Testing 1, 2, 3

Serum and Urine Protein Electrophoresis with Reflex to Immunofixation

Reflex testing for Serum and Urine Protein Electrophoresis is now available. A gold top serum separator tube is required and plasma is not an acceptable choice of specimen (due to interference from fibrinogen).

The new orders are listed in SmartChart as:
Protein Electrophoresis, Serum, Reflex Immunofix
Protein Electrophoresis, Urine, Reflex Immunofix

The new orders are listed in Cerner (Riddle Hospital) as:
Prot Electrophoresis, Ser, Reflex IMMFIX
Prot Electrophoresis, UR, Reflex IMMFIX

The main clinical use of serum and urine protein electrophoresis is to search for monoclonal proteins (paraproteins, M-spires), which are often associated with lymphoproliferative disorders such as multiple myeloma and Waldenstrom’s macroglobulinemia. The presence of a presumed monoclonal protein on electrophoresis should be confirmed with serum or urine immunofixation, which confirms that the spike is indeed monoclonal and characterizes the type of monoclonal present (immunoglobulin class and light chain type, intact immunoglobulin vs free light chain).

The availability of the reflex test allows the pathologist interpreting serum or urine protein electrophoresis patterns to order the follow up immunofixation test immediately when he identifies or suspects a monoclonal protein, rather than requesting the original ordering physician to provide a supplemental order for immunofixation.

Call the Client Service Center

The Main Line Health Laboratories Client Service Center (CSC) wants you to know that you can call client services for answers to just about anything. Simply call 484.580.4200 and we will assist you with test results, testing requirements, supply and courier transport requests or myriad other questions that are too numerous to list. We strive to serve and support our customers, whatever they need or want. If we don’t know the answer to your question immediately, we will find out the answer for you or refer you to someone else who can help.

CSC representatives (CSRs) receive 200 plus calls per day and the average wait time for callers is 30 seconds.

The CSC staff came to us from various backgrounds and stages of life. Their combined years of service to Main Line Health is 186. They draw on a wealth of laboratory experience as they provide superior client service each day.

Clearly, answering phones and satisfying customers is the primary responsibility of all Client Service staff. Following are some of the other functions that are performed daily in the Client Service Center:

• Sorter: CSRs rotate daily and work the “sorter.” They receive constant transmission of STAT results, searches of INR results and routine or ASAP results which have “fax-to” or “call” requests. These requests are collated, transmitted to the physician and documented all day, every day.

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Every 40 seconds, someone in the United States has a stroke. A stroke occurs when a blockage stops the flow of blood to the brain or when a blood vessel in or around the brain bursts. Strokes can affect people of all ages and backgrounds and can lead to serious, life-changing complications, including paralysis or weakness on one side of the body; problems with thinking, learning, judgment, and memory; problems understanding or forming speech; and depression.

There are two major types of strokes: ischemic or hemorrhagic stroke. An ischemic stroke occurs when a blood clot or piece of plaque travels into the brain and blocks blood flow. A blood vessel that bursts or leaks into the brain tissue or into the fluid which surrounds the brain is called a hemorrhagic stroke. Most strokes are ischemic. Treatment is based on the type of stroke and each person’s needs. An ischemic stroke can sometimes be treated by a “clot-busting drug” (tPA) given within a few hours of the stroke occurring. Treatment for a hemorrhagic stroke includes finding the cause of bleeding and repairing it if possible. A Transient Ischemic Attack (TIA) or “mini-stroke” is when a person experiences stroke symptoms which last less than 24 hours and resolve completely. TIAs are a warning sign that a stroke may soon occur.

The Main Line Health Stroke Program provides a comprehensive continuum of high-quality stroke care that includes community education, assessment and stroke-prevention efforts, early identification and acute-treatment strategies, rehabilitation, and secondary-stroke prevention efforts. The Joint Commission has certified our four acute care hospitals—Lankenau Medical Center, and Paoli, Bryn Mawr, and Riddle Hospitals, as Primary Stroke Centers. At each hospital campus there are program coordinators, physician coordinators and a medical director who are dedicated to stroke. Each year, MLH treats more than 1,500 patients with strokes or TIAs. We follow a formal “Stroke Alert” system for notifying key departments and clinicians when an acute stroke patient is identified. Certain protocols are followed by the stroke team: after the initial physical exam and neurological evaluation, labs are drawn and labeled as “STROKE” to alert the lab to expedite testing. There is a target turn-around time of less than 45 minutes for laboratory testing from order to result time. The patients proceed to Imaging for further testing.

Main Line Health Laboratories promotes stroke awareness by partnering with Community Health to offer stroke screenings for all employees at each of the acute care hospitals every year during National Laboratory Professionals Week, which occurs the last week of April. In 2011, the Department of Health and Human Services launched the Million Hearts initiative to prevent a million heart attacks and strokes by 2017. A primary focus is on the ABCs to prevent cardiovascular disease, including strokes, and contribute to overall health.

1) Appropriate aspirin therapy
2) Blood pressure control
3) Cholesterol management
4) Smoking cessation

Other ways to help lower your stroke risk include: drinking only in moderation, exercising daily, eating a low salt, low fat diet, and controlling atrial fibrillation (irregular heart rhythm). If you have any stroke symptoms, seek immediate medical attention. Remember—with a stroke, time lost is brain lost.

Submitted by Elizabeth Cromie, Clinical Laboratory Scientist, Main Line Health Laboratories, Paoli Hospital

The following tool can help someone recognize stroke symptoms “FAST”:

F = face: Ask the person to smile. Does one side of the face droop?
A = arms: Ask the person to raise both arms. Does one arm drift down?
S = speech: Ask the person to repeat a simple phrase. Does speech sound slurred/strange?
T = time: If you observe any of these signs, call 9-1-1.
Trauma: The Paoli Laboratory Experience

On October 15th 2010, Paoli Hospital began operating as a Level II trauma center. As Chester County’s only trauma center, Paoli is able to respond to the needs of seriously injured patients who no longer need to be transported long distances for care when every minute counts.

To become a Level II trauma center, Paoli had to provide all the resources to care for trauma patients in an immediate and efficient manner. They brought in trauma surgeons from Thomas Jefferson University Hospital to join the team of anesthesiologists, emergency physicians and nurses, and almost every department in the hospital was called upon to offer support.

The laboratory implemented a trauma operations committee to prepare for the increased demand for lab services. Laboratory representatives met with the hospital’s trauma implementation team to determine their needs and expectations, and contacted local trauma centers to share their experiences and solutions to challenges that they had encountered. Our laboratory system was fortunate to have several Clinical Laboratory Scientists with prior experience working at a trauma center.

Processes were put into place to identify the trauma specimens on arrival so they could be given priority treatment. Without delay, the specimen processors enter the orders into the computer and deliver them to the Medical Technologist to begin testing. The hematology, chemistry, coagulation and urinalysis results are vitally important to the trauma physicians and directly impact their medical and surgical decisions. Methods were evaluated to determine the fastest way to provide the results.

In the Blood Bank, we increased the inventory of every blood product and added a second courier service to ensure the quickest possible delivery, should our inventory need to be replenished. To decrease the turnaround time for plasma, our Laboratory Medical Director, Blood Bank Medical Director and Blood Bank Manager evaluated the use of pre-thawed plasma versus thawing on demand. We now keep two units of thawed plasma available at all times for immediate use. Pre-tagged O positive and O negative packed cells sit on the emergency release shelf of the Blood Bank refrigerator ready for the fastest possible use. After each use we evaluate the turnaround time to see if we can shave seconds off of our next response. Massive transfusion protocol was established to develop an automatic plan for extreme transfusion needs. This process allows for a constant stream of products in pre-established increments to replace the patient’s blood volume—a valuable protocol in the treatment of trauma and non-trauma hemorrhages.

On-call laboratory staff was initiated to supplement the support for each Level I trauma. As soon as the pager sounds, the technologist heads to the lab and works until released. As laboratory employees, we play a vital role in the patient’s survival. Our patient support extends beyond the Emergency Room to the Operating Room and the unit where they begin their recovery. We have experienced the stress associated with working in a high performance environment and have shared in the reward of knowing that we made a difference in the life of another person.

Submitted by Paula Garton, Clinical Laboratory Scientist, MLH Laboratories, Paoli Hospital
Fran, a former lead phlebotomist at the Lawrence Park satellite and Assistant Supervisor of Specimen Processing and Phlebotomy at Bryn Mawr Hospital, joined us three years ago. Fran also teaches Phlebotomy at Delaware County Community College.

Taillia and Tami came to us without any previous healthcare experience but with a strong desire to learn and grow. Both ladies showed great promise and have grown into very talented representatives. Taillia has been with us for ten years and Tami became part of the team seven years ago after a short time as a temp.

Jeanne is the Manager. She transitioned to Client Services twelve years ago “for a change” after working many rewarding years as a Medical Technologist in the Stat Lab at Lankenau. As the Lab system has grown and evolved, Jeanne experiences more than her share of change on a daily basis.

MLHL couriers
MLHL couriers are an integral part of the service team for our clients. Ruben is our Lead courier, along with Angelo, Earl and Herndon. Together, they:

• Collate and deliver Clinical and Pathology reports daily to practices that prefer hard copies
• Collate and mail reports to out-of-network physicians
• Hand deliver Pathology slides to all hospitals twice daily
• Take inventory and keep our storeroom stocked
• Fill and deliver supplies to clients
• Strive to fill supply orders within 48 – 72 hours. The MLHL courier phone number is 484.580.4236

• Are also on call for any emergency deliveries that occur during the day

We also have two MLHL couriers, Anthony and Michael, who work exclusively between Bryn Mawr Hospital and the new Bryn Mawr Medical Arts Building, which houses multiple practices and the Hematology/Oncology Cancer Center. Mike and Anthony are responsible for the timely delivery of blood specimens from the Cancer Center to the Rapid Response Lab throughout the day, to ensure the rapid processing and resulting of specimens.

What you should know
• The Client Service Center is open from 7:30 am – 8:00 pm, Monday through Friday and from 8:00 am – 2:00 pm on Saturday. After hours calls are transferred to the Core Lab at Lankenau.
• The CSC phone number is 484.580.4200 and the fax number is 610.977.0070
• Results from release forms will be mailed to patients within 5 business days of test completion or faxed within 48 hours of completion
• Non-MLH physicians will receive results via US Mail unless they have specified otherwise
• If we don’t know the answer to your question, we will find someone who does

The Client Service staff is knowledgeable, dedicated and committed to providing superior service to our clients and customers. We look forward to your next call!

Submitted by Jeanne Annarelli, Client Services Manager, MLH Laboratories

Client Service Center
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Peggy worked at Lankenau for many years as the Lead Phlebotomist and phlebotomy trainer for Patient Care techs. She transferred to CSC six years ago, also due to back issues.

Sandy, a phlebotomist and former phlebotomy supervisor at St. Agnes, worked at Lankenau and Bryn Mawr Outpatient Labs, as well as the Outpatient Lab at the Susquehanna Building. She transferred to CSC three years ago when lab services were discontinued at Susquehanna.