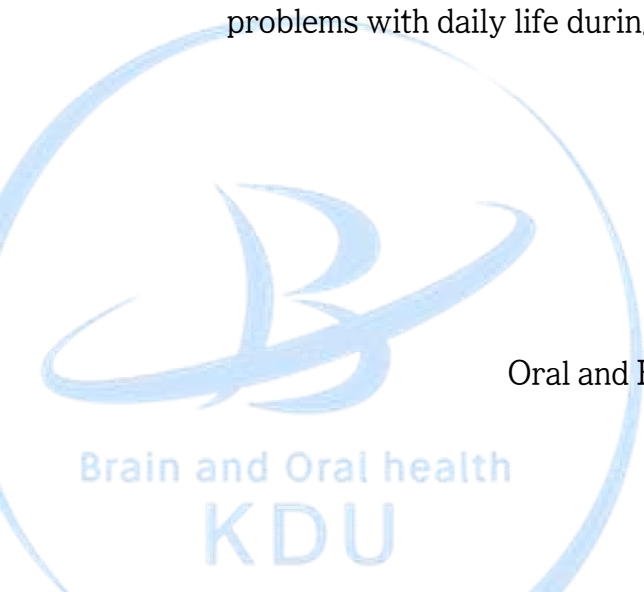


Implant Treatment

What are Implants?

In the mid-1960s, research began to focus on clinical applications, and osseointegration (direct interface with bone) was proposed by Brånemark et al. Since then, various implant systems have been developed. The materials used for implants are titanium, titanium alloys, and zirconia. The advantages of implant treatment are that, compared to bridges, the treatment can be completed only in the area of missing teeth without involving the adjacent teeth, and the restoration of occlusal function is the same as that of natural teeth. In addition, compared to removable dentures, the implants are not only functional, but also look just like your own teeth, and you don't have to remove them to feel uncomfortable. Although there are many factors involved in the outcome of post-implant treatment, current research reports indicate that the survival rate is generally 96% or higher (10 years).

The standard implant treatment consists of examination, diagnosis, X-ray examination (tomogram : CBCT), and surgical planning using simulation software to select the most appropriate size of implant, and then surgically place the implant. The standard treatment period is approximately 3 to 4 months for the mandible and 4 to 6 months for the maxilla. The surgery will be performed about 1 to 2 hours, depending on the number of implants to be placed, and is performed under local anesthesia. After the surgery, there will be no problems with daily life during normal implant placement surgery.



Socket Preservation

The area to be treated with implants requires the extraction of teeth that are already missing or that cannot be retained (periodontal disease or severe tooth decay).

Usually, when a tooth is extracted, the alveolar crest (bone crest) that supports it thins and shrinks. To prevent this, at the time of tooth extraction, collagen, artificial bone grafting material, or a composite of these materials are used to ensure a wide alveolar crest and a regenerative bone environment for the placement of dental implants in order to prevent resorption.

Osteogenesis, GBR technique

In cases where the alveolar crest is not wide enough to place the implant, osteogenesis may be performed to provide the necessary width for implant placement. This can be done at the same time as the implant placement (Simultaneous) or in advance of the implant placement (staged).

Autologous (harvested from within the own mouth) or artificial bone graft material, a barrier membrane, or titanium meshes are used in the procedure.

Ridge Expansion

In cases where the alveolar ridge (crest of bone) is not wide enough, this method uses specialized instruments to expand the bone width to a condition that allows for the placement of implants. This technique is mainly applied to the maxilla.



Sinus elevation and sinus lift

Sinus elevation and sinus lift are indicated when the bone height of the maxillary molars is insufficient to reach the maxillary sinus. Sinus elevation is performed when the existing bone height is 4 to 5 mm or more, and sinus lift is performed when the existing bone height is less than 4 to 5 mm. The materials used are autogenous (harvested from within the own mouth) or artificial bone graft material and a barrier membrane.

