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Retinal Detachment

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The retina is a light-sensitive layer of nerve tissue, lining the inner part of the eye and sending visual signals through the optic nerve to the brain. It is Important to know that the retina, it is connected to a layer rich in blood vessels, which nourishes it so that it can carry out its functions, which is the choroid.

One of the most important causes of retinal detachment is age and sex, as it affects all age groups, but it is more common in those over forty years of age and affects males more than females. There are people with other diseases, whether ocular or chronic, who are susceptible to this disease, and they are those with: (high myopia due to the large size of the eye, diseases of the blood vessels, cataracts, severe and direct bruising to the eye).

Symptoms of retinal detachment generally start from the periphery to the center (partial & gradual), and in some cases they are complete and sudden. the most prominent symptoms are: a sudden increase in floating objects, through whose shadows falling on the retina the patient sees shapes such as flies and strings in the visual field. In some cases, the patient may see flashes of light resulting from the tension that occurs in the retina, which may lead to a loss of vision, and the vision may be DARK. These symptoms may be accompanied by distortions in the shapes of viewed objects, as if they were wavy, with a decrease in visual acuity (VA).

Types

Rhegmatogenous Retinal Detachment: It occurs as a result of a tear or hole in the retina and may be accompanied by shrinkage of the vitreous. Through these holes, fluids leak behind the retina and cause it to tear. It is the most common type.

Tractinal Retinal Detachment: It occurs as a result of the formation of fibrous tissue that tightens the retina, resulting in a tear and separation of the retina. It is considered one of the least common.

Exudative Retinal Detachment: This type of detachment has nothing to do with holes, but rather occurs as a result of diseases and infections that lead to fluid leakage behind the retina, and as a result of pushing, the detachment occurs.

Pediatric Side of Retinal Detachment

In a study entitled "Retinal detachments in children: differential diagnosis and current therapy" conducted in 2008, it was confirmed that "the number of retinal detachments in children is very low compared to the number of retinal detachments in adults, as they occur at a rate of only 3.2 - 6.6% in children. The main factors are These are eye cases, related conditions, myopia and retinopathy of prematurity (ROP). Moreover, retinal detachment in children can be idiopathic. This condition is not associated with any accompanying ocular or physical disease. In a few cases, retinal detachment is caused by uveitis and "Coats' disease" [a chronic inflammation of the retina]. Treatment outcomes for retinal detachment in children are less successful than in adults. Further surgical innovations and aetiology-specific treatment strategies are needed to improve outcomes in this group. Recent findings show that the use of intravitreal VEGF inhibitors to treat retinopathy of prematurity (ROP) in children is effective, but we need more information about safety and side effects."

There are many factors that the doctor needs in treatment, including speeding up the start of the treatment plan to obtain a better result. The size and location of the detachment also affects, as the smaller it is and located at the edges of the retina, the better the result. Studies in the 1920s proved that retinal detachment was a major cause of blindness. With the development of science and its modern innovations, which subsequently contributed to increasing the success rate of the surgical procedure and achieving better results, the cases of blindness resulting from retinal detachment were significantly reduced.

Some Possible Methods of Treatment

Laser

The laser is considered a primary treatment used in simple, early cases. The doctor burns the existing tears, and then fibers are formed that work to close and stabilize the tears and prevent fluid leakage. This procedure is used under local anesthesia in specialized clinics.

Pneumatic Retinopexy

This treatment is used if the injury is in the upper parts of the retina. It is done by injecting the vitreous with gas or air bubbles, so that they float to the top and pressure is applied to the place of separation to hold the retina in place. After a few days, the body absorbs the bubbles and replaces them with fluids.

Vitrectomy

This treatment is used in the event of significant bleeding and

tearing in the retina, as the doctor replaces the vitreous body with a transparent silicone liquid or oil, while taking appropriate measures to stabilize the detached part in the surgical treatment of retinal detachment.

We know very well that prevention is better than cure, but there is no general method followed that completely prevents retinal detachment, but some steps can be followed that reduce the chances of developing it, such as wearing protective eye glasses when exercising, controlling blood sugar levels, and performing eye examinations. Periodically, pay attention to symptoms that may indicate the beginning of retinal detachment, and seek immediate medical care to avoid aggravation of the condition that may lead to loss of vision [1-3].

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