PRINT- COVID-19 Treatment & Care: Then vs. Now

What health care providers know about the COVID-19 virus now compared to when it first hit the US shores 9 months ago is significant. That includes how to treat it.

Since the beginning of the pandemic, OSF HealthCare has become more successful at getting COVID-19 patients who do have to be hospitalized discharged to home more quickly with fewer people requiring admission to an intensive care unit (ICU) or dying.

Dr. Doug Kasper, an Infectious Disease physician with OSF HealthCare, thinks providers have gotten better at identifying patients at risk and recognizing symptoms in patients with COVID-19. That, he says, has resulted in providing care faster, which has improved treatment and recovery.

Along the way there has been pressure to find a vaccine and, until then, treatments that are effective. Convalescent plasma is one treatment that uses the blood of people who have recovered from COVID-19. OSF HealthCare Saint Francis Medical Center in Peoria was one of the first sites in Illinois to make convalescent plasma available as part of a clinical trial to gather more data about the effectiveness of the strategy.

On August 22, the Food and Drug Administration issued an emergency use authorization for convalescent plasma, acknowledging the potential benefits outweigh the potential risks in using it. Patients meeting certain criteria, including being younger than 80 years old, within three days of diagnosis, and not on a respirator, showed the greatest benefit.Dr. Kasper says OSF will continue using convalescent plasma, but he points out one of the biggest challenges - nationwide - is a limited supply and the infrastructure for blood plasma screening and distribution. He says screening for other pathogens is important as well for health and safety reasons.

“The pace at which all of these technologies and therapeutics is far quicker than anything we’ve done within medicine in our lifetimes and because of that, we often have to make sure these therapies are available and can be safely monitored when they’re given and that does require oversight from national boards.”

When the virus first hit, Dr. Kasper says there was a fear of going into medical facilities. Now, people have more confidence and with the help of OSF HealthCare digital tools for symptom checking and triage, providers are more quickly identifying a treatment strategy, whether it includes hospitalization or supportive care at home. That faster response is benefitting the patient and the health care system.

According to Dr. Kasper, early on doctors knew patients who were very sick progressed to respiratory failure and required being put on a ventilator. So early treatments focused on trying to prevent that outcome.

Avoiding Need for a Ventilator

“What’s changed in that time is that we developed a lot of strategies – some which are pharmacologic, some of which are patient management strategies that have helped with lung-related infection injury to keep people from progressing to full respiratory failure and ICU hospitalization, he says.

Part of the patient management strategy involved proning – putting patients on their stomachs.

According to Dr. Kasper, “It helps oxygenate the posterior portions of the lungs. It is a free procedure that is minimally invasive to the patient and outside of some discomfort from being in the same position for a prolonged period of time, it has shown a very big benefit in maintaining oxygen levels in the blood – reducing the progression of the disease toward intubation.”

Research from prior coronavirus infections such as SARS-CoV and MERS-CoV suggested there might be clinical benefit for hydroxychloriquine for treatment of patients with COVID1-9.

Dr. Kasper explains, “What has changed since that time is that we have multiple, randomized, controlled placebo trials that have not yet shown clinical benefit for hydroxychloroquine for patient care. That was accepted by the government with the rescinding of the FDA’s Emergency Use Authorization in June.”

Other Successful Strategies

Remdesivir is an anti-viral medication the FDA approved for use in treatment of COVID-19 patients under the FDA’s Emergency Use Authorization. It can prevent the virus from spreading within the body. Many hospitals throughout the 14-hospital OSF HealthCare Ministry have access to Remdesivir as part of a revolving reserve.

Additionally, Dr. Kasper says there are other strategies for people seeking care with more advanced symptoms of COVID-19 that haven't received as much media attention.

"Specific other strategies that have been shown to reduce mortality include dexamethasone which is a steroid – which is FDA approved for many other conditions but has been shown to reduce mortality rates in patients with COVID-19 infection that are requiring supplemental oxygen or ICU-level admission."

Dr. Kasper says all viruses cause inflammation, which is the body's attempt to control the spread of the virus. However, some people's immune system creates such a big response the inflammation can lead to excessive damage that extends beyond the lungs to other organs, leaving long-term negative effects.

"There are things we're only aware of now because people who became infected in February and March are now showing us what happens over the long term." He adds, "Our concern remains not only the acute infection but ensuring that long-term damage doesn't occur to anyone that has the disease."

Another strategy includes giving patients medication to prevent blood clotting, which can also happen as the body's immune system kicks into overdrive.

For patients with less serious conditions, OSF HealthCare has developed strategies to help those quarantined at home. Learn more.