

2RT

sehkraft<sup>®</sup>







A black and white photograph of a textured surface, possibly sand or a coarse fabric, with a central white text overlay. The texture is composed of many small, irregular grains or fibers, creating a grainy, tactile appearance. The lighting is somewhat uneven, with darker areas in the shadows and lighter areas where the surface catches the light. The text is centered horizontally and vertically, rendered in a clean, white, sans-serif font.

experience a new dimension



# sehkraft

As early as 1992, we were fascinated by the possibilities of modern laser technology, which today allows us to help our patients achieve perfect vision in just a few minutes and thus significantly improve their quality of life. Doing this to the highest perfection is a passion that unites our entire team.

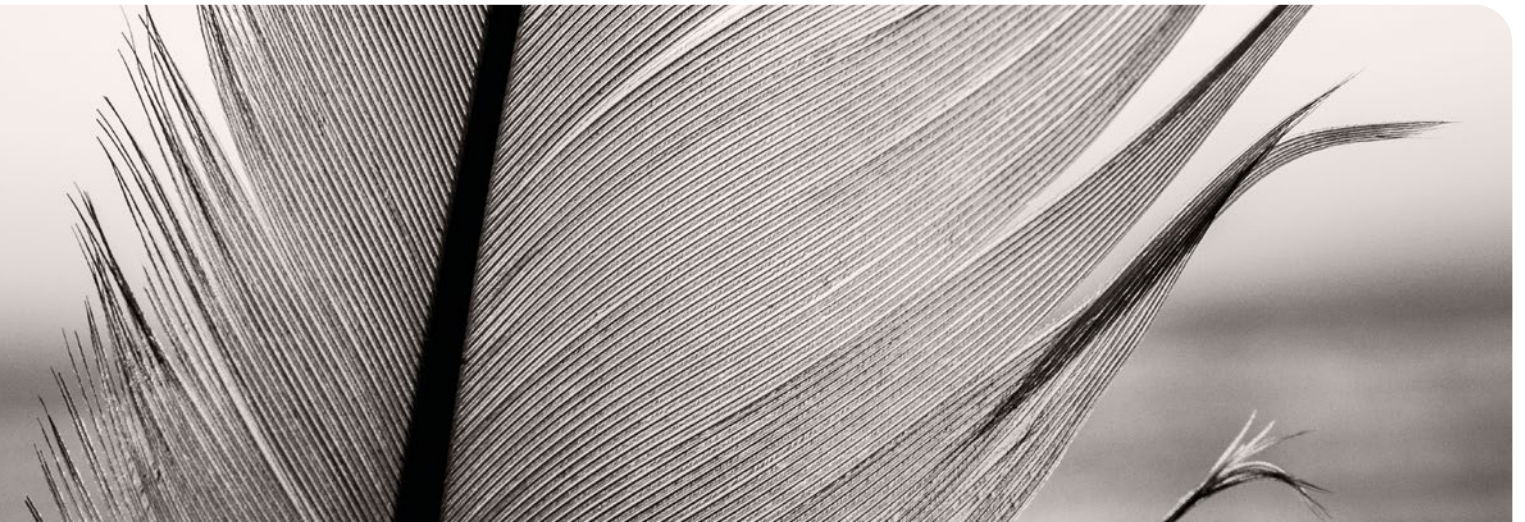
**WE DO EVERYTHING WE CAN  
FOR THE QUALITY OF RESULTS  
AND SECURITY YOU EXPECT  
FOR YOUR EYES.**

Respect for the trust you place in us obliges us to offer you excellent results and maximum security at the same time.

With the 2RT™ laser, which was essentially developed in cooperation with one of the best-known eye clinics in the world, the Moorfields Eye Hospital in London, we have a wonderful laser procedure at our disposal with which the early stages of dry AMD (age-related macular degeneration) can be treated for the first time. The 2RT laser stimulates a completely natural biological healing response on the retina, which regenerates as a result.

In this way, the first signs of the disease can be reversed, the progression of the disease can be stopped and the transition to the aggressive form of wet AMD can be prevented.

The risk of blindness due to AMD is thus significantly reduced.



## AMD - Age-related macular degeneration

AMD is the most common cause of blindness in the western world. In Germany, too, AMD is the most frequent cause of severe visual impairment (considerable reduction of central vision), at 50%, and thus for the receipt of blindness benefits.

The disease affects the central retina and leads to loss of central visual acuity. Writing becomes distorted, faces become blurred and in the final stage only the peripheral field of vision is perceived. Reading, driving or watching television are no longer possible. AMD is very dramatic for those affected, as social contacts and the flow of information are considerably restricted.

**AMD IS THE MOST COMMON CAUSE OF BLINDNESS IN THE WESTERN WORLD.**

## Here are a few figures:

- the prevalence (frequency) of AMD increases with age
- At 85%, dry AMD is the most common form
- in 15% of patients it changes to the aggressive wet form

## Suffering from early forms of AMD ...

- approx. 20% of 65- to 74-year-olds
- approx. 35% of 75- to 84-year-olds

## End-stage AMD affects ...

- approx. 1% of 65- to 74-year-olds
- approx. 5% of 75- to 84-year-olds

Age-related macular degeneration (AMD) is a metabolic disorder. Unfortunately, the main cause is the natural ageing process. Risk factors such as genetic disposition and environmental factors (smoking, poor diet, lack of exercise) favour an earlier onset of the disease. We distinguish between the early form, also called dry AMD, and the late advanced form, known as wet AMD.

The macula is the place of sharpest vision. This is the region where the photoreceptors (the cells with which we see) are particularly dense.

# AMD

This important part of the retina is supplied by the underlying retinal pigment epithelium (RPE). The RPE cells provide nutrients to the photoreceptor cells and remove dead cells. In the course of life, tiny end products that cannot be further degraded accumulate inside the retinal pigment epithelial cells and material accumulates in the border area between pigment epithelial cells and the neighbouring Bruch's membrane.

## THE TRANSITION TO THE AGGRESSIVE FORM OF MOIST AMD CAN BE PREVENTED.

These deposits lead to pigment displacement and the formation of so-called drusen (whitish round spots) as well as to circulatory disorders of the macula. In the advanced stage, this ultimately leads to the death of the photoreceptors.

In the later stages of the disease, the retina including the photoreceptors are already irreversibly degenerated. The affected eye can develop a wet form of AMD and only in some cases can be saved

from blindness by regular intravitreal injections (injections into the eye).

Since the early stages of dry AMD can develop into the severe form of wet macular degeneration, early diagnosis is crucial.

Long before the first subjective visual disturbances occur, the first signs of this insidious disease are already visible through a simple OCT examination.

## THE FIRST SIGNS OF AMD ARE OFTEN DETECTABLE AS EARLY AS THE AGE OF 45 - BEFORE THE PATIENT EVEN NOTICES ANYTHING.

We therefore recommend an annual preventive check-up from the age of 45. International experts also recommend purely prophylactic treatment to prevent AMD from developing in the first place.

View of a patient with AMD



Sight with healthy eyes





# 2RT LASER PROCEDURE

2RT, retinal regeneration therapy, is a non-invasive, absolutely painless treatment method that can be used for the first time to treat the early stages of dry AMD. By using the 2RT laser, a natural biological healing response is stimulated on the retina, which stimulates a regeneration process.

## EARLY STAGE OF AMD TREATABLE FOR THE FIRST TIME WITH STATE-OF-THE-ART LASER TECHNOLOGY.

In a 2RT treatment, ultra-short nanosecond laser light pulses with very low energy are placed on specific points of the retina. Only the cells in the periphery are treated with the ultra-short "cold" light pulses, the cells of the sensitive macula itself remain untouched.

This treatment triggers an immune response in the body and thereby stimulates the adjacent cells to divide and form new healthy cells, hence the name retinal rejuvenation therapy. The function of the retinal pigment epithelial cells is reactivated and the RPE cells are stimulated to break down the deposits and drusen that have already occurred.

This means that already existing initial signs of the disease can be reversed and the progression of this degenerative disease is combated. The transition to the aggressive form of wet AMD can be prevented and thus the risk of blindness due to AMD can be significantly reduced.

2RT treatment can also be used to treat diabetic macular oedema.





**Treatment process**

The 2RT treatment is performed on an outpatient basis. First we anaesthetise the eye locally with eye drops and your pupil is dilated with appropriate drops.

During the treatment, you sit opposite the doctor and look through a contact glass. Very gently and imperceptibly for you, the cells on the retina are treated.

Finally, you will receive antibiotic eye drops. The treatment is completely painless and takes about 10 minutes.

**After the treatment**

As your pupils are still dilated after the treatment, you must not drive yourself. You may experience

temporary blurred vision or a slight reddening, but this is absolutely harmless.

The treatment can be repeated almost as often as desired at a later time. If both eyes are affected, the treatment is carried out at intervals of a few days.

**Costs**

The costs for the 2RT treatment are approx. 2,400 euros per eye. If a booster treatment is required after 6 months, it is already included in this amount.

Unfortunately, statutory health insurers do not pay for the treatment. The reimbursement behaviour of private health insurers varies greatly.



**IF YOU HAVE ANY FURTHER  
QUESTIONS, PLEASE DO NOT  
HESITATE TO CONTACT US.**

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As of: November 2023

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