Cardiac Allograft Vasculopathy (CAV)

What is CAV?

CAV is a form of chronic rejection that narrows the blood vessels of your transplanted heart. We check for CAV by doing a yearly cardiac cath or dobutamine echocardiogram. CAV affects the entire length of the vessel, not just one spot. CAV is not caused by plaque, but rather the vessel wall grows in thickness, leaving less room for blood to pass through. It may come on quickly. Generally, collateral or smaller natural bypass vessels do not form. The use of stents or bypass surgery is very difficult and often not helpful. For this reason frequent monitoring and preventive care is the best management for CAV.

Who is at risk for CAV?

All heart transplant patients are at risk for CAV. CAV affects men and women, adults and children of all races who have had heart transplants. CAV can occur early after transplant, but the frequency increases over time after transplant.

What can we do to prevent CAV?

Manage your risk factors that you can change:

- Lower your cholesterol through diet, exercise and medications.
- Control your diabetes.
- Maintain a healthy blood pressure.
- Maintain a healthy weight.
- Do not smoke and avoid exposure to second hand smoke.

Take your immunosuppressant medicines as prescribed.

- Because CAV is a form of chronic rejection, it is vital to take all of your immunosuppressant medicines as prescribed.
- Take “statin” drugs even if you do not have high cholesterol. They work in such a way that they may decrease the risk of CAV.
- Sirolimus; a drug that prevents rejection and also works to prevent CAV, may be added to your treatment if you develop CAV. It has been shown to decrease the worsening of CAV.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911.