

# Introduction

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Age-related macular degeneration (AMD) is now one of the major causes of central vision loss.

It involves the macular area and when it progresses and destroys the central fovea, quality of life is seriously compromised.

The ability to read, drive, recognize faces or watch television is impaired or lost.

It is a disease associated with aging and progressive tissue degeneration.

Most of these senior citizens had anticipated the opportunity to enjoy life at leisure doing their preferred activities and find profound limitations and are deeply disappointed in their expectations.

This was the dismal state of affairs until a few years ago when the introduction of new therapeutic agents changed dramatically the expected outcome.

The most important development has been the clinical demonstration that agents inhibiting vascular endothelial growth factor and, therefore, the formation and development of new vessels not only preserve visual acuity but also improve visual function.

This find was a true revolution in ophthalmology.

The retina like the central nervous system, particularly in old age, was not considered capable of regeneration and, therefore, new therapies were expected to offer only stabilization of the disease.

When laser photocoagulation was shown to be effective for the treatment of diabetic retinopathy this was a breakthrough but it offered only stabilization of the disease and maintenance of visual acuity present at time of treatment.

Now, new available treatments offer real improvement in visual acuity, implicating improved visual function and some degree of recovery of the retinal neuronal network.

AMD is, therefore, an active scientific area with new information becoming available almost everyday on the pathophysiology, clinical phenotypes, markers of disease progression, new treatments and novel treatment regimens.

It is a complex multifactorial disease where aging associates with genetic factors and inflammatory responses to local cell injury.

This means that the treatment of AMD must also address the various factors involved in disease progression and, most likely, will involve a combination of therapies after clear identification of the different AMD phenotypes.

This book reviews the new concepts on AMD and is, therefore, timely.

It is a concerted effort of Portuguese ophthalmologists which together with a few other European experts in the field cover the subject paying particular attention to daily practice management of AMD.

I am particularly happy to see this collaborative effort coming from my country, Portugal.

It shows that Portuguese ophthalmology is at the forefront of European and International ophthalmology.

It shows also that there is in Portugal a real spirit of collaboration between colleagues working together to improve the vision of their patients.

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