Good news, at last – a targeted weapon system against early COVID-19 infection

By Chief Medical Officer, Dr. Malcolm Butler Nov 1,2021

Your immune system is similar to a modern army. It has cells that act like generals, coordinating the battle. It has scouts that guard your periphery looking for viruses and other bad guys. It has an intelligence service that remembers what the bad guys look like so they can be easily spotted if they try to invade in the future. It has killer cells that can melt holes in the enemy. It even has precision guidance systems that target specific enemy targets.

Antibodies are part of that precision guidance system. Antibodies recognize specific bad guys, usually a virus or bacteria, glom onto it, and then act like a beacon, calling in precision guided weaponry to destroy the virus. The problem is, if the enemy has never been seen before, if the intelligence service doesn't have a way to recognize the virus as "not part of me," there are no antibodies to spot-light a virus as a bad guy. Antibodies are created by our immune system to protect us against the second attack.

In our war against COVID-19 we have hoped for tools to fight off the virus. Vaccinations create antibodies, so that our immune system is primed and ready to destroy the SARS-CoV-2 virus (COVID virus) as soon as it is seen. COVID-19 infection also creates antibodies to protect us against a second infection.

Wouldn't it be great if we could inject antibodies that recognize the current SARS-CoV-2 variant into a person who is fighting COVID-19? What would it mean if we could inject beacons that would find the COVID virus, glom onto it, and call in some precision weaponry to destroy it?

Great news, at last. We have now synthesized antibodies to the COVID-19 virus and can inject them into a person whose immune system is fighting COVID-19. What it means is a 70% decrease in the likelihood of needing to be hospitalized or dying from COVID-19. The fancy name for this new treatment is "monoclonal antibody therapy" or "mAb therapy".

As in any battle, the secret is to overwhelm the enemy early in the fight, before they can do too much damage, or reinforce their position. The same is true in the use of mAb therapy. We need to inject these synthetic antibodies as soon as possible to overwhelm and destroy the virus before it has a chance to reproduce and create havoc.

If you are at high risk for severe COVID-19, and if you have been exposed, or tested positive, and have COVID symptoms, healthcare providers can help. We can reduce your risk of getting seriously ill by 70%, if we can inject these synthetic antibodies into you within 10 days of symptom onset.

In the Wenatchee area these injections are provided at Columbia Valley Community Health. If you are at high risk and might have early COVID, contact your medical provider to see if this treatment is right for you. If you live outside the Wenatchee area, you can find other monoclonal antibody providers at: www.doh.wa.gov/emergencies/covid19/therapeutictreatmentlocations