

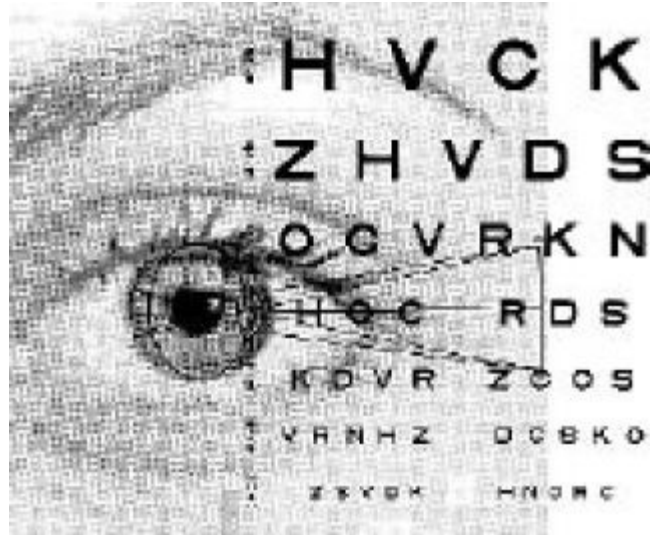
Eyes

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By Dr. Bob Wilson

Ways we are like the naked mole rat: We are naked. We can walk as fast backwards as we can forwards. We look ridiculous without clothes. Ways we are not like the naked mole rat: We do not gnaw dirt and we are heavily dependent on vision.

Conceptually your eye is very simple. It is a couple of lenses that collect and focus light, some clear goop in the middle of the eye that allows the light to pass through on the way to a bunch of cells at the back of the eye that detect the light and send a signal to your brain.



If your eyes are open and you are awake, your brain will take the information and create an image. The eyeball can have problems just like any other body part and one of the most common is glaucoma.

Glaucoma is usually due to excessive pressure inside the eye ball. The eye needs to have some pressure to keep its shape. Otherwise it would collapse and fall out of your face.

On the other hand, if pressure inside of the eye is too great, damage will eventually be done to the cells of the retina. With even higher pressures other parts of the eye, like the cornea, are damaged as well. I suppose if the pressure went really, really high, eyeballs might start exploding, which in comparison makes the image of eyes hanging from their sockets seem pretty OK.

Fortunately, eyeball disease is not so dramatic. In fact glaucoma is down right sneaky. It is also very common. It is the second leading cause of blindness world wide and comes in two varieties; open and closed angle. Closed angle glaucoma is pretty rare and it develops suddenly and with pain. On the other hand, open angle glaucoma can require years to do noticeable harm. The damage starts in the peripheral vision.

Since it does not initially affect central vision, it may not be noticed. This is where I pitch the preventative eye exam.

Like high blood pressure, high eye pressure has no symptoms initially, yet the damage is being done. Inflating a blood pressure cuff around your face is not an accurate test for glaucoma. See a doctor.

Another very common cause of vision loss is diabetes, which also damages the retina, but not because of excess pressure. Arteries in the retina swell, leak, become blocked, and grow abnormally all of which leads to destruction of the retinal cells and loss of vision. Like most diabetic problems, this too can be prevented by controlling blood sugar.

Be aware that, within the cubic inch eyeball, there are dozens of other possible problems. Most of these will be self evident if you stay aware. Anything from pain to discharge to double vision, visions of grandeur, and more, can all be warning signs. If these develop, see a doctor.