Hollenhorst Plaque

When undergoing a retinal eye exam with dilation of one’s pupils, an eye doctor may notice a tiny, glistening plaque within a retinal artery. This represents a tiny piece of cholesterol that has broken off from the inside of an artery in another part of that person’s body. This tiny piece of cholesterol has then travelled within that person’s circulation, ultimately being deposited (coming to rest) in a very tiny artery in the back of the eye (the retina). This is known as a retinal emboli or Hollenhorst plaque. This event may significantly affect the person’s vision causing sudden loss of vision or the event may be totally asymptomatic.

Once a Hollenhorst plaque has been identified, certain tests are ordered to determine where in one’s body the tiny piece of cholesterol originated. These tests may include a carotid ultrasound and cardiac echocardiogram to determine if there is a significant cholesterol build-up within the neck artery or upon a heart valve, respectively. Blood work including glucose levels, a complete blood count (CBC) and lipid levels will be ordered. Blood pressure and visual fields should be assessed as well.

Should a critical cholesterol build-up be found then a vascular or cardiac surgeon will need to be consulted in order to determine if surgery is needed for removal of the excess cholesterol. Removal, in turn, may prevent a stroke (within the brain or eye) from occurring in the near future.

Although the chance of a significant problem related to an asymptomatic Hollenhorst plaque is low, it is important to follow the eye doctor’s recommendation for further testing. In this manner, catastrophic results stemming from an occult (hidden) cholesterol build-up can be avoided. Also, it may be recommended to a person with a Hollenhorst plaque to start taking a daily blood thinner such as a baby aspirin or an omega-3 nutritional supplement.

Should there be any questions, do not hesitate to ask the health care professional involved in the case.