Inherited Retinal Disorders

What are Inherited Retinal Disorders?

There are a number of inherited retinal diseases that can cause severe vision loss. They tend to be chronic, progressive (gradually getting worse), and run in families. Inherited retinal disorders frequently impact the macula, the part of the retina responsible for sharp central vision, making it hard to complete simple tasks like driving and reading.

Retinitis pigmentosa (RP) is the most common inherited retinal disorder. It is actually a group of problems that affect the retina, changing how it responds to light and making it hard to see. Retinitis pigmentosa causes some photoreceptor cells to gradually fade and die, losing the ability to transmit visual messages to the brain. It typically begins to affect people in their teenage years.

Symptoms

Symptoms of retinitis pigmentosa are typically painless and bilateral (affecting both eyes) and include:

- Gradual loss of peripheral (side) vision (also known as tunnel vision)
- Loss of central vision
- Loss of night vision

- Problems with color vision

Diagnosis

Retinitis pigmentosa can be diagnosed and monitored through:

- Genetic testing
- Electroretinography — a test that measures the electrical activity in the retina
- Visual field testing
- Optical coherence tomography (OCT) — an imaging test that takes highly detailed pictures of your retina

Treatment

Currently, there is no single treatment for retinitis pigmentosa. Researchers continue to study the disease and hope to develop treatments.

Studies have reported that taking certain vitamins and supplements, including vitamin A palmitate and docosahexaenoic acid (DHA), may help preserve retinal function for some people with retinitis pigmentosa. Your Texas Retina physician can help determine if vitamins or supplements might be helpful for you and recommend the proper dosage.

Another study suggested that patients eating a diet rich in omega-3 fatty acids such as salmon, tuna, herring, mackerel or sardines, experienced a 40 to 50 percent slower rate of visual loss.

Some patients with inherited retinal disease develop swelling of the retina

and may be helped by a certain type of eye drop. In addition, they can also develop cataracts, and surgery may be helpful for those patients. There is also an “artificial retina,” called the ARGUS II implant, which may assist some patients with severe vision loss due to retinitis pigmentosa.

People with low vision due to inherited retinal disease like retinitis pigmentosa can learn to maximize use of their remaining sight through tools and techniques that can help with certain tasks.

If you have retinitis pigmentosa and plan to have children, you might want to speak with a genetic counselor to learn about your chance of passing this eye condition on to your children.