

Age-related macular degeneration

Age-related macular degeneration (ARMD) is one of the most common retinal disorders after the age of 60-65 years old and is defined by macula damage (the central retinal area). This affection causes important loss of central vision, influencing daily activities such as driving, reading. Macula is the area in the center of the retina that offers important details and, implicitly, a quality vision. In cases with macular degeneration, the central vision becomes blurred, with black spots, distortions and curvature of the straight lines may appear.

As risk factors for ARMD, we mention: family predisposition, age over 55 years old, hypercholesterolemia, smoking, diabetes and prolonged exposure to sunlight.

Symptoms:

1. decrease of central vision, without impairment of peripheral vision;
2. the appearance of metamorphosis (distortion of straight lines);
3. appearance in the center of the visual field of a dark area.

Ophthalmological examination consists of:

- evaluation of visual acuity with identification of central vision alteration;
- the Amsler test. The patient looks at a millimeter-sized paper and instead of identifying straight lines, he notices them as veiled. In severe cases, a central black patch is indicated which indicates severe impairment of the macular area.
- examination of the retina with evidence of macular changes;
- angiography: useful in detecting neovascularization (abnormal blood vessels);
- optical coherence tomography (OCT) for quantifying macular lesions.

Types of macular degeneration

With aging the retina involves the formation of small "drusen" deposits caused by the accumulation of lipofuscin type amorphous material. Excessive deposits cause the appearance of the two forms of macular degeneration. Most people (90% of cases) have macular degeneration - the "dry" form. It is caused by aging process and thinning of the macula tissue with progressive and irreversible visual loss.

At the opposite side, the "wet" or exudative form is defined by the appearance of abnormal new vessels under the retina. These new vessels induce fluid loss with subretinal accumulation. Loss of vision can be rapid and severe.

The treatment of macular degeneration depends on the clinical form.

Supportive treatment recommends changing lifestyle, smoking cessation, and wearing UV-protected sun glasses. In dry forms, nutritional supplements based on antioxidants, unsaturated fatty acids, lutein, vitamins, zinc and selenium are used.

Wet form can initially benefit from intravitreal injections with vascular-endothelial growth factor-VEGF inhibitors, then laser and photodynamic surgery.