



HALT the HEMOLYSIS!

Why do we care about hemolysis?

The bottom line is that hemolysis leads to delayed or possibly inaccurate laboratory results; but here are some of the downstream effects to consider.

1. Without accurate or timely laboratory results, the physicians ability to correctly diagnose and treat a patient becomes more complicated.
2. Our health care costs increase because we have to use more supplies. We may mismanage treatment based on inaccurate results and ultimately this could result in longer hospital stays.
3. Nobody wins here...the patient doesn't want to be stuck multiple times, and honestly, who wants to have to go back and re-draw?



HEMOLYSIS

The rupture or destruction of red blood cells

What can YOU do?

Research shows that hemolysis is most directly affected by poor venipuncture technique, so here's some tips:

1. Be choosy about your draw site. Drawing from smaller veins increases your chances of hemolysis. The antecubital fossa is the recommended area to draw from.
2. Avoid using small-bored needles. Chances are you don't like being squeezed through small spaces, and guess what... neither do red blood cells. Any gauge size larger than a 21 gauge needle, such as a 23 gauge, is not recommended.
3. Tourniquet times—leaving it on any longer than a minute causes interstitial fluid to leak into the specimen and then *BAM* hemolysis
4. If drawing with a syringe, a gentle touch is recommended, meaning don't forcefully pull on the plunger to force the blood to flow in. This also means to not forcefully push the plunger to put the blood into tubes. Those little cells can be fragile and they just don't do well under high amounts of pressure.
5. Red blood cells and alcohol just don't get along. Make sure the draw site has completely dried before drawing blood.
6. Tubes need to be mixed gently. A nice and easy 180° inversion 8 to 10 times will do the trick. No need to shake it like polaroid picture.
7. Line draws and pedi-bullet tubes are associated with high rates of hemolysis. If you can avoid using them, the rates are guaranteed to drop.