

Advice for the Patient

Dear patient,

This brochure provides you with important information about your ocular prosthesis. Use of ocular prostheses can alleviate physical and mental impairments, resulting from the loss of a natural eye. Our profession is to provide you with the knowledge and answers to the questions that will arise.

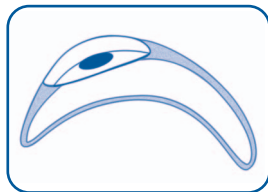
And we help you to use the ocular prosthesis properly so that you will feel confident and secure. Please consider the recommendations for use, to obtain a comfortably wearing after correct care and nursing. If you have questions, do not hesitate to contact us.

Ocular prostheses are not an invention of modern times. Even in the middle ages so-called „orbital prostheses (eye epitheses)“ already existed. These were painted eyes made of leather, which were attached over the eye socket with a spring wire worn around the head. Moreover, „inserted eyes“ made of gold and silver, on which the iris was drawn in with enamel, were also manufactured. The manufacture of ocular prostheses made of glass, which fit directly into the eye socket began as early as the eighteenth century.

The progress in medicine and ocular medical technology has led to the best possible benefits in health care for the patient. The basis for these benefits is good collaboration between the ophthalmologist and the ocularist.

Thanks to their natural appearance and expert fitting to the anatomy of the eye socket, today ocular prostheses can be worn inconspicuously and fit without problem, giving the patient confidence in the company of others.

Glass ocular prostheses are manufactured as hollow, double-walled prostheses (Snellen eyes) or as single-walled shell eyes (cover shells). Plastic ocular prostheses, on the other hand, are manufactured from solid material.



Cross-section through a double-walled glass ocular prosthesis

The standard material used for **ocular prosthesis is glass**. They are manufactured from cryolyte glass, produced only for the manufacture of ocular prostheses. Due to the material compatibility and the possibility for processing, cryolyte glass is especially well suited for fulfilling the medical requirements.

Other advantages are:

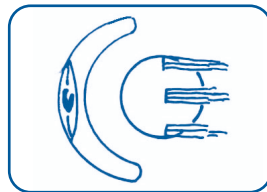
- Extremely smooth surface, resulting from fire polishing
- High lustre
- No allergic reactions
- Light-weight (hollow body)
- Good chemical resistance
- High mechanical surface stability
- Good moistening properties by tear fluid (hydrophilic)
- Bio-compatible (highly tolerated by conjunctiva)

Plastic ocular prostheses are seldom used in Germany because the material has a soft, easily damaged surface and wears out faster. While these ocular prostheses can in fact be polished, compatibility with the conjunctiva cannot be ensured. They are used only when requested by the patient or for purposes handling (e.g. for persons unable to properly grasp objects) there is a danger that a glass ocular prosthesis can break.

After removal of the eyeball or the evisceration, the resulting loss of volume is largely compensated by an implant. The remaining ocular muscles, which are connected to this implant, provide a **mobile base** for the subsequent ocular prosthesis. The implant is covered by the conjunctiva and is therefore not visible.

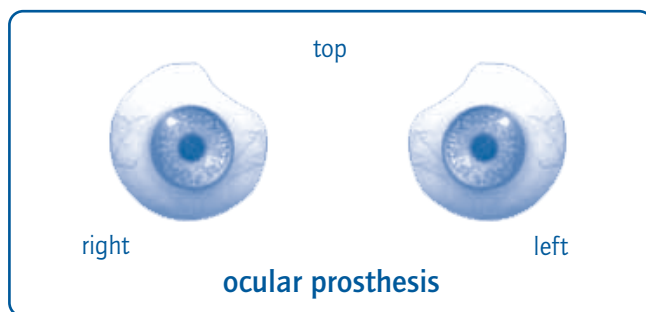
Immediately after the operation, the eye socket is provided with a conformer, which forms the eye socket, prevents shrinkage and prepares the way for care with an ocular prosthesis.

In cases of serious injuries or pathological alterations in and on the eye socket, restrictions must be accepted in regard to appearance and mobility



Eye socket provided with implant, with double-walled ocular prosthesis

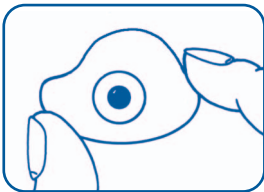
After the operation you should arrange an appointment without delay with your ocularist in order to discuss continuing treatment. As a rule, during this session a model is taken and, after about 14 days, the first ocular prosthesis is manufactured and fitted. At first, wearing the ocular prosthesis is an unusual sensation, but is not painful. For the preparation, you should prepare for a **treatment time** of about 1-2 hours.



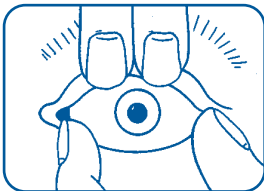
Please consider that we manufacture your ocular prosthesis individually for you, according to the anatomical requirements of your eye socket.

Please note: As a rule, the short part of the ocular prosthesis points towards the nose. However, a few forms do not follow this pattern.

In the beginning, inserting the ocular prosthesis may seem unusual, but with a little practice it is a very simple procedure. In order to avoid damage to the ocular prosthesis, during inserting and removing the eye should always be placed on a soft pad. Sit down at a table, place a cloth on the table and set a table mirror in front of yourself. Thoroughly clean the eye before inserting it (**see Cleaning and care**).



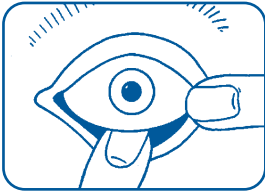
1) Grasp the ocular prosthesis in the hand so that the upper part is free. The short side must point towards the nose.



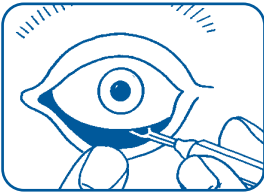
2) Lift the upper eye lid with the free hand and push the free upper part of the ocular prosthesis behind the upper eye lid. Firmly hold the ocular prosthesis in this position and draw the eye lid downwards. Slight pressure against the ocular prosthesis, supported by a circular movement, brings the eye into the correct position. Any air pockets behind the ocular prosthesis can then escape.

If your ophthalmologist has prescribed an ointment or drops, you should apply these according to the doctor's instructions. It is advisable to apply the ointment to the reverse side of the ocular prosthesis before inserting. Slight pressure against the ocular prosthesis, supported by circular movements, distributes the salve uniformly throughout the conjunctival sac. Apply drops directly to the eye socket before inserting the ocular prosthesis.

Inserting your ocular prosthesis

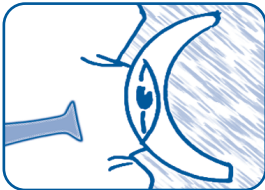


1) From a relaxed position, look upwards. Place the index finger next to your nose and grasp the lower eye lid. With a stroking movement, draw the lower eye lid under the edge of your ocular prosthesis. Then push the prosthesis forward while looking upward. It will then slide out of the eye socket by itself.



2) A tiny hook or a sucker can sometimes be helpful.

– Draw the lower eye lid downwards, bring the **hook** behind the lower edge of your ocular prosthesis, and lift it out of the eye socket.



– Or if you use a **sucker**, place the sucker, slightly moistened, against the ocular prosthesis. Then draw the lower eye lid downwards and pull out the ocular prosthesis.

Just as for inserting your ocular prosthesis, with a little practice removing the prosthesis is also very simple. When removing, don't forget a soft pad so that the ocular prosthesis is not damaged if you inadvertently should drop it.

Please note: If you rub or wipe the eye, then always do so in the direction of the nose. Wiping in the opposite direction (especially on the lower eye lid) could rotate or press out the ocular prosthesis.

Removing your ocular prosthesis

Your ocular prosthesis is a valuable object, which you must handle properly. This includes all proper **care** described above. Take a little time every day for this. The best way is to find a place where you are undisturbed, since the brief cleaning ritual is easier to perform when you are relaxed and calm.

- Thoroughly clean your ocular prosthesis at least once a day. Make sure that your hands are clean and dry and sit comfortably at a table with a cloth spread out before you.
- After removing the ocular prosthesis, clean it with lukewarm water in a container vessel (never under running water!). Then dry it gently with a soft tissue.
- Moisten the ocular prosthesis with water or saline solution and insert it once again in the eye socket.

This is all you have to do **to clean** your ocular prosthesis. As a rule, ocular prostheses can be worn day and night. Under certain conditions, however, we advise the patient to remove the ocular prosthesis for a short time. Please speak with your ocularist about this.

Please note:

- Do not leave the ocular prosthesis in liquids overnight.
- Never clean over a sink or a stone floor.
- Do not clean with caustic liquids.
- Do not clean with hard objects.

The **durability** of an ocular prosthesis depends on environmental factors, the anatomy of the eye socket, and the pathological factors of the patient (e.g. due to alterations of the eye socket or, with children, due to growth). All ocular prostheses are subject to wear on the surface, which can result in irritation of the eye socket.

The previously mentioned facts significantly affect the **length of use**. In exceptional cases, it is not possible to wear an ocular prosthesis for the average length of use of about one year. Environmental factors, dust and dirt, as well as functional disturbances of the eye lid mechanism, can also shorten the length of use.

If the surface becomes roughened, this causes irritation to the conjunctiva. Its protective function is impaired as a result. The first indications that you need a **new ocular prosthesis** are the increased flow of tears, viscous yellow discharges, or itching in the region of the eye socket and the edge of the eye lid. Should these symptoms persist for several days, inform your ophthalmologist without delay. Only in the dry state after removing the ocular prosthesis from the eye socket, it is possible to see the roughness of the surface. Then the eye socket can be examined for inflammation.

Please note: It is advisable to always have a spare ocular prosthesis with you. Think about this for your next holiday. In this way, in the case of damage or loss of your ocular prosthesis you can avoid problems until the next appointment with your ocularist. The eye socket should not be left untreated for longer periods of time.

Here we would like to mention that, for certain activities (e.g. jobs at home) you should wear suitable safety goggles. The ocular prosthesis patient can move with no restrictions whatsoever. Many of our patients are even outstanding sportsmen and sportswomen. However, because the field of sight is somewhat restricted, it is necessary to be particularly careful. Here, you should respect certain rules:

*Tennis, squash,
badminton, golf*

For sports such as tennis, squash, badminton and golf we advise our patients to wear sports glasses.

Horseback riding

For riding horseback, you should also protect your eyes well. This is especially true in the country, where it is important to protect your eyes from whipping branches.

Swimming

Swimmers should wear swimming goggles in order to protect the eye socket and the conjunctiva against „swimming conjunctivitis“. This is an irritation of the mucous membranes of the eye, which unfortunately occurs occasionally due to contaminated water in public swimming pools. At the swimming pool, you should avoid plunging into the water head-first, because of the danger of rinsing the ocular prosthesis out of your eye socket when you plunge quickly into the water.

Diving

Special precautionary measures apply for divers. Along with the standard air pressure on land, a pressure of 1 bar must be added for every 10 metres depth of water. The resulting water pressure changes compress the air within the body, causing undue pressure on the ocular prosthesis. This coupled with the already existing underpressure of the ocular prosthesis, can possibly crush it. This can cause further injuries with serious consequences during the diving expedition.

Sauna

Even visits to the sauna require certain precautions. The rapid temperature changes can cause damage to your ocular prosthesis.

Flying

During air travel, patients who wear ocular prostheses have no problems. Although the cabin pressure of an airplane is reduced during the flight, this does not affect the internal pressure of the eye. We therefore assume that you can enjoy your flight for a holiday or on business without problems.

Professional profile of the ocularist

The six-year education comprises two steps, each with an examination administered by the professional association of the German Ocularists Society (DOG). The examined ocularist is qualified to individually manufacture and fit ocular prostheses. Institutions affiliated with the DOG are also admitted by the cost bearers.



Here you can obtain further information

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