

Medical Staff Progress Notes

Volume 4, Number 5
May, 1992



From the President

The recent Pennsylvania Medical Society's 1992 Leadership Conference, "Survival on the High Wire," provided a forum for discussion of a wide range of interesting topics on the current medical landscape. These included a look at evolving trends in several areas of health care, including liability reform, managed care of all different types, and a considerable amount of interest in the development of practice parameters and clinical outcomes research.

Cost containment continues to be the main focus of those paying for medical care, with increasing attention directed toward evaluation of treatment outcomes and effectiveness. Much discussion at the meeting centered around the future of American health care. Emphasis was placed on the importance of physician-hospital relationships and the need to form effective partnerships, in an era of increasing control by the purchasers and regulators of our services.

The significance of practical political involvement for physicians, and the need to develop a working relationship with our legislators was also stressed. It is clear that rapid change in health

care is the order of the day, and the more proactive we are the better we will be able to deal with the new environment.

Several tapes from the meeting presentations have been requested and are available in the Medical Staff Services Office. The tapes include "Practice Parameters," "Liability Reform" (excellent), and "The Future of Health Care."

Progress continues on the Cancer Center with an advisory committee including a number of Medical Staff members helping to shape the exact form of the Center and its leadership. Gary Marshall, Administrator, Oncology Services, has recently been hired. In addition, a physician director of the Cancer Center will be selected via a search process, considering both internal and external candidates.

The Past Presidents Council continues to meet regularly. This is a new committee which has been very helpful in providing perspective and the benefit of past leadership experience in addressing current problems of the Medical Staff.

Continued on Page 2

In This Issue ..

*Notification of
Reportable Cases to
the Coroner*

-- Page 3

*Hospital to Switch
to New Telephone
Exchange*

-- Page 4

*Pharmacy &
Therapeutics
Highlights*

-- Pages 15-18

*Drug Information
Bulletin*

-- Pages 19-20

HLA Testing

-- Page 21

*IV Therapy Update
and Procedural
Changes*

-- Pages 23-25

Many of you have expressed concern about the new OSHA Guidelines for physicians' office practices. In conjunction with our Infection Control Department, Physician Office Practice Services (POPS) recently conducted seminars for office staffs to provide assistance and direction in attempting to comply with these sometimes arcane directives from our friends in Washington.

We are seeing increased interest in serving on the Medical Executive Committee including a number of inquiries on how one gets to serve. Basically, there are a total of 12 at-large members of the committee of whom four are nominated and elected each year in June. The term is three years with meetings held once a month.

While the issues dealt with are sometimes difficult and complicated, the payback is that Medical Staff members get a chance to participate in the decision and policy-making processes of our hospital as well as a more in-depth look at the governance process here. Service on the Medical Executive Committee, although sometimes demanding, can be a very rewarding experience. Expressions of interest should be communicated to the Medical Staff Services Office either personally or in writing.



John Jaffe, M.D.
President, Medical Staff

Observation Status

On April 10 at 17th & Chew and April 17 at Cedar Crest & I-78, the outpatient category of Observation status became available for use. The goals of this outpatient category are to reduce admission denials and provide additional time and setting to evaluate patients prior to a decision to admit the patient. Key points for physicians to remember:

- * a physician's order must be written to assign patients to Observation
- * documentation in the medical record must clearly reflect the reason the patient required Observation

- * decisions to admit or discharge patients should be made within 24 hours from the time of the order to assign patient to Observation
- * physician billing and hospital billing must be the same -- OUTPATIENT
- * consultations should be handled on a physician-to-physician basis and should be responded to within four hours.

If you have any questions regarding appropriate use of Observation, please contact Susan Lawrence, Director, Integrated Quality Assessment/Resource Utilization Management, at 778-2414.

Notification of Reportable Cases to the Coroner

It is the policy of Lehigh Valley Hospital to abide by Pennsylvania Law 16 P.S. s5106, which requires the proper notification of reportable cases to the Coroner. According to the guidelines, this law provides immunity from civil and/or criminal liability arising out of reporting. Failure to report any of these cases can lead to civil or criminal liability.

The following are reportable cases under Pennsylvania Law to the Coroner:

- * Sudden deaths, as defined below, not caused by readily recognizable disease, or wherein the cause of death cannot be properly certified by a physician on the basis of prior (recent) medical attendance.
- * Death occurring under suspicious circumstances, including those where alcohol, drugs or other toxic substances may have had a direct bearing on the outcome.
- * Deaths occurring as a result of violence or trauma (including falls), whether apparently homicidal, suicidal or accidental (including, but not limited to, those due to mechanical, thermal, chemical, electrical or radiational injury, drowning, cave-ins and subsidences).
- * Any death in which trauma, chemical injury, drug overdose or reaction to drugs or medication or medical treatment, was a primary or secondary, direct or indirect, contributory, aggravating or precipitating cause of death.
- * Operative and peri-operative deaths in which the death is not readily explainable on the basis of prior disease.
- * Any death wherein the body is unidentified or unclaimed.
- * Deaths known or suspected as due to contagious disease and constituting a public hazard (refer to Policy in the Infection Control Manual under Reportable Diseases - Infection Control Policy, Section II - Isolation).
- * Sudden Infant Death Syndrome (SIDS)
- * Stillbirths that are 16 weeks of gestation or greater, and death of infants within 24 hours of birth.

Sudden Death - The Coroner shall regard any death as sudden if it occurs without prior medical attendance by a person who may lawfully execute a certificate of death in this Commonwealth, or if, within 24 hours of death, the decedent was discharged from such medical attendance or a change of such medical attendance had occurred, or if any such medical attendance began within 24 hours of death and the medical attendant refuses or is unable to certify the cause of death. Medical attendance includes hospitalization.

For more information, please consult Policy Number AD 2100.02 in the Administrative Directory which is available in Medical Staff Services.

A General Medical Staff Meeting will be held on Monday, June 8, at 6 p.m. in the Auditorium of Lehigh Valley Hospital, Cedar Crest & I-78.

All members of the Medical Staff are urged to attend.

One Hospital - One Telephone Exchange

Another important step in the merger of the hospital will take place on June 1 -- one unique telephone exchange for the entire hospital system.

Currently, the hospital uses several telephone exchanges including 776, 778, 821, 798, to name a few. On June 1, Lehigh Valley Hospital will begin using the 402 prefix which will be used solely by the hospital.

Although the change will benefit the public in terms of simplicity, it should cause little to no confusion for employees and affected physician offices. An important part of the conversion is that the four digit extensions following the new prefix will remain unchanged. Also unchanged will be some of the typical codes such as "99" for outside lines and Ext. 8999 for the paging operator.

Differences to the system will be minor, such as dialing "5100" rather than "51" for direct paging; "5300" rather than "53" to change paging status; and "9000" rather than "0" to access the inside operator.

Because 10,000 numbers are affected, it is impossible for Bell of Pennsylvania to provide after-the-fact recordings indicating the change for everyone's extension.

However, newspaper advertising regarding the new telephone exchange will run in local newspapers throughout the month of May to alert the community. In addition, physicians' offices affected by the new exchange have received postcards to notify their patients of the change.

The new telephone exchange is the latest in a series of actions designed to give Lehigh Valley Hospital a truly singular identity.

Single Provider Number Anticipated

Since the announcement of the hospital's new name -- Lehigh Valley Hospital -- physicians' offices have inquired if the hospital now has a single provider number. According to Sandra Colon, Director of Patient Accounting, Lehigh Valley Hospital has made application for a single hospital provider number, and it is expected that this request will be approved. In addition, a single number for Medicare billing and reimbursement is also being pursued.

The anticipated date for change is July 1, 1992, and, if granted, the hospital will use the former Allentown Hospital provider number as its single provider identification. Since physicians may need to update their billing systems with this change, updates and announcements will be provided through *Medical Staff Progress Notes* as soon as information becomes available.



HLA Testing

The Histocompatibility (HLA) Lab at Lehigh Valley Hospital, Cedar Crest & I-78, has been in operation for over a year and provides to the medical community of the Lehigh Valley and surrounding area unique clinical testing opportunities. In addition to servicing the renal transplant program, the HLA Lab offers testing which may be of value to physicians in the areas of hematology, oncology, rheumatology, ophthalmology, and endocrinology.

For your convenience, attached to this issue of *Medical Staff Progress Notes* is a table which briefly outlines the HLA tests which are currently available along with some of the clinical applications for each test.

DNA Ploidy Measurements

The Clinical Laboratory is pleased to announce that DNA ploidy measurements of solid tumors are now available. The testing is done on paraffin embedded tissue by flow cytometry. Image analysis technology is also available for smaller specimens and for specific morphometric measurements.

Test requests received by Tuesday will be reported on Friday. The test must be requested by ordering on the surgical pathology request form or by calling the molecular lab at 776-8005.

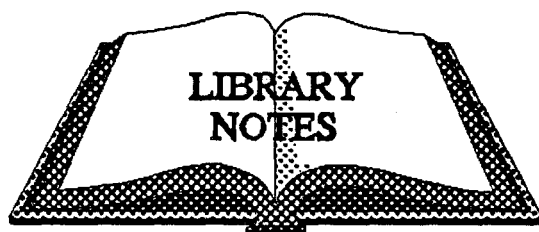
Any questions or comments regarding this test should be addressed to Brian W. Little, M.D., in Pathology.

Intact-PTH

Through an agreement with Nephrology and Endocrinology, the Laboratory is promoting the Intact-PTH as the most reliable clinical test for parathyroid hormone. Thus, the N-terminal and C-terminal tests have been removed from the new laboratory test request form. The Intact-PTH is done in-house by an RIA method and requires a lavender top tube and a red top tube placed on ice and delivered as soon as possible to the laboratory. The test request, besides an Intact-PTH, includes an ionized calcium, phosphorus, and creatinine. Please refer to the Laboratory Handbook for reference ranges. If you have any questions regarding this issue, please contact Gerald E. Clement, Ph.D., Director, Toxicology/Immunology/Chemistry, at 778-2534, or Gale Fritch, Immunology Supervisor, at 778-2845.

Tay Sachs Testing

Thomas Jefferson University, the hospital's reference lab for Tay Sachs testing, has recently instituted a charge for this test; therefore, effective June 1, patients will no longer receive Tay Sachs screening for free. There will now be a \$60 charge for the testing. Test results received from Thomas Jefferson will be mailed by the laboratory directly to the patient and/or ordering physician. If you have any questions regarding this issue, please contact Dr. Clement at 778-2534 or Gale Fritch at 778-2845.



Library Computerized Services - What's New

The new year has brought with it many new additions and changes to the library's computerized services. Since there will be much more to come, now is the time to familiarize yourself with these services and how to utilize them. Computer technology and information management is changing almost daily; therefore, the methods and programs used in the library will be undergoing changes just as rapidly. If you are already using these services, it is important that you keep current with these changes as they occur. Information is always available in the library or by calling Sherry Giardiniere, Computer Coordinator, at 776-8406.

Recent Changes

Medline Remote Access

Because of a conflict between the new 1992 set of MEDLINE CD's and the library's communications remote access software PC ANYWHERE III, an update to the new PC ANYWHERE 4.5 version has been made. There are major changes in this upgrade which affect some of the methods used by the remote user. Although there is more flexibility with the upgrade, it requires some users to change their methods of access. Also, features found to be

very useful by the host system have been eliminated. If you are a current remote user and are experiencing problems, please contact Mrs. Giardiniere at 776-8406 for assistance and further information. All new information and documentation will be sent out as soon as possible after the changes occur.

If you do not currently utilize this service but would like to, orientations will be held monthly beginning in June 1992. Contact Mrs. Giardiniere for hardware and software requirements.

ILIAD 4.0

Iliad, a computer-based medical diagnostic tool for internal medicine, has been upgraded to version 4.0 which contains significant enhancements. This program is available 24 hours daily at Cedar Crest & I-78. This is an exciting new way to use computers in medicine, and we will see much more happen in the area of expert systems in the future. There is a demo available on the system; training and orientation are being planned for the near future.

QUOTE OF THE MONTH

"It takes courage to push yourself to places that you've never been before...to test your limits...to break through barriers."

Nuclear Medicine News

The Nuclear Medicine Division at Lehigh Valley Hospital, Cedar Crest & I-78, has recently purchased a state-of-the-art Scinticor multi-crystal gamma camera for the evaluation of right ventricular and left ventricular wall motion and ejection fraction. This new camera has both first pass and multigated capabilities and can be used portably if indicated. It is anticipated that portable use of this camera will be mostly on the patients in the Open Heart and Transitional Open Heart units on whom echocardiograms would be very difficult to obtain.

All of the Nuclear Medicine physicians and technologists have been fully trained on this equipment and can provide this service on a same day or next day basis.

When ordering this examination, please specify the following:

- * Whether or not the study needs to be done portably.
- * If you are mainly interested in the ejection fraction of the left ventricle, please order an "RNA-LVEF" scan. A routine first pass RNA scan will be performed.

- * If you are mainly interested in the ejection fraction of both ventricles, please order an "RNA-RVEF & LVEF" scan. A routine first pass RNA scan will be performed.
- * If you are interested in both wall motion and ejection fraction of the left ventricle, please order "RNA-LVEF with wall motion." An anterior first pass RNA scan followed by a LAO gated cardiac scan will be performed.
- * If you are interested in both wall motion and ejection fraction of the right and left ventricles, please order "RNA-RVEF & LVEF with wall motion." An anterior first pass RNA scan followed by a LAO gated cardiac scan will be performed.
- * If you are interested in myocardial viability, please order a gated MIBI scan. This study may also be done portably if needed.

If you have any questions or comments regarding this issue, please contact one of the Nuclear Medicine physicians at 776-8383.

IV Therapy Update and Procedural Changes

In an effort to provide members of the Medical Staff with the most up-to-date information, attached to this issue of

Medical Staff Progress Notes are details regarding critical issues related to IV Therapy as well as recent policy and procedural changes.

Pool Trust Approves Funding

The Trustees of the Dorothy Rider Pool Health Care Trust recently approved the release of \$98,000 of Department of Medicine Discretionary Funds to John P. Fitzgibbons, M.D., as Chairman, Department of Medicine. The funds will be used to support the research activities within the Department of Medicine.

The Trustees have also approved release of \$211,951 of Trust funds from the Institutional Research grant for the following RAC protocols:

"Trauma Outcome Neurophysiology Study (TONS): Assessment of the Prognostic Significance of Selected Neurophysiological and Clinical Data in Severely Head Injured Patients" - \$102,657 - Alexander Rae-Grant, M.D., Principal Investigator (PI)

"The Role of MRI in the Diagnosis of Foot Infections in the Diabetic" - \$28,275 - Gary Nicholas, M.D., PI

"Nonlinear Dynamics of Neurological Events: Electroencephalography" - \$26,840 - Alexander Rae-Grant, M.D., PI

"Cellular Models of Hypoxic/Ischemic/Traumatic Brain Insult: Mechanisms and Treatments" - \$25,725 - George Chovanes, M.D., PI

"Herpes Simplex Virus and Oro-Tracheal Airways" - \$13,920 - Patrick Hanley, D.O., PI

"Health-Related Quality of Life in Inflammatory Bowel Disease" - \$10,034 - James Reed III, Ph.D., PI

"Clostridia Difficile Colitis" - \$4,500 - Lester Rosen, M.D., PI

The Pool Trustees also initiated two Innovation and Development grants -- the first one, "Lehigh Valley Partnership for Health: Access to Care, Phase II" for \$10,000 to facilitate collaboration among the health and human services providers in Lehigh and Northampton Counties, and the second, "The Generalist Physician," for \$5,000 to be used to facilitate the Lehigh Valley Hospital's role in Hahnemann University's development of primary care.

Medical Staff Progress Notes is published monthly to inform the Lehigh Valley Hospital Medical Staff and employees of important issues concerning the Medical Staff. Articles should be submitted to Janet M. Laudenslager, Coordinator, Physician Office Practice Services, 17th & Chew, by the first of each month. If you have any questions regarding the newsletter, please call Ms. Laudenslager at 778-2780.

Our Quality Policy: Our commitment is to quality in everything we do. This can only be achieved if we provide services that conform to clearly understood requirements. We are dedicated to continuous improvements in our work processes. Our approach is based on "Prevention" and the concept of "Do it right the first time."

**Equal Opportunity Employer
M/F/H/V**

Exclusive OSHA Resources Available to Pennsylvania Medical Society Members

New Occupational Safety and Health Administration (OSHA) regulations on bloodborne pathogens affect virtually every Pennsylvania physician in clinical practice, with few exceptions, and failure to comply could cost thousands of dollars per violation.

An information kit has been created by the Pennsylvania Medical Society to provide members with everything necessary to comply with the new regulations, including:

- * a Model Exposure Control Plan reprinted, with permission, from the AMA;
- * an Employee Training Manual also published by the AMA;
- * an overview of the final OSHA regulations and compliance requirements for the office;
- * an informative article on the regulations reprinted from the April issue of *Pennsylvania Medicine*; and
- * a one-page summary of the phase-in dates for the new requirements.

The kit is available to members only for \$10 plus tax. For order information, contact the Pennsylvania Medical Society, Department of Physician Services, at 1-800-228-7823.

Congratulations!

Gazi Abdulhay, M.D., Department of Obstetrics and Gynecology, and his wife, Sue, welcomed a baby daughter on April 28. Nour weighed 7 lbs. 4 1/2 oz., and was 20 in. long. She was welcomed home by her two sisters, Leyla and Mediha, and three brothers, Ali, Nabil, and Amir.

Howard A. Israel, M.D., allergist, was recently informed that he successfully passed the certification examination and is now a Diplomate of the American Board of Allergy and Immunology.

Francis A. Salerno, M.D., chief, Division of Geriatrics, was recently honored by the Medical Alumni of Saint Joseph's University with the prestigious Clarence E. Shaffrey, S.J. Award.

Father Shaffrey, who served as Professor of Biology for over 20 years at St. Joseph's, was directly responsible for establishing what is today recognized as one of the finest pre-medical departments in the United States. His greatest ambition was realized in blending the office of a priest and the educating of Catholic men for the medical profession. His devotion as a teacher to his students was exceeded only by his dedication to the service of God. It is for this profound dedication of himself and his untiring efforts in the preparation of young men for the medical and dental professions that this award is made.

Publications, Papers and Presentations

Bala B. Carver, M.D., pathologist, co-authored an article, **Subacute (Acute, Persistent) Thrombotic Thrombocytopenic Purpura (TTP)**, which was presented at the 13th Annual Meeting of the American Society for Apheresis which was held recently in Chicago, Ill.

Peter A. Keblish, M.D., chief, Division of Orthopedic Surgery, was principal exhibitor for a scientific exhibit at the American Academy of Orthopaedic Surgeons 59th Annual Meeting, held in Washington, D.C. The title of the exhibit was **"Rationale and Selection of Prosthetic Types in Mobile Bearing Total Knee Arthroplasty."** Michael J. Pappas, Ph.D., a biomedical engineer from the New Jersey Institute of Technology, was co-exhibitor. Dr. Keblish also presented a scientific paper at the Foot

and Ankle Society meeting during the AAOS meeting, titled **"Cementless Meniscal Bearing (Shallow Sulcus) Total Ankle Replacement: Multicenter Clinical Trial of 237."**

Indru T. Khubchandani, M.D., colon and rectal surgeon, recently served as a visiting professor at San Pietro Hospital, University of Genoa, Italy, where he lectured on **"New Trends in Surgery for Crohn's Disease"** at the faculty meeting.

He was also an invited speaker at the Second International Symposium on Advances in Colon and Rectal Surgery in Torino, Italy, and was the keynote speaker at the opening ceremony with an address, **"Status of Coloproctology in the World."** He also lectured on **"Emergency Surgery in Colon Diseases"** and participated in a panel and showed a video on **"Hemorrhoidectomy with Local Anesthesia."**

Upcoming Seminars, Conferences, and Meetings

Medical Grand Rounds

Parting Shots will be presented by John H. Samies, M.D., infectious disease specialist, on Tuesday, May 19.

Magnesium will be presented by Mark D. Kelley, M.D., general internist, on Tuesday, May 26.

Medical Grand Rounds are held each Tuesday beginning at noon in the Auditorium of Lehigh Valley Hospital, Cedar Crest & I-78.

For more information, contact the Department of Medicine at 776-8200.

Continued on Page 11

Department of Pediatrics

Grand Rounds will be held on Tuesday, May 19, and on Tuesday, May 26, both beginning at 8 a.m., in the Auditorium of Lehigh Valley Hospital, 17th & Chew.

Approach to the Adolescent Patient - How Do You Deal With Confidentiality with Teenagers will be presented by Paula Braverman, M.D., Adolescent Medicine, St. Christopher's Hospital for Children, on Friday, May 22, beginning at noon.

Dorsal Rhizotomy will be presented by Ann-Christine Duhaime, M.D., pediatric neurosurgeon, on Friday, May 29, beginning at noon.

Both noon conferences will be held in the Auditorium of Lehigh Valley Hospital, 17th & Chew.

For more information, contact Beverly Humphrey in the Department of Pediatrics at 778-2540.

Department of Psychiatry to Begin Grand Rounds in June

The Department of Psychiatry has developed a Grand Rounds series scheduled for the third Thursday of each month. The hour-long sessions will begin at noon.

The first Psychiatry Grand Rounds program, **New Insights into the Neurobiology and Treatment of Depression and Anxiety from PET Research**, will be presented by Wayne C. Drevets, M.D., Assistant Professor

of Psychiatry, Washington University School of Medicine, St. Louis, Mo., on June 18 in the Auditorium of Lehigh Valley Hospital, 17th & Chew.

Dr. Drevets' presentation will include three sections: functional brain imaging techniques, regional abnormalities in affective and anxiety disorders, and neuroanatomical circuits related to depression.

As lunch will be provided, pre-registration is requested. For more information or to register, please call Lisa in the Department of Psychiatry at 778-2810 by June 1.

Primary Care Seminars

Issues in Blood Banking will be presented by Ronald E. Domen, M.D., Medical Director, Miller Memorial Blood Center, on Wednesday, May 20, from 10 a.m. to noon, in the Auditorium of Lehigh Valley Hospital, 17th & Chew.

How to Quit Smoking - The Role of the Primary Care Physician will be presented by John A. Kibelstis, M.D., pulmonologist, and Sam Bub, M.D., family practitioner, on Wednesday, June 10, from 10 a.m. to noon, in the Auditorium of Lehigh Valley Hospital, Cedar Crest & I-78.

Detection and Treatment of Allergic Rhinitis will be presented by Diane Schuller, M.D., on Wednesday, June 17, from 10 a.m. to noon, in the Auditorium of Lehigh Valley Hospital, 17th & Chew.

For more information, contact the Department of Medicine at 776-8200.

Continued on Page 12

Regional Symposium Series III

Seventh Annual Postgraduate Course in Obstetrics and Gynecology will be held on Friday, June 5, from 7:30 a.m. to 5 p.m., at the Holiday Inn - Bethlehem, Routes 512 and 22, Bethlehem, Pa. At the completion of this program, participants will be able to discuss the management of diabetes during pregnancy, describe the management for post caesarean section bleeding, discuss the diagnosis and treatment of HIV infection in women, identify the incidence and treatment of Group B streptococcus in pregnancy, explain the pathophysiology of hirsutism, describe techniques used in preventing adhesions after gynecologic surgery, discuss the diagnosis and treatment of pelvic mass, and describe the most current surgical management of cervical cancer.

Obstetricians, gynecologists, family practitioners, oncologists, nurses, and other healthcare professionals interested in an update in maternal-fetal medicine, reproductive endocrinology, and gynecologic oncology will benefit from the program.

For more information, please contact Human Resource Development at 776-8322.

Alzheimer's Disease: When Life Becomes a Puzzle

The Division of Geriatrics, in conjunction with Hospital Central Services, Inc. and Subsidiaries, will

offer a comprehensive, one-day seminar about Alzheimer's Disease on Wednesday, June 10, at the Scottish Rite Cathedral, 1533 Hamilton Street, Allentown, from 8 a.m. to 4:30 p.m.

Information about the latest research on Alzheimer's Disease, early symptoms and how to manage difficult behavior, and community resources to help cope with caring will be presented at the seminar.

The \$12 registration fee covers the cost of parking, lunch, and program materials. For more information, please contact Patricia Brill, M.S.W., Ambulatory Geriatric Evaluation Services, at 778-9890.

Shopping for a Physician Office Practice System?

Results of a survey conducted last year of physician offices on the hospital's Medical Staff indicated that approximately 50% of the respondents to the survey were not yet automated and that almost half of these offices plan to automate in the near future. In order to assist physician offices with office automation planning and as a continuation of the Introduction to Computers series which was offered to physicians during the last three months, a three-hour seminar regarding how to select a physician office practice system has been scheduled.

The seminar, which is open to members of the Medical Staff and their office managers, will be held on Thursday, June 4, from 7 to 10 p.m., at Lehigh Valley Hospital, Cedar Crest & I-78, in the Quality Room on the third floor of the Carl Anderson Wing.

Continued on Page 13

The program will include discussion of an 11-step process for selecting a system, benefits analysis, and operational and implementation considerations. Although strengths and distinguishing features of the major vendors servicing the Lehigh Valley area will be covered, vendor endorsements will not be made since no one vendor is the right choice for every office.

The seminar is a joint effort of the hospital's Information Services Department and Physician Business Services, Inc. Session size is limited and pre-registration is required. To register, please contact Pat Skrovanek, Physician Office Practice Services (POPS) representative, at 778-2781.

Physician Practice Opportunities

* For Sale or Lease -- Medical-Professional Office Building on Cedar Crest Boulevard, just minutes from Cedar Crest & I-78 and 17th & Chew. Plenty of parking. Ideal for physician.

* For Sale or Lease -- Springhouse Professional Center, 1575 Pond Road. Ideal for physician's office. Two suites available -- one with 2,540 sq. ft.; one with 2,514 sq. ft. Will finish space to specifications.

* For Sale or Lease -- Medical-professional office building on South Cedar Crest Boulevard, just minutes from Cedar Crest & I-78 and 17th & Chew. 3,560 total sq. ft. Ample parking, security/fire alarms installed. Ideal for physician group.

* For Sale -- Professional Office Building on West Broad Street, near the Allentown/Bethlehem border. 4,500 sq. ft. with plenty of parking on corner lot.

* For Lease -- Slots are currently available for the Brown Bag suite at Kutztown Professional Center.

* For Lease -- Share large medical office near Cedar Crest & I-78. Fully furnished and staffed. Multiple line phone system. Computerized billing available.

* For Lease -- Specialty practice time-share space available in a comprehensive health care facility. Riverside Professional Center, 4019 Wynnewood Drive, Laurys Station. Half- or full-day slots immediately available.

* For Lease -- Share medical office space at Riverside Professional Center in Laurys Station. Ideal for solo or small group practice.

For more information, contact Joe Pilla, POPS Representative, at 778-9647.

WHO'S NEW

The Who's New section of *Medical Staff Progress Notes* contains an update of new appointments, address changes, newly approved privileges, etc.

Please remember that each department or unit is responsible for updating its directory, rolodexes, and approved privilege rosters.

Medical Staff

Additional Privileges

Richard M. Lieberman, MD
Department of Surgery
Division of Urology
Laparoscopic Endoscopic Surgery

Paul L. Orr, MD
Department of Psychiatry
Electro-Convulsive Therapy

Change of Status

Laura S. Kramer, DO
Department of Medicine
Division of Internal Medicine
Section of General Internal Medicine
From Provisional Active to Provisional Courtesy

Edward A. Schwartz, DPM
Department of Surgery
Division of Orthopedic Surgery
Section of Podiatry
From Active to Referring

John S. Wheeler, MD
Department of Pediatrics
Division of General Pediatrics
From Active to Courtesy

Allied Health Professionals

Appointments

Barbara Koons, CRNP
Physician Extender
Professional - CRNP
(17th & Chew - Clinic)

Carol B. Laurenzano, PsyD
Associate Scientific
Psychologist
(Department of Psychiatry)

Additional Privileges

David S. Glosser, ScD
Associate Scientific
Psychologist
Psychology Privileges



P & T HIGHLIGHTS

Lehigh Valley Hospital Pharmacy Department

James Giardina, R.Ph., M.S. - Editor

The following actions were taken at the April 13, 1992 P & T Committee meeting.

PARENTERAL ANTIBIOTIC ORDER PROGRAM

The Committee was informed that one month compliance with the new order sheet ranged between 70 and 90% on a daily basis. Costs were \$20,000 less in March when compared to the average of January and February, 1992. An ad hoc group discussed reorganizing the order form sequence in patient charts to reduce the likelihood of missed orders. More will follow on this topic.

THE PRESCRIPTION COSTS WHAT!

Through the first 6 month of FY 92 (July-December 91), we spent 1 million dollars more on drugs compared to the same period in the previous fiscal year. The causes for the increases were noted to be:

- New products, especially biotech agents
- Increased utilization of existing products.
- Excessive price increases from manufacturers (i.e. > 10%/yr)

The committee approved a plan to specifically deal with the pharmaceutical industry which includes:

- Mandatory registration at Pharmacy for all visits to the hospital.
- Restriction on in hospital detailing to formulary meds only.
- Negotiate favorable terms with those companies passing on large increases.
- Privilege suspension for companies failing to comply with visiting and detailing requirements.

Strategies to assess effectiveness and to control inappropriate utilization will be developed and brought to the committee at a future date. Strategies discussed include a Counter Detailing Program, Physician Education and Pharmacy and Therapeutics Committee Restructuring.

THE ANSWER TO TOO MUCH TYLENOL IS..

The Committee approved several recommendations to reduce the potential for Chronic Acetaminophen (APAP) toxicity. Again the source of the potential problem is the concurrent use of several different APAP containing products for analgesia/antipyresis. Recommendations are:

1. Educate (Physician/Nurses) regarding the maximum recommended dose (< 4 Gm/day) and APAP content of the major products:

<u>Product</u>	<u>APAP Content</u>
Acetaminophen Tablet	325mg
Acetaminophen Xtra Strength	500mg
Acetaminophen w/Codeine (Tylenol w/Codeine)	300mg
Acetaminophen w/Oxycodone (Percocet)	325mg
Acetaminophen w/Propoxyphene (Darvocet N 100)	650mg
Acetaminophen/Butalbital/Caffeine (Fioricet)	325mg

2. Review preprinted order sheets to assess need for multiple agents.
3. Add a cautionary statement to not exceed 4Gm/day on preprinted orders which have multiple acetaminophen containing products.
4. Inform major prescribing physicians that Darvocet N 100 has never been proven to be more effective than ASA or APAP, has greater side effects and is addictive. This will be done through a pharmacy counter detailing program.
5. Develop recommendations on appropriate pain management.

HEPARIN INFUSION STANDARD

The Committee agreed that Pharmacy will only stock one concentration of Therapeutic Heparin for continuous infusion - the 25,000 units/250cc size. Physicians need only write orders for Heparin infusion @ xxx units/hr. Whenever concentrations other than 25,000units/250cc are ordered, a pharmacist will contact the prescriber to suggest the standard in order to decrease the potential for misinfusion due to rate calculation or dispensing errors.

DRUG USE EVALUATIONS

The Committee accepted reports on usage of Clozapine and Alteplase (tPA). Key findings were as follows:

Clozapine - Most criteria were met for the 11 courses (10 pts) followed. Criteria needing improvement were weekly CBC monitoring, side effects and concomitant hematologically toxic meds. The evaluation will be repeated.

Alteplase - As with Clozapine, most criteria were met for the 28 courses reviewed. Continued monitoring focusing on dose prescribed (relative to wt.) and order turnaround time will be performed.

FORMULARY ADDITION REQUESTS

Clarithromycin (Biaxin, Abbott) - this request was tablet pending further review and recommendations by the I.D. Section.

Mivacurium (Mivacron, B-W) - is the shortest acting non-depolarizing neuromuscular blocker marketed to date. It is indicated as an adjunct to general anesthesia, to facilitate intubation and to provide skeletal muscle relaxation when required. Blockade occurs in 2-6 minutes, with average time to 25% and 95% recovery being 16 and 26 minutes, respectively. The most common reported adverse effect is flushing of the face, neck and chest (17%). Dosage varies depending on concomitantly administered agents, depth of anesthesia required, patient age, patient response, renal and hepatic status. Mivacurium costs \$8.12/10mg and \$12.69/20mg vial.

Pamidronate (Aredia, Ciba-Geigy) - is an intravenous biphosphonate derivative indicated to treat hypercalcemia of malignancy. The most common side effects are transient fever and leucopenia, which occur within the first two days of therapy. Mild thrombophlebitis has also been reported frequently. Pamidronate is contraindicated in patients allergic to any biphosphonate. The recommended dose for moderate hypercalcemia (corrected serum calcium of 12-13.5mg/dL) is 60-90mg, and in severe hypercalcemia (corrected serum calcium > 13.5mg/dL) is 90mg. Pamidronate is given as a single, 24 hour infusion. Once reconstituted, Pamidronate should be diluted in 1000cc D5W, NaCl 0.45% or 0.9%. It should not be diluted in any calcium containing solutions (Lactated Ringers, Ringers, etc.). A limited number of patients have been retreated with Pamidronate and the manufacturer recommends waiting at least 7 days to allow for full response. See chart below for cost comparison.

Gallium Nitrate (Ganite, Fujisawa) - was also added to the formulary as an alternative agent to treat more severe forms of hypercalcemia. There is little published data comparing Gallium to either etidronate or pamidronate and the committee agreed that a task force should be appointed to make recommendations on treatment strategies. Gallium can cause adverse renal effects (increased BUN and Creatinine) and should not be given concurrently with other potentially nephrotoxic agents (e.g. aminoglycosides, amphotericin B). Gallium is contraindicated in patients with severe renal impairment (SCr > 2.5mg/dL). The usual recommended dose of gallium is 200mg/m² daily for 5 consecutive days. The daily dose should be diluted in 1000cc of NaCl 0.9% or D5W and given over 24 hours. Adequate hydration must be maintained throughout the treatment period with careful attention to avoid over hydration in cardiovascular compromised patients.

Cost Comparison for Pamidronate, Etidronate, Gallium Nitrate

	Unit Cost	Extended Cost
Pamidronate 30mg	\$134.75	\$269.50 (60mg)-\$404.25 (90mg)
Etidronate 300mg	\$ 54.83	\$328.98 (600mg/day x 3 doses)
Gallium Nitrate 500mg/20ml	\$ 91.30	\$456.50 (1 vial/day x 5 days)

Etidronate (Didronel, Norwich) - was deleted from the formulary since all indications are that Pamidronate is safe, more effective and easier to administer.

Nicotine Transdermal System (Various brands, various mfg.) - was approved to the formulary for a 4 month therapeutic evaluation as a smoking cessation aid. The various patches differ slightly in size and dose per patch. All patches were found to be more effective when used in conjunction with a behavior modification program, with long term results unimpressive when used alone. The most popular brands come in 21mg, 14mg and 7mg per 24 hr patch. Common side effects are local skin irritation under the patch (25-50%). Nicotine patches are contraindicated in patients allergic to any of the components of the patch. Therapy is started with a 21mg patch unless the patient weighs less than 100lbs, is a light smoker or has cardiovascular disease. Once therapy is initiated, patients should stop smoking completely. Patients should be transferred to 14mg patches after 4-8 weeks, then to 7mg after 2-4 weeks and stop using patches and be nicotine free after 2-4 additional weeks.

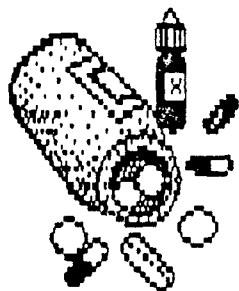
DOCTOR, I WANT THE NEW ONCE DAILY CARDIZEM OR LETS PROTECT OUR PROFITS.

Diltiazem (Cardizem CD, Marion-Merrell Dow) was discussed by the committee. The point that this is one of the most heavily patient promoted products in recent years cannot be ignored. The advertized advantages are of course patient convenience and savings compared to the SR dosage form. What the ads don't say is that the SR patent has expired and any company could manufacturer it and would probably do so less expensively than Marion. The committee agreed that Pharmacy will:

- Stock and dispense only the 300mg CD strength.
- Dispense 90mg SR BID for 180mg CD daily orders.
- Dispense 120mg SR BID for 240mg CD daily orders.

Both substitutions will be made with a note to the chart changing the order. This decision, will be re-evaluated depending on generic SR availability and/or Marion's decision to stop making SR sooner.

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DRUG INFORMATION BULLETIN

Lehigh Valley Hospital

May, 1992

Editor: Mary E. Bradley

NEW I.V. CLEANROOM:

On March 30, 1992, the Lehigh Valley Hospital Pharmacy Department received authorization from the State Health Department to occupy and begin compounding operations in the newly constructed pharmacy cleanroom located in the main pharmacy, CC & I-78, on the first floor. The cleanroom provides a class 10,000 positive air pressure environment for the laminar air flow hoods which are used to compound patient I.V. solutions, parenteral nutrition, and syringes. Adjacent to the cleanroom is an ante-room which is used for gowning and staging of compounding operations. Pharmacy personnel are required to wear O.R. greens, caps, foot covers, and gloves prior to entering the cleanroom. With this new facility, the Pharmacy Department will begin to expand the I.V. admixture services offered to our patients at both campuses.

By: Lynn Kuster, Supervisor, Sterile Products

PEPTIC ULCER -- Combination Treatment?

Perhaps you are already familiar with our physician chart notice for therapeutic duplication in patients receiving combination therapy for the treatment or prophylaxis of peptic ulcers. Combination therapy for peptic ulcer disease would be justified if a reduction in ulcer healing time or an increase in percentage of ulcers healed was realized. Yet, despite the theoretical advantages of prescribing agents with differing mechanisms of action, literature to support the use of combination therapy is lacking. In fact, there are disadvantages to prescribing multiple medications for peptic ulcer disease. These include increased cost, which may be prohibitive to patients without prescription payment plans; complicated administration schedules, which may affect patient compliance; and the potential for drug-drug inter-

actions. Therefore, without proven advantages, and with the existence of a number of disadvantages, combination therapy does not offer increased efficacy over monotherapy. For this reason, single-drug regimens remain the mainstay of therapy.

WHICH ANTIBIOTIC?

Recently, with the advent of our newly instituted parenteral antibiotic order sheet (PAOS), many questions have been asked. One of the more frequently encountered queries is: "Where did cefoxitin (Mefoxin) go?"

Cefazolin/Metronidazole and Cefotetan are new additions to our antibiotic formulary and have appeared, alternatively to cefoxitin, on the PAOS. Owing to similar activity, cefazolin/metronidazole and cefotetan have been shown to be as effective as cefoxitin in surgical prophylaxis and would be appropriately used in infections where a mixed aerobic-anaerobic flora is encountered. Cefazolin/metronidazole is the most cost effective of the three agents with its limitation being its contraindicated use in pregnancy. In this setting, cefotetan would be the suggested alternative. Cefotetan has not been approved for use in pediatrics, therefore, it is for this population only that we recommend cefoxitin.

	Daily Cost	Considerations	Dosing Schedule
Cefazolin/ Metronidazole	\$8.28	avoid in pregnancy	q8h
Cefotetan	\$17.50	not recommended for pediatrics	q12h
Cefoxitin	\$24.56	advise against routine use in adults due to cost considerations	q6h

* Cefotetan needs only be given q12h due to its long half life. If it is unnecessarily dosed more frequently, it is no longer more cost effective than cefoxitin.

* Dose conversion:
cefoxitin 1gm q6h = cefotetan 1gm q12h
cefoxitin 1-2gm q6h = cefazolin/metronidazole q8h

UPDATE ON ADVERSE DRUG REACTIONS:

Previously we have stressed the importance of reporting Adverse Drug Reactions. We promised if you reported, we would report back to you. Well, here we are --

Since the implementation of our new system, which includes a new form to allow for more complete reporting as well as for a faster turn-around time, we have seen a 300% increase in the number of reports. According to what we know through retrospective monitoring, though, we are not yet receiving reports of 100% of the reactions which are occurring, but in fact have reached about 50%. The following represent ADR totals for 12 months (April 1991 through March 1992):

Month	Total	Month	Total
April '91	8	October '91	20
May '91	8	November '91	32
June '91	13	December '91	23
July '91	13	January '92	30
August '91	11	February '92	29
September '92	18	March '92	34

Of the reactions reported since the implementation of our new reporting system (Dec '91 through March '92), the five classes of drugs most frequently involved in reactions were:

Antimicrobials:	28%
Anticoagulants:	10%
Narcotic analgesics:	9%
Cardiac Medications:	9%
Sedative Hypnotics:	5%

We appreciate the time and effort which was required to increase the reporting in order to reach our present status. Through this increase in reporting, we improve our ability to follow-up on specific reactions, as well as to trend reactions by specific agents as well as by classes of agents. Our goal is not numerical (ie. how many reactions we have reported), but rather to attain the ability to prevent reactions before they occur based on the knowledge gained through your reports. We ask that you continue to be aware of the importance of drug reactions and report them as they occur.

**** HEALTHEAST LABORATORY NOTES ****

HLA TESTING

The HLA (Histocompatibility) Lab at the Lehigh Valley Hospital-- Cedar Crest and I-78 has been in operation for over a year and provides to the medical community of the Lehigh Valley and surrounding area unique clinical testing opportunities. In addition to servicing the renal transplant program, the HLA Lab offers testing which may be of value to physicians in the areas of hematology, oncology, rheumatology, ophthalmology, and endocrinology.

The following table briefly outlines the HLA tests which are currently available and indicates some of the clinical applications for each test.


TEST	CLINICAL APPLICATION
HLA-ABC Typing	♦ Type potential renal, bone marrow and platelet recipients and donors (to rule out poorly matched donors)
HLA-DR, DQw Typing	♦ Type potential renal and bone marrow recipients and donors ♦ Disease Association i.e., DR3, DR4: Diabetes DR2, DQw1: Narcolepsy
HLA-B27	♦ Disease Association i.e., Ankylosing Spondylitis (and other rheumatoid diseases)
PRA (Panel Reactive Antibody) HLA Antibody Screen	♦ Renal transplant ♦ Platelet transfusion - when the patient has become refractory to random donor platelets
Tests which will be available in the future:	
OKT-3 Antibody Screen	♦ Renal and bone marrow transplant recipients
MLC (Mixed Lymphocyte Culture)	♦ Renal and bone marrow transplant recipient donor combinations

Because of the proximity of the HLA Lab (at the Lehigh Valley Hospital) and the size of our staff, we are able to provide to you, our customer, personable service, excellent turn-around-time, and convenience for your patients. If we may be of service to you, or you have additional questions concerning the testing we offer, please contact the HLA Lab, Monday thru Friday, 7:00 a.m. to 4:00 p.m. at 215/776-8014.

LEHIGH VALLEY
HOSPITAL

DATE: April 23, 1992

TO: Medical/Surgical Division Chiefs

FROM: Luther V. Rhodes, III, MD 
Hospital Epidemiologist

RE: IV Therapy Update and Procedural Change

The following information is being relayed in an effort to keep the Medical Staff apprised of critical issues related to IV Therapy as well as recent policy and procedural changes.

1. Central cannulas, A-lines, guidewires and cutdowns must be inserted with aseptic technique, masks, hair covers, eyewear, gloves, gowns, drapes and sterile equipment. Please see the procedure for "Requirements for Protective Attire During Procedures" for details.
2. Central cannulas **do not** require replacement at specific intervals.
3. Peripheral arterial lines may be left in place **as long as needed**, with the understanding that lines in place longer than 4 days are prone to colonization and ultimately, infection. Axillary arterial catheters should not be in place beyond 4 days.
4. When guidewires are used to change or reposition lines, they are **subject to the same care requirements** as any central line (that is, they must be used aseptically and the appropriate attire must be worn).
5. When a guidewire is used to exchange a catheter, the external portion of the catheter and surrounding skin must be disinfected with chlorhexidine or an iodophor prior to the exchange.
6. Guidewire exchange is limited to one time per Pulmonary artery catheter.
7. If a first attempt at cannula insertion fails, a **new (sterile) cannula** or catheter should be used for each subsequent attempt. (This applies to peripheral IV catheters as well as CVC's and guidewires).
8. The upper extremity (or, if necessary, subclavian and jugular sites) should be used in preference to lower extremity sites for IV cannulation in adult patients. All cannulas inserted into a

lower extremity should be changed as soon as a satisfactory site can be established elsewhere. Regardless of which extremity is chosen, sites should be rotated between the left and right extremity, if possible.

9. If prolonged IV therapy with peripheral cannula is indicated, the cannula should be removed and a new cannula inserted **every 72 hours**.

Peripheral cannulas may have to be used for longer than 72 hours if another peripheral site cannot be found. The reason for extending the 72 hour deadline must be documented on the progress record or **doctor's order sheet**. (Physician order required.)

10. All existing peripheral IV's and CVC's should be changed with **24 hours** of the patient's admission or transfer to Lehigh Valley Hospital, unless otherwise indicated by the attending physician. This applies to catheters inserted by pre-hospital personnel and those inserted at transferring institutions.

Central lines which accompany patients upon transfer should be reported to the physician who will make the decision as to whether or not the catheters need to be removed and replaced. (Physician order required.)

11. Wrist immobilizers should be used to stabilize all radial arterial lines.
12. Invasive Line Protocol CVC Insertion and Maintenance. Patients with intravenous devices should be evaluated at least once per shift for evidence of cannula related complications by gentle palpation of the insertion site through the intact dressing. If the patient has an **unexplained fever** ($T > 102^{\circ}\text{F}$) or there is pain or tenderness at the insertion site, the dressing should be removed and the IV site inspected directly.

Fever work-up in the absence of an obvious infection source, should include exchanging and culturing all indwelling catheters provided the skin site appears healthy.

Summary Statement

- a. CVC's are left in place and not changed until indicated.
- b. CVC's are changed by guidewire technique under the following conditions:
 1. Catheter malfunction
 2. CVC to PAC interconversion
 3. Positive blood culture since catheter last changed
 4. Septic clinical pattern without obvious etiology.
- c. CVC's are changed with a fresh stick under the following conditions:

1. Skin infection at insertion site:
 - a) purulent drainage at skin puncture site.
 - b) cellulitis at skin puncture site.
 - c) erythema at skin puncture site and a positive skin site culture.
2. A positive line culture.
3. Documented catheter related sepsis (a positive blood culture and catheter culture with the same organism).

(More than 15 cfu/ml is considered a positive catheter culture.)

LVR/lf

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HOSPITAL

17th & Chew
Post Office Box 7017
Allentown, PA 18105-7017

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