AACE Position Statement: Coronavirus (COVID-19) and People with Cardiometabolic Disease

April 15, 2020

Approximately 47 million Americans have some form of cardiometabolic disease, such as heart disease, strokes, peripheral arterial disease, type 2 diabetes, fatty liver disease, dyslipidemia and many other conditions. Accordingly, it is important to understand the relationship between COVID-19 and cardiometabolic disease.

Initial research suggests that people with cardiometabolic disease are at increased risk of experiencing complications from infection with COVID-19 and may be more susceptible to contracting the virus. Studies indicate that up to 40% of hospitalized COVID-19 patients have some form of underlying cardiometabolic disease. Another study that looked at a large population of confirmed patients found that individuals with cardiovascular disease (CVD), which is a type of cardiometabolic disease, made up 22.7% of fatal cases.

As a result, people with cardiometabolic disease are strongly advised to adhere to the precautions outlined below to protect themselves:

- Continue taking medications as prescribed
  - This includes ACEIs and ARBs. Considering the benefits and risks with these medications related to COVID-19, the latest evidence suggests continuation of these therapies.
- Ensure appropriate supplies of medications at home, ideally for several months
- Stay up to date with vaccinations, including for pneumonia and influenza
- Use extreme caution and try to avoid taking medications, supplements, food or drinks that contribute to high blood pressure, which increases your risk of contraction and complications. These include (unless necessary and/or prescribed by your healthcare provider):
  - Medications such as NSAIDs (for example naproxen or ibuprofen)
  - Prescription drugs such as corticosteroids, oral birth control, immunosuppressants, mental health drugs and some cancer medications
  - Herbal supplements such as licorice
  - Alcohol and caffeine – limit use as much as possible
- If you experience a hypertensive crisis, which presents with symptoms such as chest or back pain, numbness of weakness, loss of vision, difficulty breathing or speaking, call an emergency service or your healthcare provider immediately.

It is also important to remember that cardiometabolic disease is the number one cause of death in the U.S. The morbidity and mortality from cardiometabolic disease is dramatically higher than that from COVID-19.
As a result, it is crucial to maintain a healthy lifestyle, as unhealthy habits and stress can adversely affect your immune and cardiovascular systems. Although this may be difficult during these times of stress and social isolation, there are helpful tips to follow:

- Have a healthy and balanced diet with lots of fruits and vegetables. Avoid sugar and processed foods as much as possible.
- Get regular physical activity. Although it may be more difficult to get regular physical activity with shelter-in-place rules, there are many ways to get exercise: take a walk, play in the yard with the kids, clean your house or use exercise videos on YouTube.
- Get at least 7-9 hours of restful sleep each night.
- Cut back on smoking or vaping.
- Drink less alcohol. During these times of stress, many people turn to alcohol to relieve stress. Find other ways to relieve stress, such as exercising or meditating.
- Meditate. This helps you unwind and relax.
- Make it a household affair. If you live with friends or family, get them involved in a healthy lifestyle.

Finally, make sure to continue following the advice from Centers for Disease Control and Prevention (CDC) to reduce risk of infection. The following actions will help prevent the spread of COVID-19 and better protect individuals, including those with cardiometabolic disease:

- If experiencing fever, cough, shortness of breath or other symptoms, call both the COVID-19 hotline (check your state government website for contact information) and your primary care physician
- Stay at home as much as possible and avoid close contact with other people
- Cover your mouth and nose with a cloth face cover when around others
- Wash your hands with soap and water regularly for at least 20 seconds, especially before eating or drinking, after using the restroom and after blowing your nose, coughing or sneezing
- If soap and water are not readily available, use an alcohol-based sanitizer with at least 60% alcohol
- Cover your nose and mouth when coughing or sneezing with a tissue or a flexed elbow, then throw the tissue in the trash
- Avoid touching your eyes, mouth or nose with unwashed hands
- Clean and disinfect frequently touched surfaces daily

References

1. COVID-19 Clinical Guidance For the Cardiovascular Care Team [PDF]. (2020, March 6). American College of Cardiology.
Severe Acute Respiratory Syndrome Coronavirus 2 Infection. Journal of the American Heart Association, 9(7), e016219.
