

6. Necessary Studies for Artificial Dental Root Therapeutics

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In conventional medicine, there are the great blind spots of three kinds of categories of energies, therefore it is inevitable to introduce the concept of energies as well as quantum-based medicine, viz.;

- 1) Environmental energy, which directly affect the function of cellular respiration, and consequently, human health.
 - 2) Introduction of mitochondrial energy metabolism and mitochondria-based pathology.
 - 3) Biomechanics in behavior of lifestyle, which affect directly to human health, especially oral and perioral habitual behavior, viz.;
- (1) Unilateral mastication habit, which coincide with dextra or sinistra of the hand, this has chain reaction with sleeping posture habit.
 - (2) Unilateral sleeping posture habit or prone on one's face; this has chain reaction with mouth breathing habit.
 - (3) Mouth breathing habit.

What are the Causes of Deterioration of Dentitions?

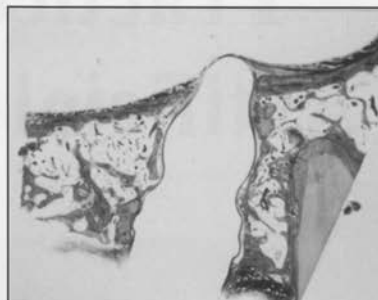
In conventional medicine i.e., in odonto-stomatology, diseases have been defined in only two categories, i.e., dental caries and periodontal disease. However, from the standpoint of biomechanics, oraland perioral habitual behavior are the most important to know the causes of dentition deterioration.

According to the recently progress in preventive dentistry in Japan, dental caries and periodontitis disappear drastically, however, dental arch deformities, diastema, teeth crowding, snuggled-teeth, dental arch narrowing, and tooth loss occur, all of which are called functional diseases, i.e., deformities. The causes of these deformities including tooth loss are biomechanical energy induced by the above mentioned three kinds of oral, peri-oral habitual behaviors. For Artificial Dental Root therapeutics, remedies of these habitual behaviors are inevitable. Because the tooth, as well as Artificial Dental Root, cannot support lateral pressure of vectors and move only 1/5000 (i.e., 20g) of lateral pressure of occlusal stress (i.e., 80kg)

Serious Defects of the Osseo-fixture Dental Implants

Osteogenesis in vertebrates can only occur by hydrodynamic circulation of blood, which induces streaming potential.

By this potential the gene expression of the mesenchymal cells is triggered to induce osteoblasts to generate osseous tissue. Therefore, constant regeneration of osseous tissues between different separated skeletal organs, which have



different movements, the articulations, i.e., fibrous as well as synovial joint systems are inevitable. Dental and orthopedic implants of the osseo-integration systems have no joint system, therefore, mineral components of contact point of osseous hard tissue have no remodelling system, therefore decalcification quite resembling by strong acid occurs during occlusal functions. By occlusal mastication function of the fixture implants we can clearly observe the bone destruction, i.e., demineralization around them just like a basin of waterfall by bone maceration.

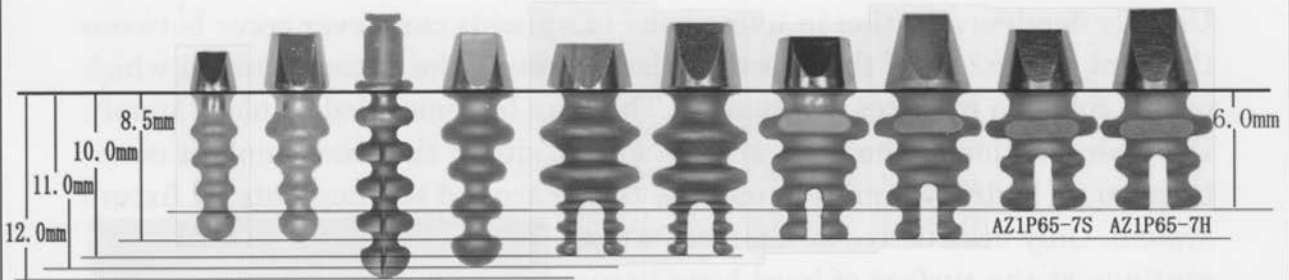
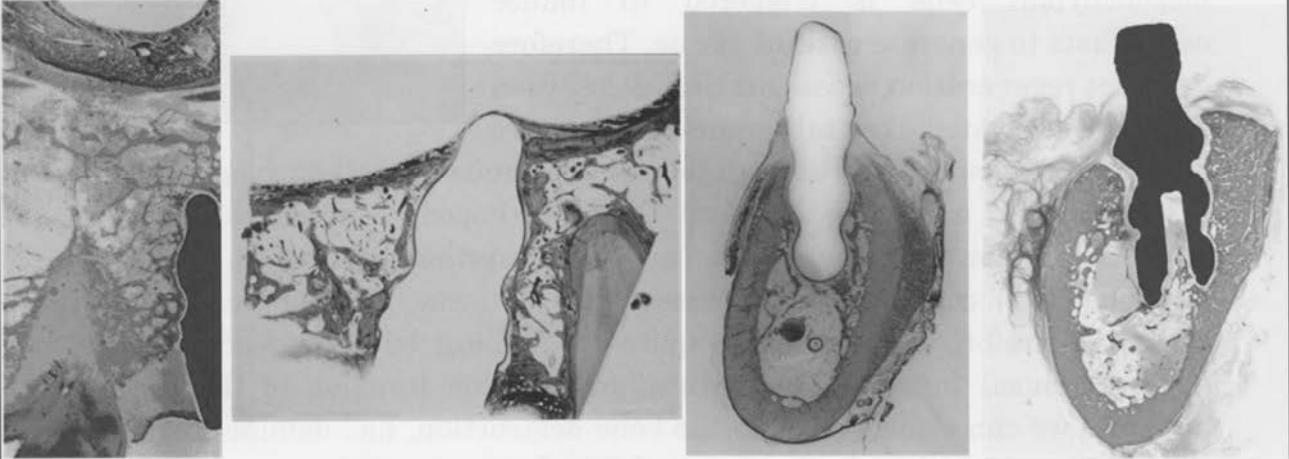
Usually demineralization in living bone in animals can never occur between the joint site except of the osseous tissue around the fixture, around which organic collagen matrices can remain. They can be remodeled by blood supply. Demineralization of the bone on the contact site of the fixed implant occur, because no hydrodynamics in osseous tissue around the implants by fixture system. Only destructive mechanical stress continue at the surface of hard bone tissue around it. Decalcification around implant continece gradually along the time of occlusal function. However, we cannot detect by X-ray film.



Demineralizing destruction around fixture type dental implants essentially occur after a period of occlusal function. X-rays exhibit no deductive shadow. However, by maceration, waterfall-basin type bone resorption occurs.

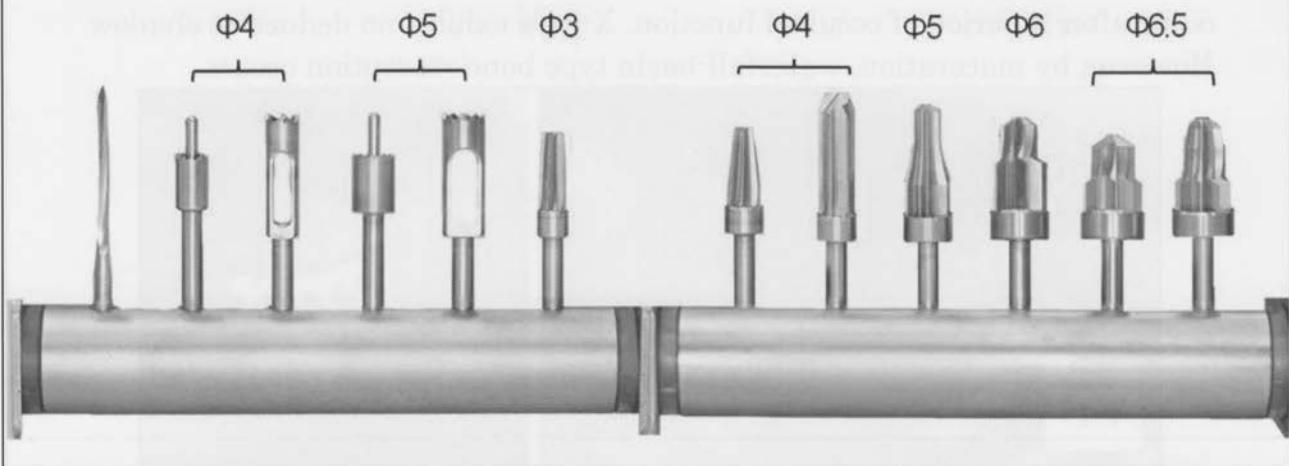


Practice for AART-Type Artificial Root Therapeutics

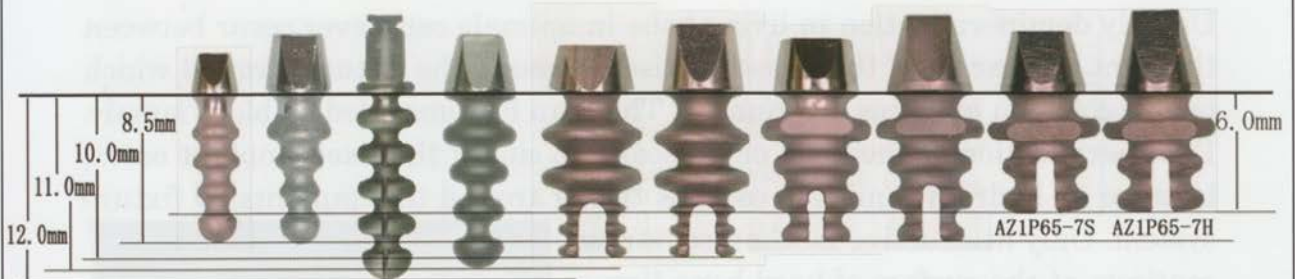
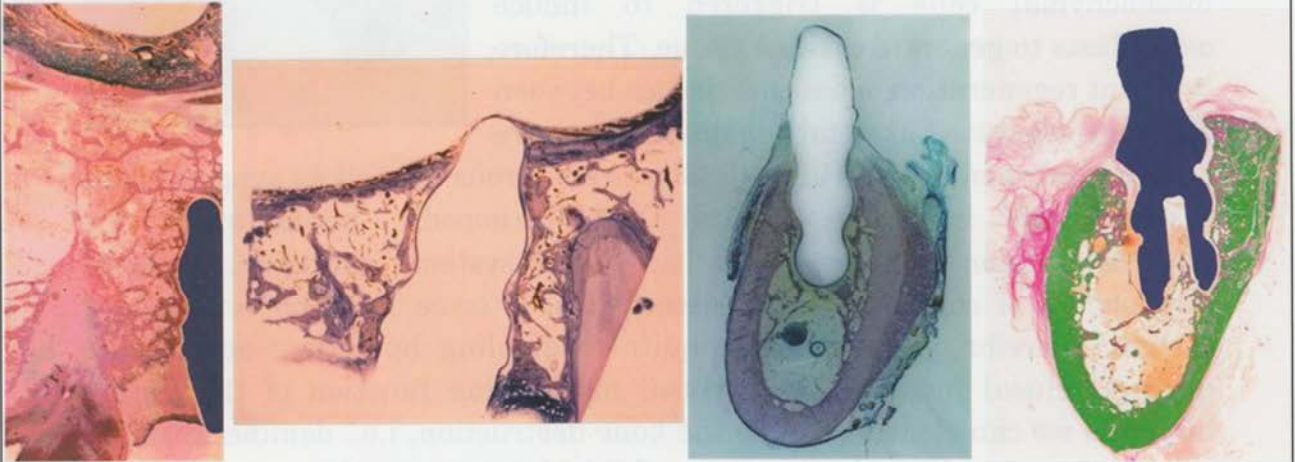


AZ30	AZ40	AZ40-N	AZ50	AZ60-9S	AZ60-9H	AZ65-9S	AZ65-9H		
φ3	φ4	φ4	φ5	φ6	φ6	φ6.5	φ6.5	φ6.5	φ6.5

Instruments for AR

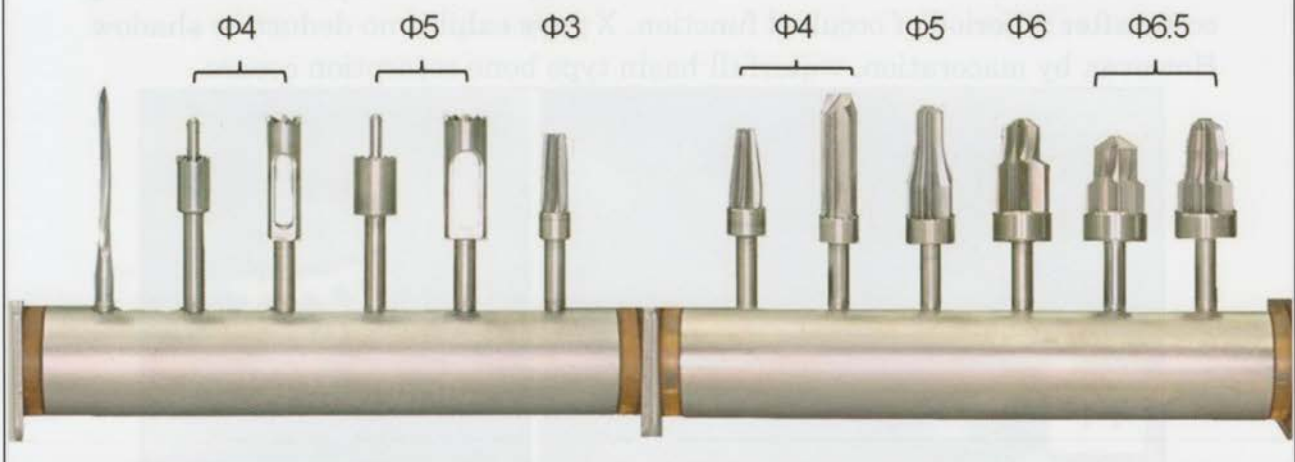


Practice for AART-Type Artificial Root Therapeutics



AZ30	AZ40	AZ40-N	AZ50	AZ60-9S	AZ60-9H	AZ65-9S	AZ65-9H		
φ3	φ4	φ4	φ5	φ6	φ6	φ6.5	φ6.5	φ6.5	φ6.5

Instruments for AR



Procedures of artificial dental root operation



1) Provisional sequential crowns are removed before operation.



2) After local anesthesia maxillary bone is drilled with peeso reamer directly over the gingiver.



3) Guide-stick of circular knife is inserted, then circulated.



4) Then rotated, cutting down till subperiosteum.



5) Removing circular knife.



6) Treffin bur is set and drilled into jawbone through gum, periostiem and bone marrow.



7) Cut bone with gum is removed with osteotrite.



8) The cut jaw bone with gum is recovered.



9) Turning $\phi 5\text{mm}$ bone cutting bur is inserted into the trephine bur hole.



10) Drilling upper jaw bone (maxilla) with $\phi 5\text{mm}$ bone cutting bur.



11) Turning bone bur with 1,000rpm, osseous saw dust disclose a bone-marrow cavity around artificial dental root socket hole. With almost no bleeding.



12) Turning $\phi 6\text{mm}$ bur is inserted into the socket hole as well



13) Turning 1,000rpm with $\phi 6\text{mm}$ bur with irrigation, the socket hole formation for artificial dental root is finished with almost no bleeding



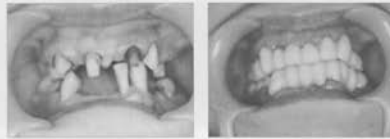
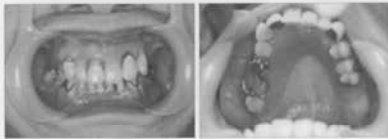
14) Implanting Ti AR with tapping, operation is finished with slight bleeding. It takes 5 - 6 minutes.

Case presentation



Before AR Therapy 70 year old

Before AR Therapy 2008.6.17

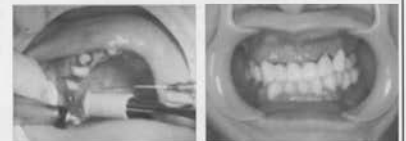


Crown and Br provisional



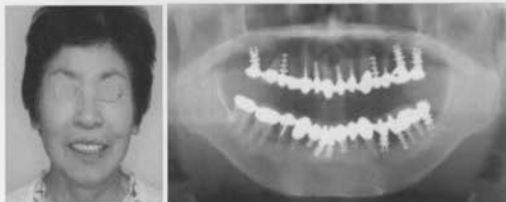
Preparation for provisional temporal sequential crown and bridge before implantation.

Operation for upper jaw starts 10:30 A.M. and ends 12:30. Patient can eat lunch with us and operator together.



After that, lower jaw operation starts 14:00 PM.

The first day, conventional partial denture has been used.



2008.6.26

Prosthetic sequential crown-and-bridge.

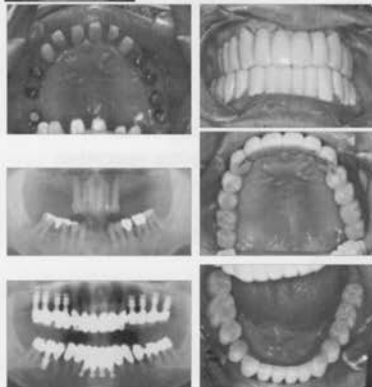
After 5 year



2013.15.April



59 year old
2005. June
Initial consultation
2005. Oct
Finished



After 3 years



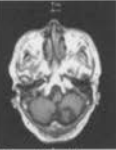
2013. March
After 8 years



Chronic Dullness by opportunistic infection 72 year-old
Movable teeth with nonfitted denture.



2010.8. Nov 2010.3. Dec 2012.12. Oct



Cerebellum
infarction



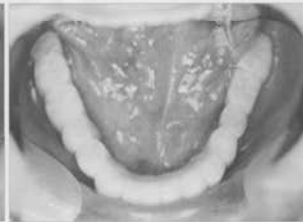
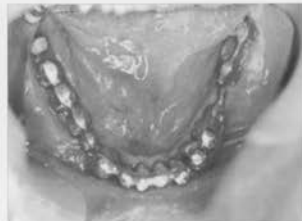
2010. 18. Nov



2011. June



2011. June



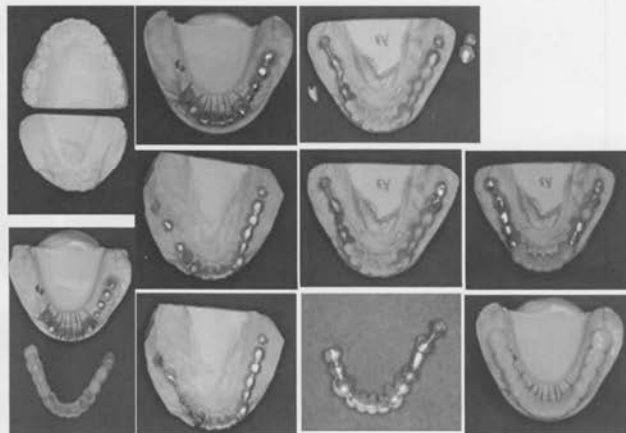
Sequential fixation separated 3 parts are fabricated.
After that prosthetic sequential crown separated 3
parts are made and set.

Operation procedure 2011. 6. June



Five pieces of artificial roots
were implanted left mandible
A.M, after lunch they were
implanted in right mandible.

Sequential fixation were fabricated.



Hydroxy apatite, Ti and Pure Gold Artificial Root

Hydroxy apatite artificial root

1987. operation



2004.13, May
16-year post op



2004.26, Aug



2011.8.March 23-year post op



HAP artificial root can induce easily cementoblasts at the surface of the root however, the cementum easily joins with tooth calculus, then all cementum turn to contaminated tooth calculus.

2002. Sep



2003. Feb



2013. Jan



10 years port op, Puregold Artificial root 2002

Four Pure Gold ARs were planted in a patient, who had suffered severe asthma and DM, which were perfectly cured by my MATM.



2003年3月31日



2012年3月12日



2013年3月26日



Facial deformity caused by sinistral lateral mastication concomitant with same-side sleeping posture habit, having artificial root therapeutics with pure gold roots. After 10 years, AR have fallen out by left sleeping posture, habit. AR with sequential crowns are set after overhauling and bacteriocidal treatment.

Spontaneous fallen out sequential crown-bridge together with teeth roots, by sleeping posture habit

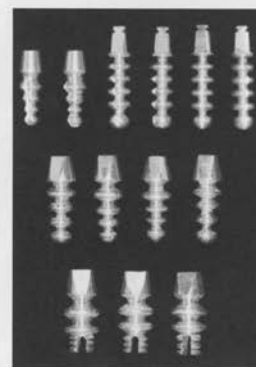
73 years old



Before 13 year, all together were treated and implanted



2012.6, Dec



Pure gold AR had been implanted into right mandible.



Pure gold Artificial Root



13 pieces pure gold AR for fallen out maxillal region.