News from Central Processing

New Computer Interface

The primary reference laboratory for CMH is Mayo Medical Laboratories. This is the lab where we send tests that we do not do ourselves unless we have a specific reason to use another reference laboratory. We now have direct download of results from their computer to our computer. While the new formatting may take some time to get use to, this direct communication prevents errors associated with manually entering results, allows us to include all the information from Mayo and any changes at Mayo, such as in reference ranges, and will be immediately included in our system. This is a big improvement for all.

Never on Friday

Some reference laboratories can receive specimens on Saturdays and some cannot. This means that some testing cannot be sent out on Friday. If the order and specimen are received on Friday, they will be held until Monday to be sent. The reference lab will receive the specimen on Tuesday. The earliest results could be available is Wednesday, and in most cases, it will take longer. We hope this explains why it can take so long to get some results. Many times it is best to wait until Monday to order the test and collect the specimen.

The Trial of Unlabeled/Mislabeled Specimens

There is a Hospital Policy for Handles Unlabeled/Mislabeled Specimen, which will be reviewed here, in simplified form. It is important to remember that when an unlabeled specimen arrives in the lab via Translogic Tube, we do not know where it came from. Unlabeled/Mislabeled specimens will never be returned to the clinical unit. When uncertainties occur, consult the Clinical Pathologist.

Non-Replaceable Specimens — Bone Marrow, CSF, and Pathology Tissue: If we can identify the problem and know whom to contact, the lab will contact the appropriate person. If the lab can verify with good certainty the correct identification of the specimen, the contact can come to the lab to fix the problem. They will need to sign the log sheet used for this purpose. The result will include a comment with regard to this error.

Replaceable Specimens — Blood, Urine, Swabs, etc.: These specimens will not be processed and will need to be recollected. Occasionally, a specimen that seems to be replaceable is not. An example is a blood culture specimen collected just before the administration of antibiotics. These specimens will be treated as non-replaceable specimens.

Transfusion Specimens: These must be correctly labeled, including the phlebotomist initials, date, and time. There will be no exceptions.
Transfusion Potpourri

**The Disappearing DAT**

A DAT will no longer be done as part of a routine Type and Screen.

The DAT (Direct Antiglobulin Test) tests for the presence of IgG and/or complement, specifically C3d on the surface of red blood cells. In this assay, the IgG and complement have become associated with the RBC in the body (in vivo). Positive DATs occur in a number of conditions and may or may not be associated with shortened RBC survival. A positive DAT that does not shorten the life span of the RBC is of little clinical significance. Some conditions associated with a positive DAT include:

- Autoantibodies in patients with autoimmune hemolytic anemia
- Alloantibodies made in response to a previous RBC transfusion
- Antibodies passively acquired in previously transfused FFP or platelets
- Maternal auto or alloantibodies that have crossed the placenta into a newborn
- Antibodies against drugs that bind to RBC
- Non-immunological absorption of antibodies to RBC membranes that have been altered in some way. This occurs with the Cephalosporins
- Immune complexes, i.e., drug – anti-drug
- Hypergammaglobulinemia or IVIG or Cytogam

In the past, the Transfusion Services Laboratory did a DAT as part of a routine Type and Screen without a specific order for a DAT. This will be discontinued for several reasons. It will allow us to streamline the serological testing and will be a cost containment. However, the main reason for discontinuing the DAT at this time is that doing the test without a specific order for a DAT is not in compliance with current federal regulations. The DAT was never a requirement. Several prominent hospitals, including Boston Children’s Hospital and Children’s National Medical Center, discontinued the DAT several years ago and have experienced no adverse affect.

At CMH we will continue to do the DAT on all children less than 4 months old. This is to specifically detect antibodies that have crossed the placenta and may be causing a problem for the newborn. As always, it will be done as part of a transfusion reaction work-up.

The DAT should be ordered when there is a suspicion of hemolytic anemia and can be ordered when desired. In Meditech, it is ordered under LAB BB and the mnemonic is DC.

**Charles Drew Program**

CMH will be participating in the Charles Drew Program of the American Red Cross. This will supply fresh, phenotyped blood from a limited donor pool to our children with sickle cell disease who have chronic transfusions.

**Meeting Announcement**

The meeting of the Heart of America Association of Blood Banks will be in Kansas City at the Embassy Suites, June 5-7. The agenda has not been formalized, but proposed topics by outside experts include heparin-induced platelet antibodies, activated factor VII, platelet gel, and automated red cell exchange for sickle cell. It is a great opportunity and so nearby.

**The Labels Are Coming, The Labels Are Coming**

Currently the blood bag labels are done by hand increasing the chance of error. Currently the Transfusion Laboratory is working toward computer-generated labels, which will be easier to read and help eliminate human error. All labeling errors must be reported to the FDA. Hopefully, there will be fewer reports.

**Last But Not Least**

Yes, the new CMS facility will have transfusion facilities. We are planning to have O+ and O- packed red blood cells and FFP available for emergencies.

The Transfusion Committee is reviewing Audit Criteria. Expect changes for platelets and FFP.