

PRESERVING EYESIGHT

EUROCONDOR embarks on study of innovative therapeutic treatment using eye drops to combat diabetic retinopathy



A group of leading European ophthalmologists, endocrinologists and researchers have gathered together under EUROCONDOR -the European Consortium for the early treatment of diabetic retinopathy- with the aim of implementing the first clinical trial using eye drops for the treatment of the earliest stages of this diabetes-related complication (DR).

Diabetic retinopathy (DR) is an eye disease that occurs in people living with diabetes and which can ultimately lead to severe loss of vision or even blindness. This disease is the leading cause of blindness among working-age individuals in developed countries, as well as the most common complication of diabetes. Rising rates of diabetes across Europe mean that more and more people will be at risk of developing diabetic retinopathy. Along with the human suffering from this devastating complication comes an increasingly heavy economic burden that includes healthcare costs, but also economic costs to the wider society in loss of productivity and early retirement.

Treatments for diabetic retinopathy do exist. However, the options currently available - such as laser photocoagulation or intravitreal injections of corticosteroids - are only indicated in advanced stages of the disease and are invasive, costly and associated with significant side-effects.

Growing evidence suggests that retinal neurodegeneration is an early event in the pathogenesis of DR (i.e. neurodegeneration plays an important role in the onset of the disease). It is reasonable to hypothesise that therapeutic strategies based on neuroprotection will be effective not only in preventing or arresting retinal neurodegeneration but also in preventing the development and progression of the early stages of diabetic retinopathy.

With this in mind, the EUROCONDOR consortium will start a clinical trial this November to determine the safety and effectiveness of a new therapeutic eye drop treatment based on two neuroprotective drugs: somatostatin (a peptide hormone) and brimonidine (a drug currently used to treat glaucoma) for the early stages of diabetic retinopathy.

“Until recently, the use of eye drops has not been considered an appropriate route for the administration of drugs in the early treatment of this complication because of the general assumption that they do not reach the retina”, comments Dr Rafael Simó, Director of Diabetes Research and Metabolism Unit at VHIR (Hospital Universitari de la Vall d’Hebrón – Institut de Recerca) and coordinator of the EUROCONDOR project. However, recent studies show that many drugs are able to reach the retina in pharmacological concentrations. “These findings mean that neuroprotective drugs administered through eye drops have the potential to open up a new strategy to treat the early stages of diabetic retinopathy”, adds Dr Simó.

Positive outcomes for the EUROCONDOR project could also have a considerable impact on prevention, placing neurodegeneration as a new target for screening of diabetic retinopathy in people living with diabetes.

Meanwhile, ophthalmologists and physicians treating patients with diabetes should be aware of the potential usefulness of these drugs and work together in future research. “It is only through such coordinated actions, as well as through effective and comprehensive prevention strategies, that we will be able to reduce the burden of this devastating complication and improve the lives of people living with diabetes”, concludes Dr. Simó.



From left to right,
EUROCONDOR
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