

How to use Abutment

[Product description]

This product is an upper structure of a dental implant, a supporting device, a screw, etc. used to support or maintain the restoration after implanting the lower structure, and is designed to fasten the foodstuff and the supporting device using a screw

[Usage purpose]

The upper structure of the implant that is inserted to support prosthetics such as artificial teeth used to restore the patient's chewing function

[Performance]

- 1) Shear fatigue: must be 250 N or higher and no breakage, cracks, deformation, etc. of the product.
- 2) Precision fit: 10 μm or less for clearance and 3° or less for rotation angle
- 3) Shear compressive load: 500 N or more
- 4) Rotation shear torque: 42 N·cm or more
- 5) Release torque: 24.5 N·cm or more

[Usage protocol & operation sequence]

A. Preparations before use

- 1) The results of X-Ray imaging should be carefully read and the product suitable for the patient's characteristics should be selected.
- 2) Check whether the product is deformed, discolored, foreign substances, etc. or damaged.
- 3) All surgical instruments used should be sterilized in advance. The sterilization method is wet heat sterilization (ISO 17665-1,2,3).
- 4) When mounting the upper structure in the patient's oral cavity, the operator should check the degree of bone fusion of the embedded fixture by radiography and percussion reaction, and proceed with the procedure if appropriate.
- 5) The operator must be fully aware of the surgical method, clinical indications, and precautions using the surgical instrument of this product.
- 6) Check the patient's oral condition to ensure that there are no biological or biological factors that may impair surgical outcomes.
- 7) After planting the transplant, sign a cover screw or Healing Abutment to wait for a certain healing period for bone union. After a certain period of time, after removing the cover screw through the surgical process, the Healing Abutment is mounted on the top of the graft to locate the gums and locate the prosthesis to wait for the healing of the soft tissue. Since there are various types of abutments, the size and type should be determined in advance according to the patient's oral condition, and a prosthesis production plan should be established accordingly.

B. How to use it or order of operation

- 1) After the soft tissue is healed (which can be done immediately after removing the Healing Abutment in case of One Stage Surgery), use an impression material to obtain an impression.
- 2) The type and size of the abutment are selected in consideration of the relationship with the adjacent value by comparing the X-ray photograph with the acquired impression.
- 3) If the selected Abutment is a Cured Retained Type, a plaster model is used to make a WAX-P on the Abutment, and a prosthetic is manufactured.
- 4) After placing the initial prosthesis on the implant or abutment in the oral cavity, fasten the screw to check for occlusion between the upper and lower jaw.
- 5) The recommended coupling torque is 35 N·cm.

C. Storage and management methods after use

- 1) This product is a disposable medical device, so reuse is prohibited

[Precautions for Use]

A. Precautions for use

Cautions for conditions, etc. considering the characteristics of medical devices

- 1) In-mouth taboo
 - ① Inadequate corollary relationship (insufficient amount of bone)
 - ② Problematic occlusion or functional relationships

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- ③ Pathological condition of the pubic bone
- ④ Radiation treatment in the weak bone
- ⑤ Oral driedness
- ⑥ Pathological changes in oral mucosa (Vitiligo, Lichen planus, stomatitis)
- ⑦ Hypertrophy of the tongue
- ⑧ Teeth, poor oral hygiene

2) Temporarily restricted taboo

- ① Acute inflammatory disease and infection
- ② Pregnancy
- ③ Temporary use of certain drugs (anticoagulants, immunosuppressants)
- ④ Physical and mental stress conditions

3) Mental taboo

- ① A patient with poor cooperation
- ② Alcohol and drug abuse
- ③ Neurology, psychopath
- ④ Problematic patient

4) General medical prohibitions

- ① General and nutritional condition-age (obesity, weak constitution, viability for more than 5 years)
- ② Current drug use (Corticosteroid, long-term antibiotic treatment)
- ③ Metabolic disorders (adolescent diabetes, diabetes levels above 300)
- ④ Hematological disorders (red blood cells, white blood cells, and blood clotting system disorders)
- ⑤ Cardiac and circulatory diseases (arteriosclerosis, hypertension level of 300 or higher)
- ⑥ Metabolic disorders of bone (osteomalacia, deformable osteostitis, osteogenic insufficiency, osteoporosis in menopause)
- ⑦ Collagen disorder (Scleritis, rheumatoid arthritis)
- ⑧ Implants as a focal point for potential bacterial growth (artificial heart valve, bacterial endocarditis)

B. General Cautions

- 1) When performing the upper structure in the patient's oral cavity, the operator must check the degree of bone fusion of the embedded fixture by radiography and percussion reaction before performing the procedure.
- 2) After acquiring the impression body in consideration of the upper and lower jaw occlusal surfaces, a gypsum model is produced.
- 3) Install a temporary structure in the patient's oral cavity while the final prosthesis is manufactured in the plant
- 4) All surgical instruments used should be sterilized in advance. The sterilization method is wet heat sterilization (ISO 17665-1,2,3).
- 5) When the buried material solidifies after using it, it must be cooled to avoid fine contraction and expansion deformation.
- 6) Do not use products contaminated by the operator's mistakes during the procedure.
- 7) All products used in the oral cavity are disposable and should not be reused.
- 8) Dispose of opened products even if they have not been used.
- 9) Implant procedures should be considered for side effects and contraindications.

[Storage method and usage period]

- ① Storage method: Room temperature storage
- ② Expiration date: Not applicable

[Manufacturer]

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