

Dear Patient,

The examination has shown that your jaw requires a bone reconstruction. In addition, you will be informed about the materials that can be used to perform an onlay bone reconstruction. Possible alternative surgical procedures are not part of this information.

Why is a reconstruction of the bone or a restoration of the masticatory function necessary?

The bony substance in your jaw has broken down or there is a risk of breakdown. This breakdown can affect parts of the jaw or the entire alveolar ridge.

The jawbone must be reconstructed in order to maintain functionality and to be able to carry out the planned prosthetic restoration. In your case the bone reconstruction

is a requirement for dental implants

is a prerequisite for a prosthetic restoration

helps filling a cyst causing a change in the relation between the upper jaw and the lower jaw

other (e.g. apicoectomy, tooth extraction)

What materials are available today for bone reconstruction?

Bone substitute / bone reconstruction material

Autologous bone

Bone is harvested from the patient's iliac crest or mandible. This removal therefore requires a further surgical procedure, which is also associated with corresponding risks. The implanted bone stimulates the growth of the bone to be reconstructed. However, the high resorption rate of autologous bone can cause the inserted material to dissolve very quickly and therefore does not provide adequate stability in the defect.

Allogenic bone

This is foreign bone that comes from organ donors. The material serves as a guide rail for ingrowing bones. It is observed that this material resorbs unpredictably. Depending on the type of bone, it may be resorbed too quickly or with a delay or may not resorb at all. In addition, the risk of infection, such as HIV or hepatitis, or a rejection reaction cannot be completely ruled out.

Xenogenic material

This material is mostly of animal origin and is obtained, for instance, from bovine bones. The material is further processed by certain chemical or thermal methods. These bone substitute materials can cause unspecific defense reactions, and they also harbor immunological and infection risks. Complete resorption is not possible, meaning that material residues can remain permanently in the body.

Synthetic materials

There is no risk of infection with these materials. The body's acceptance of such materials and the extent of resorption depends on the exact composition of the material. Complications can only occur if the introduced material can be degraded slowly or not at all.

In contrast, modern bone reconstruction materials made of pure-phase β -tricalcium phosphate (e.g. Cerasorb®) gradually dissolve

completely to make room for the regrowing bone. Therefore, no foreign body remains in the recipient bone.

Membranes

To achieve undisturbed healing, it is often necessary to cover the inserted bone substitute material with a membrane. Firstly, this prevents the bone material from being lost and secondly, membranes serve as a necessary barrier against the rapidly ingrowing gingiva. In this way, stable bone conditions can be achieved for further treatments. A distinction is made between resorbable and non-resorbable membranes.

Resorbable membranes

Are completely degraded by the body and therefore do not need to be removed. These membranes can be made from animal source material (pig, horse, cow, etc.). Safe and modern membranes are made of tissue-compatible synthetic materials (e.g. Epi-Guide®, Inion GTR™). Unlike membranes of animal origin, synthetic materials do not carry any risks of potential disease transmission.

Non-resorbable membranes

Must be removed in a second, minor, usually painless procedure after approximately 4-6 weeks (e.g. Tefgen, TI titanium foil).

Other: _____

In your case, the following material is to be used for bone reconstruction:

Notes (specific naming of the intended material, intended harvesting site, further special features, specific infectivity, e.g. in the case of foreign bones, transmission of diseases, etc.).

The advantage of bone reconstruction in the upper jaw/lower jaw

Nowadays, missing bone can be reconstructed with the help of augmentative procedures. As a result, the jaw regains its natural shape and size. Now the functionally and esthetically optimal reconstruction (optionally with an implant or a bridge) can be performed.

The prospects of a successful bone reconstruction in the upper jaw/lower jaw:

The success of bone reconstruction also depends heavily on the selection of the appropriate bone reconstruction material. The optimal bone reconstruction material offers sufficient stability during the insertion phase to prevent it from disintegrating into small particles and thus accelerating the inflammatory processes. The degradation rate of the material should be adapted to the natural bone structure, i.e. simultaneous resorption should take place. At the end of the regeneration process, the new bone should have formed without material residues. Only then is the new bone able to adapt to the changing demands in the jaw and provide a stable foundation for implants if necessary.

■ Declaration of Consent

During an informative discussion, Dr. _____
explained to me in detail about the planned bone reconstruction. I was
able to ask all the questions that seemed important to me, such as about
specific risks and complications.

Declaration of Consent

After careful consideration, I consent to the transfer of

autologous bone reconstruction material; intended donor site:

allogenic material (from organ donors) xenogenic material (from
animals)

fully synthetic material, the following product (e.g. Cerasorb®)

and the anesthesia necessary to perform the surgery.

I have no further questions, feel sufficiently informed and hereby
consent to the planned surgery after sufficient time for reflection.
I agree to any unforeseen extended procedures that may be
necessary.

I do not consent to the proposed bone transfer/insertion of bone
substitute material. I have been informed about the health disad-
vantages which may result from this.

Place / Date / Time

Patient or caregiver / Authorized representative / Custodian