 mitoses/10 high-power fields) mitoses in the microscopic sections ($P \leq 0.01$). Only 14% of patients with W DFA died of their tumor; 52% of patients with biphasic tumors died (mean follow-up, 97 months and 49 months, respectively). For patients with W DFA, the presence of thoracic adenopathy by chest radiography ($P \leq 0.001$) and metastasis at initial presentation ($P \leq 0.001$), followed by tumor recurrence ($P \leq 0.01$), were the factors most highly correlated with poor prognosis. For patients with biphasic tumors, tumor recurrence ($P \leq 0.001$) was the most significant indicator of poor prognosis, followed by metastasis at initial presentation ($P \leq 0.05$) and gross size of the tumor (≥ 5 cm) ($P \leq 0.05$). These findings support the idea that histologic class and gross and clinical findings can be of prognostic value in pulmonary blastoma.

Cancer 67:2368-2381, 1991.

Nodular Regenerative Hyperplasia of the Liver in Children

Cesar A. Moran, M.D., Florabel G. Mullick, M.D., and Kamal G. Ishak, M.D., Ph.D.

Sixteen cases of nodular regenerative hyperplasia of the liver in children are presented. The patients, 10 girls and 6 boys, were between the ages of 7 months and 13 years, with a median of 6 years. Clinically, nine children presented with hepatomegaly or splenomegaly, with and without signs of portal hypertension. A history of anti-convulsant drug therapy was obtained in four patients. Associated conditions in the remaining three cases were Donohue's syndrome, disseminated intravascular coagulation, and angiomyolipoma of the kidney. In five patients, a clinical diagnosis of primary intra-abdominal tumor was made. Follow-up showed that six patients died of causes unrelated to the nodular hyperplasia. Two patients were asymptomatic when last seen 5 and 18 years after the initial diagnosis of nodular hyperplasia. Both patients underwent shunt surgery. No follow-up was available for eight patients. The importance of recognizing this entity in the pediatric age group, as well as its histopathologic differential diagnosis, is stressed.

Am J Surg Pathol 15(5): 449-454, 1991.

Deceptive Bizarre Stromal Cells in Polyps and Ulcers of the Gastrointestinal Tract

Kris M. Shekitka, M.D. (LtCol, USAF, MC), and Elson B. Helwig, M.D.

The clinical and pathologic features of 33 pseudo-malignant lesions of the gastrointestinal tract with bizarre stromal cells are reported. Deceptive histologic changes were identified in ulcers of seven patients and in inflammatory polyps of 26. A misdiagnosis of malignant neoplasm was made in six of the 33 patients (three polyps and three ulcers). A history of gastrointestinal bleeding and/or inflammatory bowel disease was common. The bizarre stromal cells were usually distributed beneath the ulcerated mucosa or within granulation tissue. They stained strongly for vimentin in 20 of 23 cases. Some of the bizarre cells also stained for muscle specific actin (seven of 23 cases). The cells appear to be reactive fibroblasts or myofibroblasts. Follow-up information obtained on 24 of the 33 patients (including four of the six cases initially diagnosed as malignant) revealed 22 patients to be alive without evidence of a malignant neoplasm (average follow up, 13 months). Two patients died of other causes. Correct recognition of these bizarre stromal cells in gastrointestinal ulcers and inflammatory polyps will prevent a potentially serious diagnostic pitfall.

Cancer 67:2111-2117, 1991.

COURSE OFFERINGS

Armed Forces Institute of Pathology / American Registry of Pathology
August 1991- December 1991

Hepatic Pathology

September 4 - 6
Bethesda, MD: Holiday Inn Bethesda
Approx. CME Credit: 19
Tuition: \$400 (DOD, VA and PHS Fee: \$95)

Abdominal Imaging Review

September 7 - 8
Bethesda, MD: Hyatt Regency Bethesda
Approx CME Credit: 13
Tuition: \$275 (DOD, VA and PHS Fee: \$75)

Flow Cytometry: A Diagnostic Adjunct in Hematopathology

September 21 - 22
Rockville, MD: Holiday Inn Crowne Plaza
Approx. CME Credit: 12
Tuition: \$350 (DOD, VA and PHS Fee: \$200)

Morphologic Findings in Medical Renal Diseases & Transplants

September 24 - 27
Bethesda, MD: Holiday Inn Bethesda
Approx. CME Credit: 29
Tuition: \$350 (DOD, VA and PHS Fee: \$50)

Ischemic Heart Disease: Clinical and Pathologic Perspectives of Reperfusion and Revascularization

September 27 - 29
Bethesda, MD: Hyatt Regency Bethesda
Approx. CME Credit: 21
Tuition: \$400 (DOD, VA and PHS Fee: \$150)

Gynecologic Pathology

October 20 - 22
Bethesda, MD: Holiday Inn of Bethesda
Approx. CME Credit: 23
Tuition: \$425 (DOD, VA and PHS Fee: \$100)

Aerospace Pathology and Accident Investigation

October 21 - 23
Washington, DC: Armed Forces Institute of Pathology
Approx. CME Credit: 25
Tuition: \$250 (DOD, VA and PHS Fee: \$35)

Placental Pathology

October 24 - 26
Bethesda, MD: Holiday Inn of Bethesda
Approx. CME Credit: 18
Tuition: \$300 (DOD, VA and PHS Fee: \$100)

Perspectives in Scuba Diving Safety

October 26 - 27
Washington, DC: Armed Forces Institute of Pathology
Approx. CME Credit: 13
Tuition: \$135 (DOD, VA and PHS Fee: \$85)

Oral Pathology

October 28 - November 1
Bethesda, MD: Holiday Inn of Bethesda
Approx. CME Credit: 34
Tuition: \$495 (DOD, VA and PHS Fee: \$100)

Essentials in Forensic Pathology

November 4 - 8
Bethesda, MD: Holiday Inn of Bethesda
Approx. CME Credit: 32
Tuition: \$375 (DOD, VA and PHS Fee: \$100)

For further information, contact:

Education Division,
Armed Forces Institute of Pathology,
Washington, DC 20306-6000

301-427-5231
FAX: 301-427-5001.

APPLICATION FORM - AFIP COURSES

Course Title & Dates _____
 Name (Last, First, MI) _____
 Mailing Address _____
 City, State, Zip _____
 Phone _____ Specialty _____ Board Status: Certified Eligible
 Citizenship _____ Resident/Fellow Friend of AFIP Membership # _____
 Military/Federal Civilian Employees (Only): Rank/Civilian Grade _____
 Service Agency: _____
 Corps: MC, DC, NC, VC, Biomedical/Allied Science
 Payment Enclosed: (Payable in U.S. dollars only) Tuition \$ _____ DoD, VA, and PHS Fee \$ _____
 Method of Payment: Check/Money Order MasterCard Visa
 Card Number _____ Expiration Date _____
 Name as it appears on card _____
 Signature _____

Make All Payments to: AMERICAN REGISTRY OF PATHOLOGY

Mail To: Armed Forces Institute of Pathology
 Education Division
 Washington, D.C. 20306-6000
 Telephone: (301) 427-5231/5618
 AUTOVON: 291-5618 FAX: 301-427-5001

Residents and Fellows deduct 25% of Course Fee
 Friends of AFIP deduct 10% of Course Fee

YES!

Please send more information about the following courses when it becomes available. Mail to: Armed Forces Institute of Pathology, Education Division, Washington, D.C. 20306-6000

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