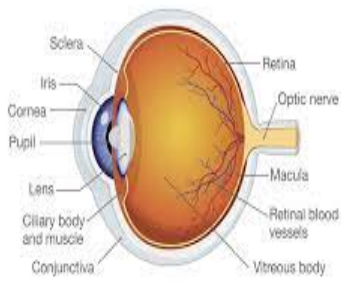


Human Eye Anatomy



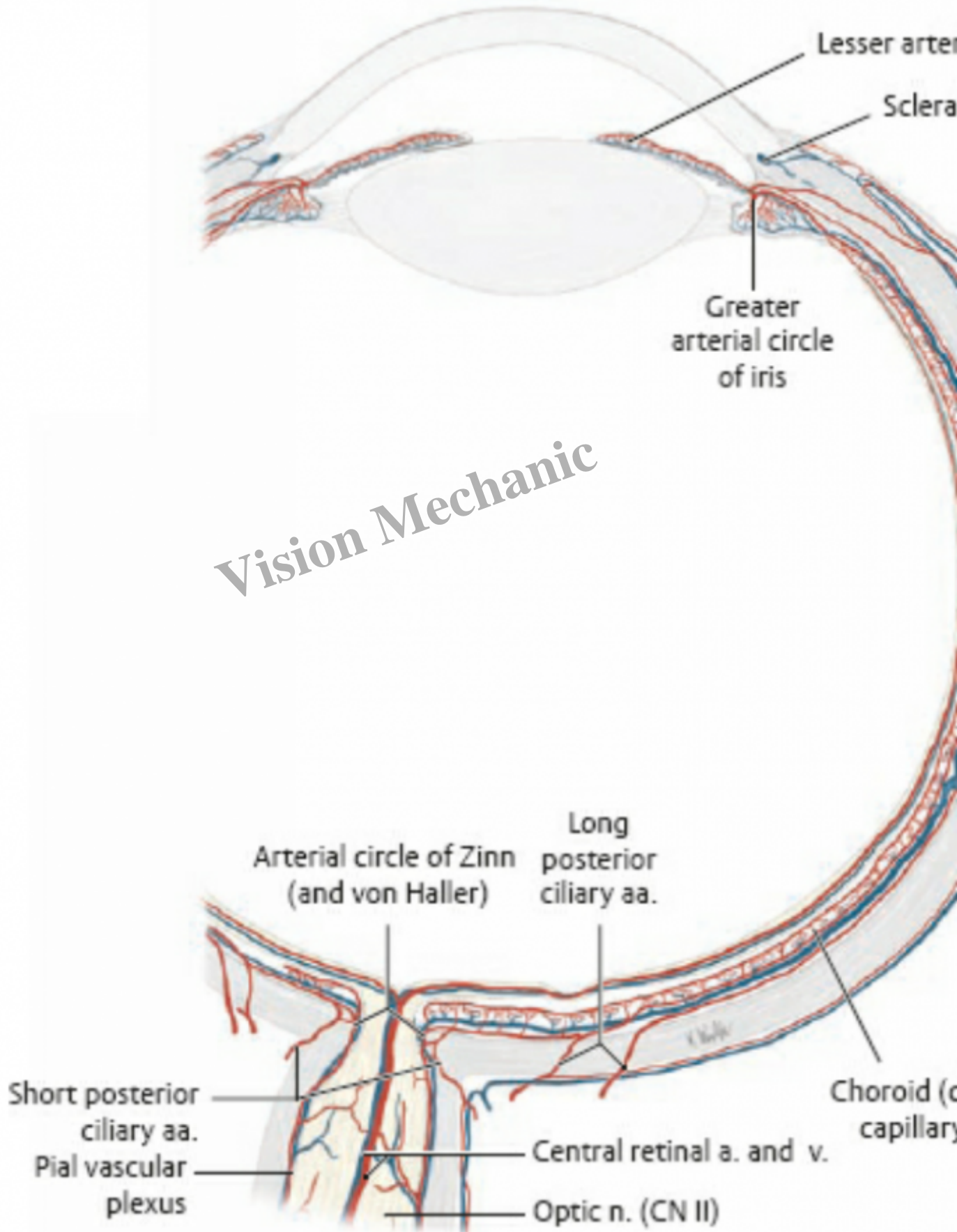
Eye Anatomy

Description

Dangerously simple introduction to visual anatomy, starting with the eyeball, or globe.

Vision Mechanic

Vision Mechanic

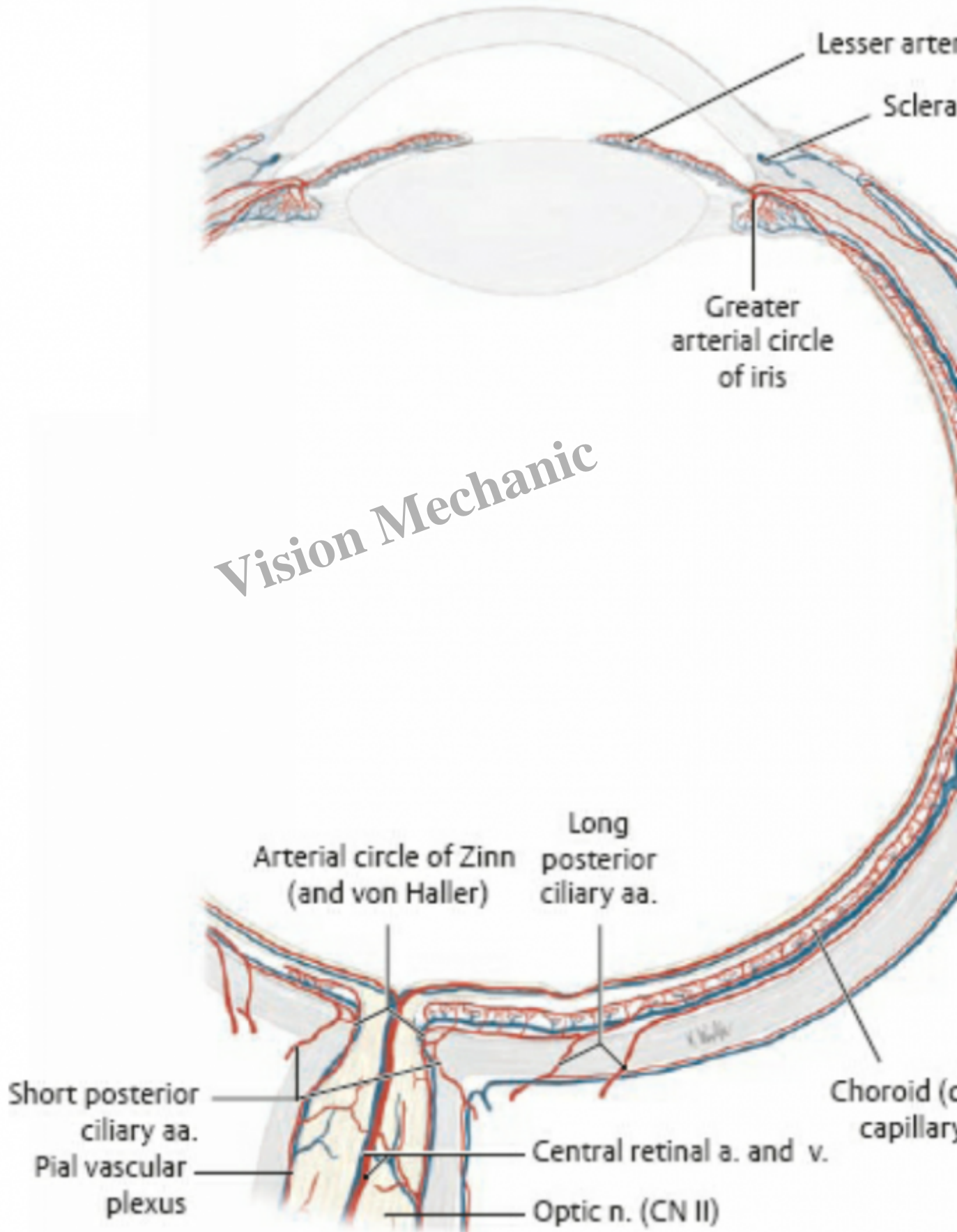


Vision Mechanic

Anatomy is not for everyone, but it's critical in understanding how your vision works. Anatomy is the machine, neurons and cortex the wiring and processing. This is only a brief sample of what's going on, and you can learn a lot more about how vision works, including more on anatomy, by taking the Intro to Human Vision [course](#).

Starting at the front of the eye there is the clear domed cornea, about 1/2mm thick, it provides most of the focusing power of the eye – it's the windshield to the visual system. Behind that is the [anterior chamber](#), an open space filled with a watery substance called the [aqueous humour](#) that bathes the inside layers of the tissues at the front of the eye including the cornea, iris, and lens.

Vision Mechanic



The iris is a muscular pigmented ring that opens and closes in response to light levels and focusing effort – the greater the eye tries to focus on something, the smaller the pupil gets. Behind the iris is the clear lens which when new is very clear and flexible and can accommodate for a wide range of focusing needs, and when old is stiff and clouded, leading to the need for reading glasses and cataracts surgeries.

Behind the lens is a large open space filled with a clear gel called the [vitreous humour](#)/body. This is a clear soft jelly that gives the eye structural support will allowing clear passage of light through to the retina.

The [retina](#) receives the light information from the environment after the light is focused by the cornea and lens. The retina, unlike a movie screen, is not a passive receiver but also does a lot of active processing of the light signals before passing these back to higher processing centres in the brain, where we actually use that light as information. The human retina is composed of multiple layers of nerve fibers and networks, and multiple kinds of cells for receiving light and for organizing and transmitting the signals to the brain through the optic nerve.

The eyes are moved by the brain by means of 6 [extraocular muscles](#) around each eye, and these are driven by three different nerves. In all, the eyes are controlled by over 40 muscles and nerves, and even more goes on under the hood in different parts of the brain including the brain stem, the pons and medulla, occipital cortex, frontal cortex, and more.

Vision is beautiful in its complexity, and wonderful in its simplicity. It's worth learning more about your eyes and vision and you can do so at [VisionMechanic.net](https://visionmechanic.net). You can even take the Intro to Human Vision series of courses to go deeper still. Feel free to go over and have a look. You'll be especially interested in spending time with us if you're a parent, a teacher, therapist or doctor working with reading, developmental, and learning disorders, or even brain injuries.

We'd appreciate it if you Liked and shared this video series if you find it helpful. We're planning a lot of new content so subscribe to ensure you see all the new videos as they come out. Go to [VisionMechanic.net](https://visionmechanic.net) to let us know if there's a topic you'd like us to cover in an upcoming episode of the VisionMechanic.

All science, with just a little attitude and no filler. That's the Vision Mechanic. See you next time.



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