



## Age-Related Macular Degeneration

### 老年性黃斑部病變(英文)

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Age-related macular degeneration is a gradual central retinal degeneration that appears as one ages.

Such degeneration will lead to gradual distorted vision, engaged or shrunk items, and eventually resulting in vision loss. Usually the disease occurs on both eyes, where the age for first loss of vision is 65 years while 12% of the patients' other eyes will be invaded every year. By 70 years old, about 60% of patients will reach legal blindness.

#### Type

Age-related macular degeneration is divided into dry and wet types according to the generation of choroidal neovascularization.

- Dry age-related macular degeneration: Does not form choroidal neovascularization and usually has smaller impact on the vision. Nonetheless as time passes, it could still deteriorate into wet age-related macular degeneration.
- Wet age-related macular degeneration: Such degeneration could result in macular edema and bleeding due to choroidal neovascularization that leads to severe vision degeneration.

#### Prevention

Aging and genetics are the two high-risk factors for disease deterioration.

An investigation of epidemiology suggests that the probability of currently smoking persons to suffer from this disease is 2~5 times that of non-smokers. Moreover, eating more beneficial food or drugs will really help a lot. Studies

reveal that peoples eating fish, dried fruit, dark-green vegetable,  $\beta$ -Carotene, and fruit will less likely to have such disease.

The AREDS hosted by U.S. National Institutes of Health – National Eye Institute discovers from the research that the daily consumption of 500mg of Vitamin C, 400 units of Vitamin E, 15mg of  $\beta$ -Carotene, 80mg of zinc oxide and 2mg of copper oxide could reduce the probability of deteriorating medium age-related macular degeneration into severity in 5 years by 25%, thereby reaching 19% of probability to reduce intermediate vision loss.

Studies show the smokers taking massive  $\beta$ -Carotene could on contrary harm the health and hence lutein is currently replacing  $\beta$ -Carotene.

## Treatment

In the event of seepage, bleeding or new arties in macular, namely the so-called wet age-related macular degeneration; the patients must receive 1) LASIK therapy 2) Anti-VEGF Therapy in Ophthalmology.

### LASIK Surgery

Such surgery includes the traditional laser coagulator therapy, transpupillary thermotherapy, and laser power therapy.

LASIKT Therapy: Applicable for use in choroidal neovascularization further away from the macular center.

Transpupillary thermotherapy: The use of lower laser power to reduce harm on normal tissues and thereby achieving neovascularization therapy.

Laser power therapy: The therapy combining laser therapy and intravenous injection photosthesia drug will make selective destruction on neovascularization tissue while retaining the normal tissues. It is the typical or hidden neovascularization used next to macular or is located under the center of macular.

### Anti-VEGF Therapy in Ophthalmology

Such medicine has amazing effect clinically while side effects include multiple eyeball injection with approximately less than 1% of patients suffering endophthalmitis. Moreover, patients with hypertension, myocardial infarction and cerebrovascular disease must also be careful. Patients who suffer infectious inflammation or are allergic to drugs surrounding the eyeball should avoid using it.

## Precautions

In case the patients discover cyclopean eye with distortion and deformation, dark shadow on the center of horizon and event central vision blurry, it is the sign of serious macular degeneration. Particularly macular degeneration often occurs when both eyes gradually are invaded. After the onset of one eye, the other one will be more likely to have the same disorder compared with most other people.

Upon discovery of the abovementioned symptoms, consult with ophthalmologist to receive active therapy.

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若有任何疑問 · 請不吝與我們聯絡  
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