



## Ocular Melanoma: What You Don't Know CAN Hurt You!

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A rare cancer of the eye known as uveal melanoma has affected a specific demographic, mainly women, who attended Auburn University in the late 1980's and early 1990's. Uveal melanoma is the most common cancer in the eye, but overall its incidence is extremely low, known to affect only 4.3 per 1 million people in the US. While these cancers are uncommon, they can lead to unfortunate outcomes including total removal of the eye, and even aggressive cancers spreading throughout the body, making it crucial to catch them early.

No one yet knows why this disease has occurred in this group of people, however the rate of incidence is too high for it to be a coincidence. Given the uniqueness of the presentation, and the implication that there could be a link to location and potential environmental factors, it has garnered the attention of experts in uveal cancers across the country. A special conference was held in early 2018 in Philadelphia, specifically to discuss and collaborate regarding these patients.

The uvea is the pigmented part of the eye, made up of 3 different structures: the iris, or colored part of the eye, the ciliary body which produces the fluid inside the eye, and the choroid, responsible for much of the blood supply to the back of the eye. Examining these structures requires a detailed eye exam using a microscope and pupil dilation. The iris is the least common of the 3 structures to be affected by melanoma, and iris melanomas are the least likely to metastasize. People thought to be most at risk are Caucasian, fair-skinned, tan easily and have light-colored eyes.

Choroidal melanomas are the most common type of uveal melanoma. These growths initially present as a benign nevus that can be examined during a dilated eye exam (as seen in the image below). And while malignancy is not common, its consequences can be severe. As with a freckle on the skin, these in the eye should be monitored carefully for growth, change of any kind, and other characteristics that indicate potential cancer. Specific to choroidal melanomas, the most common site of metastasis is the liver, and these cases are almost always fatal.

It is easy to assume that your eyes are healthy if your vision is normal. But what most people don't realize is that *many* diseases can occur in the eye without initially impacting vision. In early and even *late* stages of these cancers, vision may be totally unaffected. Patients may have no symptoms whatsoever, highlighting the need for regular, dilated eye exams. A detailed eye health exam is more than what most people realize – there are many different components, and various instruments are needed. Additional special testing may be required in many cases. For example, when an optometrist or ophthalmologist notices an iris or choroidal growth, specific imaging technology such as ultrasound and optical coherence tomography (OCT) may be necessary to determine risk and the need for follow-up. An “online eye exam” on the other hand, consists of one test – refraction. Refraction is the procedure we do to determine the glasses prescription for a patient – it does not address eye health

or examine the eye *at all*. Not to mention, online refractions have so far been found to be less accurate and more likely to lead to unsatisfied patients!

How often should you get your eyes checked, and who in your family should also be getting theirs examined? The American Optometric Association recommends that healthy, asymptomatic adults receive an eye exam every 2 years. Those with symptoms, risks such as family history of eye disease, or systemic disease that put the eyes at risk, should seek care more frequently. For more information, a link to the AOA website is provided below.

<https://www.aoa.org/patients-and-public/caring-for-your-vision/comprehensive-eye-and-vision-examination/recommended-examination-frequency-for-pediatric-patients-and-adults>

If you or someone you know attended Auburn University during that time, it is especially important to get your eyes checked right away. For more information and to keep up with the affected individuals, you can go to the following Facebook Page: <https://www.facebook.com/search/top/?q=auburn%20ocular%20melanoma%20page>

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