



## The dental implant placement of minimal invasion applied OAM (Ohguchi-type) dental implant system

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When enough bone width and the bone height that are just secured become the adaptation cause of the implant, in the cause of Japanese, it is considerably limited. In fact not to be able to deny that the alveolar bone of the defective part is absorbed by tooth extraction, and there are many parts feeling a limit by the method from the West, to the originally poor Oriental of the bone mass of the jawbone. The patient who lost a tooth and suffered from an oral cavity function disorder, chooses the implant treatment that is almost original intraoral environment as means of the oral cavity function recovery than the bridge which use a residual nature tooth as abutment tooth and the artificial tooth which is inferior of stability, and visits the dental clinic.

However as previously described, in the case of the case that alveolar ridge became constricted according to the said article, it will be accompanied by bone graft and GBR and will force a patient to the big operation method of invasion. I think even if the final aim called the oral cavity function recovery is the same, the cause that a gap produces between a patient with an operator may be such a reason. If the final aim is the same, you should offer the minimally invasive surgery that the patient demands.

I introduce OAM (Ohguchi-type) implant system (following "OAM implant system") implanting a dental implant without performing bone graft and GBR in this report.

**OAM:Ohguchi Augmentation Method**

## Basic method, basic constitution

The protocol of OAM implant system is the formation of the starting point; Marking, Reaming, and “M-R-E simple system” called the implant floor formation by expanding becomes basic, and surgically placed of the implant is implemented.(Fig.1)

I mention it later, there are the method called Slitting method, Tooth extraction and immediate implant method, Operation of spongy bone transfer and Socket lift etc. Because foundation for these methods is M-R-E simple system, it is thought with the method that it is easy to adopt to an inexperienced practiced hand of the implant treatment.

In addition, for a method the implant floor formation for the stenosis alveolar bone is a purpose, thus, the adaption range of the implant spreads out, and adapt to the fixture of each implant maker, it reduce a burden of the initial cost at the time of the introduction.,

As for the unit set of OAM implant system; for front tooth parts (straight type); (Fig.2), Molar tooth part use (by angle), each augmeter (International patent application), constitution with 16 ( $\phi 0.5 \sim \phi 3.6$ ) (Fig.3), implantation can play the fixture to around  $\phi 4.0\text{mm}$  in a unit set.

In addition, when bone width has enough space, a use range including safety and the bone quality improvement spreads out by the drill nonuse, it is made a lineup to  $\phi 3.8\text{mm}$ - $\phi 5.2\text{mm}$  (Fig.4,5) optionally.

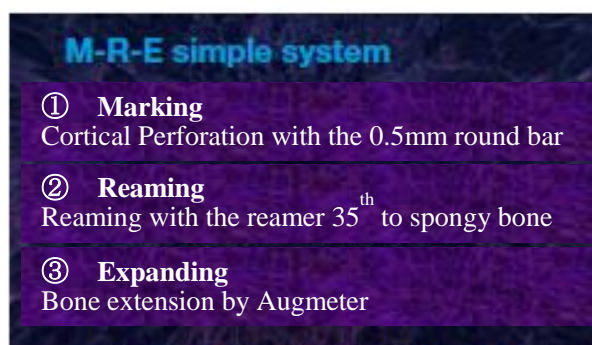


Fig.1: The flow of the method of OAM implant system. As for all technique of OAM, “MRE” is basic.



Fig.2: Unit set for OAM Augmeter front tooth parts



Fig.3: unit set for OAM Augmeter molar tooth parts



Fig.4: Option for OAM Augmeter front tooth parts



Fig.5: Option for OAM Augmeter molar tooth parts

Size up 0.2mm

Importance of the resemblance form (tip)

The writer practiced implant by the drill nonuse than before using osteotome. The method to compress and to spread a bone from longtime experience, and to form an implant floor was suitable for Japanese ossein and settled as the correspondence method to a stenosis bone in the own doctor's office.

However, there was a such a case, resistance at the time of the insertion was big and the appliances such as osteotome needed malleting and might bring about a cleavage of the bone top.

Possible causes include quantity of size up of general osteotome being too big. I thought whether it was a reason that tip shape was uneven.

Therefore the size up width by augmeter is 0.2mm (only  $\phi 0.9$ - $\phi 1.2$  size up 0.3mm), the shape of tip is a sharp, each is made resemblance form (Fig.6)

Driving force was born by having made tip shape a sharp point, an appliance became able to insert it in a bone, only by an inversion motion due to the finger.

The size up of 0.2mm, by 0.1mm enlarges the bone wall around the implant floor and hardens it and helps prevention of cleavage and compression necrosis at the time of the expansion.

As a result, to cope with a super stenosis bone became possible, it was applied to plant immediately after extraction, spongy bone movement technique, then, enabled even to block up the extraction socket and cleavage part with the self bone without using a drill entirely. (Fig.7-11)



Fig.6: Sharp point and a resemblance form.

It is a sharp point, but does not bore cortical bone because it is not given a blade. When I touch sinus bottom cortical bone, the lower alveolar canal, I can judge the intraosseous situation from a sense to be handed down to a finger-tip perceive by a physical sensation coming from the finger-tip.

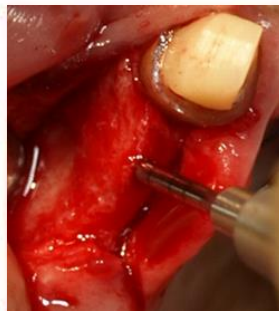


Fig. 7



Fig. 8



Fig. 9

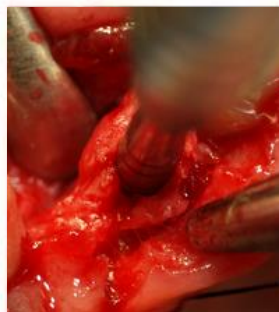


Fig. 10

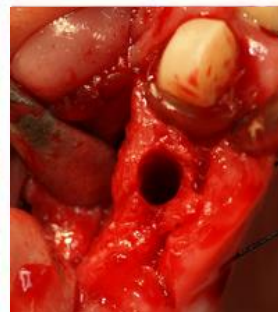


Fig. 11

Fig.7-11: By augmeter the implant floor formed for the size up at the 0.2mm interval can enlarge by 0.1mm figure 7-11 slowly.

Therefore the fossa is able to spread to objective implant diameter without making a cleavage.

The notable point is that the deletion of the bone bores only 0.5mm of the cortical bone and the spongy bone is not deleted at all.

An image offer:

Dr.Kazushige Saito YDC cosmetic dentistry center (Shinagawa-ku)  
Instructor OAM advanced implant official recognition



Method of the OAM implant system in conformity with basics of MRE simple system. (Fig.A-①~A-⑦)



Fig.A-①: The mucoperiosteum valve formation.



Fig.A-②: Marking Perforate using the round bar.



Fig.A-③: reaming Born sounding in the spongy bone by reaming tool on the market. Grasp bony hardness by the resistance one feels from finger tips. It can measure an accurate work length, if you take a dental radiograph inserting a reamer.



Fig.A-④: expanding To rub augmeter into the bone due to finger inversion motion. Because sense to rub into is similar to endodontic therapy, calling it intraosseous therapy. The expression called the intraosseous therapy has good sound in the consultation to a patient.



Fig.A-⑤



Fig.A-⑥



Fig.A-⑦

Fig.A-⑤~A-⑦: Plant an implant after widening in augmeter to the last drill diameter neighborhood of each implant system.

## CASE 01

### CASE01

Patient: Man, 75 years old

Main complaint: Aesthetic appreciation recovery by the implant implantation to the mandibular left midline part.



Fig.01-01: Preoperative intraoral views.



Fig.01-02: Intraoral views after the mucoperiosteum valve

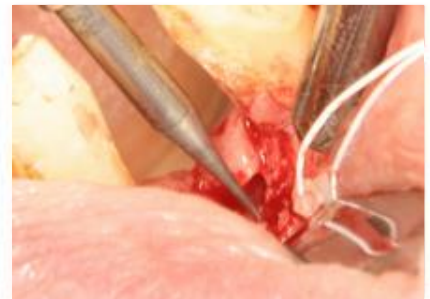


Fig.01-03: It bored cortical bone in a round bar.



Fig.01-04: Reaming



Fig.01-05: Expanded by augmeter



Fig.01-06: Intraoral views after the implant floor formation.



Fig.01-07: Intraoral views after the implant implantation.

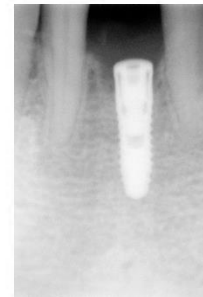


Fig.01-08: X-ray image of after the implant implantation.

## Theory of safety

One of the characteristics of the method of OAM implant system is to grasp the intraosseous situation with a reamer on the market.

It gives security to a practiced hand to know the bony-hardness beforehand. When the writer used many drillings, I approached it in a bone with number of revolutions of the maker designation without grasping the bony-hardness and it was deep unexpectedly and did a terrible experience such as too much entering.

Because the bone is not the single hardness, it is important and useful to grasp bony-hardness beforehand to push forward an operation safely.

Because reamer, augmeter do not have the ability for cortical bone perforation, it is unlikely to perforate a dangerous domain anatomically.

In addition, because augmeter is not a knife or a drill either, it is hard to think about injuring blood vessel, a nerve and prevents a serious accident (Fig.12).

An initial drill is around  $\phi 2.0\text{mm}$  in the protocol of many implant systems, therefore when you use it for a knife edge formed bone, a vertical bone mass lowers (Fig.13).

Therefore, the securing of vertical bone mass provided by a diagnosis in preoperation becomes difficult, and there is the case reaching the unexpected accident.

In the case of OAM implant system, because it is possible for perforation of the knife edge formed bone top with a round bar of  $0.5\text{mm}$ , a vertical bone mass rarely lowers (Fig.14).

In addition, because I can enlarge the bone for buccolingual by using augmeter, a preoperative vertical bone mass has few changes, on the contrary, the increase in vertical bone mass is rather recognized (Fig.15), when you do implantation deeply, implantation based on diagnosis data is enabled in preoperation (Fig.16).

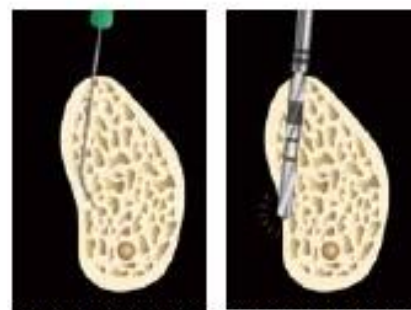


Fig.12: When a reamer touches the hard cortical bone and compact bone part (Left), reamer turns without perforating it, but in the case of with drilling tool is more likely to perforate it (Right).

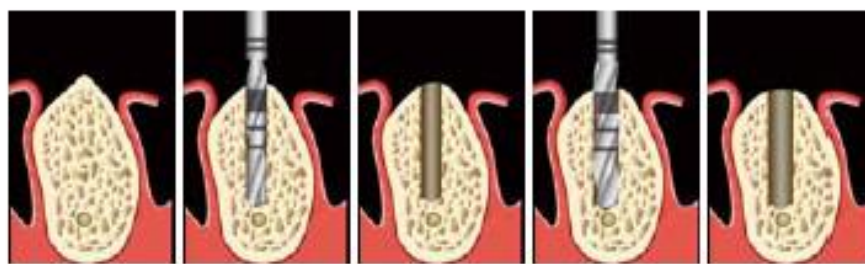


Fig.13: In the case of with drilling tool, the bone top is deleted and a vertical bone mass lowers.

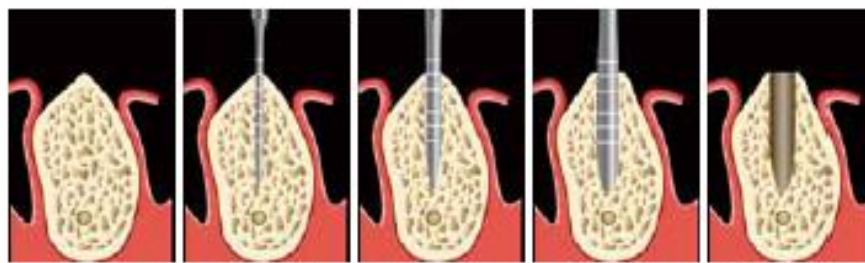


Fig.14: By enlarging the bone top using augmeter, because the bone top is not deleted, you can expect the maintenance of the vertical bone mass or increase.



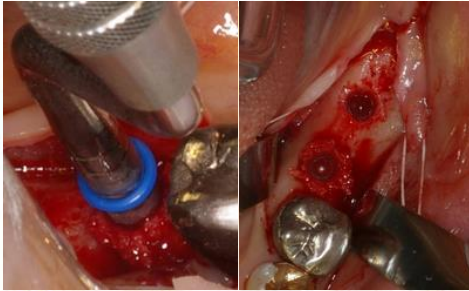


Fig.15: Because a bone may swell, in addition to the maintenance of the vertical bone mass, implant floor surrounding bone rises by around 1-2mm by and large.

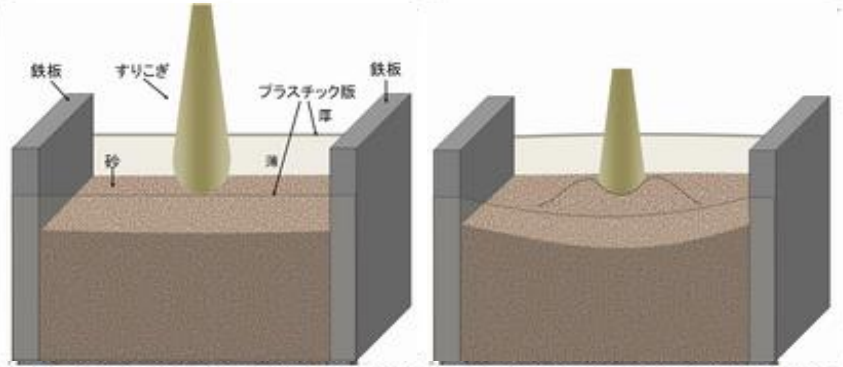


Fig.16: Schematic view when I applied augmeter.

Pestle: Augmeter

Sand: Bone

Clear plastic: Buccal side, lingual side tabula

The sand is pushed to “a pestle” when I let a pestle crawl in to sand and moves to the place where it is easy to run away.

Because the sand cannot run away to the hard “iron plate” area, it extend “clear plastic” by force, and the height of the sand slightly rises.

By-product by the bone expansion using augmeter.

Please watch the pig bone image which I discovered accidentally, when I performed video shoot for training (Fig.17). Even if 72 hours passed, the hole which I formed using a drill did not change. However, it is clear that the hall of  $\phi 3.2$  that I formed in augmeter became small than drill  $\phi 3.2$ .

As a result of pushing this without grinding bone tissue and having opened it, it is thought that a U-turn phenomenon occurred.

That is to be expected, I extract a nail driven into a tree, then a tree recover to some extent, it is the same as it.

In the case of the normal implant formation, a period that initial fixation weakens temporarily and shifts to second fixation is unstable. In contrast, in the case of OAM implant system, it is considered that if initial fixation becomes stronger the fixation is more stable. (Fig.18).



Fig.17: Forming a hole to the pig bone using augmeter and drill.

Left: OAM augmeter  $\phi 3.2$

Center: Drill  $\phi 4.0$

Right: Drill  $\phi 3.2$

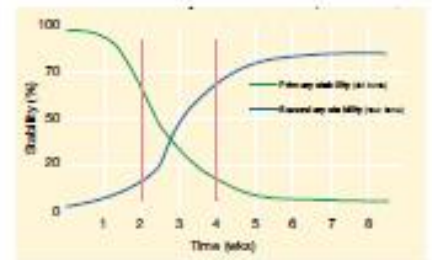


Fig.18: Initial fixation and second fixation change.

(R Sangeetha et al. Int Oral Maxillofac Implant 2005; 20: 425-431)

(R Sangeetha et al. Int Oral Maxillofac Implant 2005; 20: 425-431)

### The OAM slitting method.

Technique of bone width expansion of OAM implant system includes two concepts.

When the tooth socket tabula of the part to implantation is thin and is soft or when it is thick and obstinate.

In the former case, enough extended effects are provided by a basic method. In the latter case, I form a groove in the mesiodistal direction of bone top in a thin bar and cut the cortical bone of cheeks and the lingual side into pieces and open it.

It is a similar method to sprit crest technique, but the biggest difference is not to need cutting vertical in buccal side tooth socket tabula.(Fig.19,20)

This is because the method can size up insert augmeter by small steps(0.2mm) and enlarge bone width surely to groove of mesiodistal direction.

In the case of an existing method, I form a groove in the mesiodistal direction, drilling it vertically after that, and it is necessary to extend it by force with a bone chisel to the buccal side direction. This is because I cannot form an implant floor if I do not secure bone width forcibly more than last drill diameter necessary to do drilling.

Therefore the biggest characteristic of the OAM slitting method does not need vertical cutting, it becomes the implant floor of 4 walls characteristics, and the

holding of the blood clot is easy.

Of course the initial fixation is good and becomes implantation of the implant having high foreseeability because the blood supply is abundant. (Fig.21~27)

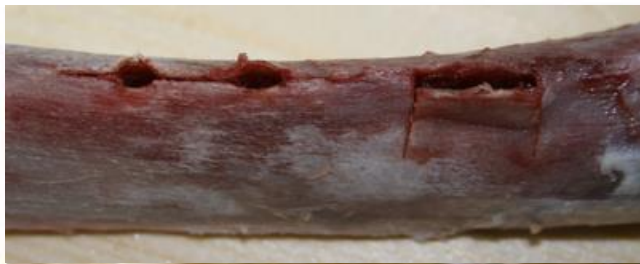


Fig.19: Art of bone width expansion by the OAM slitting method and the existing method.

Left: 4 wall-related implant floors by the OAM slitting method. Right: Implant floor with the vertical cutting by existing method.



Fig.21: After the mucoperiosteum valve formation



Fig.23  
Fig.23,24: Spread to  $\phi 1.2$  with augmeter.

**Pre-slitting**  
With the bar of the long shank, I form a ditch only to cortical bone of the top.  
To relax the stress of concentrated on cortex bone part.  
Slide "bone splitter" into groove that formed with pre-slitting  
Cut an alveolar ridge vertically by all means, don't incline it to the buccal side.

Fig.20: Protocol of slitting

Fig.22: Marking (M) ,Reaming (R)



Perform reaming after cortical bone perforation with a very small diameter long neck round bar.



Fig.24





Fig.25: The center is on the initial socket which spread in augmeter, perform pre-slitting in the mesiodistal direction on the tooth socket top and it is thin and forms a small ditch of the width.



Fig.27: The insertion of augmeter becomes easier after slitting and can spread smoothly to the desired implant floor. If the insertion includes resistance on the way, do slitting again.

If even the insertion in a bone is possible, the implant floor for the diameter is established with augmeter.

In other words I can an operation in a short time if I reduce resistance when I insert augmeter in a bone. The extended resistance of the bone becomes small and the insertion becomes easy if I form a groove in mesiodistal direction because the desired bone width expansion is buccolingual (ligula) direction. If condensed spongy bone like cortical bone forms a groove in mesiodistal direction, the insertion of the appliance becomes easy. In addition, stress is relaxed by forming a groove in alveolar crest mesiodistal direction, before a dehiscence not to aim at in buccal side tooth socket tabula produces it. After that it is the clinical evidence of the writer, but expansion cut into vertically often accepts bone resorption within five years. It is thought this cause is

interception of the blood supply. In addition, the operation invasion is easy to cause the infection to greatly need membrane. Because a wounded surface is beautiful, a reaction inflammatory than the drilling method is controlled, and it thinks that it may have a good influence on integration to cut the spongy bone into pieces in "OAM bone splitter (Fig.28, 29) having the sharp of a sword.

As for these studies, Associate Professor at Showa University school of dentistry, Masahiko Ozeki was announced in the second international aesthetic appreciation society general meeting, arts and sciences meeting, and wants to watch the trend in the university pathology laboratory in future.



Fig.26: I insert the bone splitter in a groove of pre-slitting and cut spongy bone. Never turn to the buccolingual side and turn to mesiodistal by all means and cut spongy bone. Don't need malleting.



Fig.28: In OAM Bone splitter, it is not necessary malleting. This is because trenchant blade is a characteristic of OAM bone splitter and the state being thin in addition to it. To let it slide in spongy bone with the state being sharp, the design that affected for setting attaching angle of cutting blade, thinness. A knife craftsman of Seki-City in Gifu designs it, Gifu is the hometown of the writer, and then a medical appliance production company of Nara produces it. Seki-City is known as a town of the swordsmiths for a long time, and the production such as export high quality knives is still prosperous.



Fig.29: OAM bone splitter (International patent pending)

**CASE 02****CASE 02**

Patient: female, 44 years old

Main complaint: To hope for aesthetic appreciation recovery without sharpening adjacent tooth.



Fig.02-01: Preoperative intraoral views

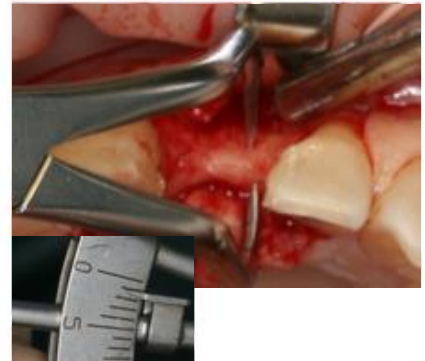


Fig.02-02: I made a plan to perform implant of  $\phi 3.7$  a fixture of 13mm in length to bone approximately 1.2mm in width.



Fig.02-03: I make the starting point to the palatal side a little. I can leave more alveolar bones in the labial side by making it in the palatal side.



Fig.02-04: Do reaming and grasp a direction and ossein.



Fig.02-05: Expanding I use from augmeter of  $\phi 0.5$ mm not to make a dehiscence in the case of a stenosis bone by all means.



Fig.02-06: While doing size up, a feeling of resistance increases a little. It is the signature at the time of the change to slitting shortly. It is a characteristic of OAM implant system which attached great importance to a finger sense that can sharpen sensibility of the practiced hand. I push forward an operation like "the skill of artisan" of the carpenter specializing in building shrines and temples solemnly.



Fig.02-07: Intraoral views before slitting.



Fig.02-08: Intraoral views after pre-slitting. I can leave many alveolar bones by labial side when I make pre-slitting the palatal side a little. Because that resembled "Ω" of Greek characters in a shape, the writer named it "the omega slitting technique".



Fig.02-09: Slitting spongy bone using bone-slitter.



Fig.02-10: I can spread to the desired implant floor without making a dehiscence after slitting.



Fig. 02-11: Intraoral views after the formation extended on an implant floor to  $\phi 3.2$ , 13mm in length.



Fig. 02-12: Intraoral views after burying the implant.  
For the formation of the fundus of the implant floor, implant a fixture strongly surely using a drill

### OAM (The Ohguchi-type)

#### Immediate placement technique

Because this report is not an opportunity to reconsider a method of immediate placement technique, I decide to tell you mainly on superiority in the initial fixed acquisition of OAM implant system. The initial fixation at the time of the primary operation is important to lead implant treatment to the success not only immediate placement. About immediate placement, instructions of the drill size (tap drills) for every ossein (the bone hardness) are placed in the method manual.

Because, in the case of a titanium-based implant, initial fixation is in particular important, in

immediate placement which is disadvantageous in initial fixed acquisition, HA-coated implants is considered to be an advantage. OAM implant system can keep a bone without starting bone expansion from  $\phi 0.5\text{mm}$ , and deleting the bone.

For a method procedure, it perforates the extraction socket palatal side in 0.5mm round bar. The perforation of the cortical bone with the 0.5mm round bar is not a difficult method.

In the case of an existing method, furthermore, to use a drill of the big size, so it may slip in an extraction socket.



The hall which I finally formed, the experience that I lose whether that it is an implant floor is an extraction socket. I think that a reader has same experience.

OAM implant system can form an implant floor for the extended formation with the finger while inclining to the direction of implant in the palatal side. (Fig.B-①~⑦)

The bone of the palatal side is put to the labial side and can form a clear implant fossa by forming it while inclining it in the palatal side. Similarly, immediate placement on a molar part where initial fixation is good is enabled to enlarge the bone of the alveolar septum by the method to approach from the

### Method of immediate placement by OAM implant system (Fig.B-①~Fig.B-⑦)



Fig.B-① : Tooth extraction. Extract a tooth not to destroy labial side tooth socket tabula as much as possible. Curette in defectiveness granulation tissues carefully.



Fig.B- ② : Marking. Perforate extraction socket cortical bone in a 0.5 mm round bar.



Fig.B-③: Reaming. Confirm the safe domain with reamer, the osseous.



Fig.B-④: Expanding. Start expansion for a sense to put palatal side spongy bone in the labial side with augmeter of front tooth part use.



Fig.B-⑤,B-⑥ : With size up, palatal side spongy bone is put to the labial side. Because a handle direction of augmeter becomes a direction of implanting an implant, I revise a direction while imaging the tooth axis of the last prosthesis. The big difference with the way of drilling and the way of immediate placement is that a correction of a direction of implanting is easy.



Fig.B-⑦ : Setting an implant. By the bone of palatal side put to the labial side, initial stability good is possible

Method, molar tooth part of immediate placement by OAM implant system (Fig.C-①～Fig.C-⑦)



Fig.C-①: Marking  
Perforate alveolar septum  
cortical bone in a round bar.



Fig.C-②: After reaming with  
a reamer, enlarge the septal  
bone with augmeter.



Fig.C-③,C-④: With size up, an extraction socket is filled up  
with an extended septal bone.  
When using a drill, a cut unites a septal bone and lacks, and  
initial fixed acquisition becomes difficult.



Fig.C-⑤: Set an implant.  
Most of the extraction  
sockets are filled up with a  
self bone, and there is an  
implant which initial fixation  
has good.



Fig.C-⑥



Fig.C-⑦



Fig.C-⑧



Fig.C-⑨

Fig.C-⑥～⑨ : An image offer: Dr. Motomori Omura  
Omura dental clinic: (Saitama prefecture Kawaguchi city) • Instructor OAM advanced implant  
official recognition.

**CASE 03****CASE 03**

Patient: Woman, 27 years old  
Main complaint: Sharp pain by the root fracture and aesthetic appreciation recovery of the maxillary central incisor.



Fig.03-01 : Preoperative intraoral views.



Fig.03-02: Preoperative radiographic appearance.



Fig.03-03 : Intraoral views after the tooth extraction.



Fig.03-04: For the purpose of completely cureting in a infected granulation tissue; Extraction socket which got evidement using a carbon dioxide laser



Fig. 03-05 : I perform reaming after the starting point formation in a round bar. Confirm how much you incline to the palatal side from the direction of the reamer head.

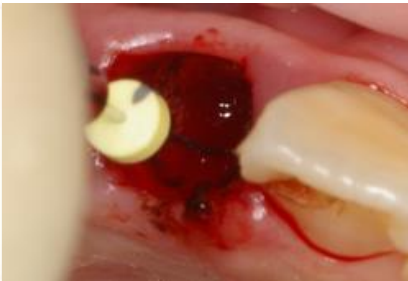
Fig.03-06 : Start expansion from  $\phi 0.5$  with augmeter for front tooth. Because it can start from 0.5 mm, the smooth insertion is possible and can inflect without wasting a bone.

Fig.03-07 : With size up, you can observe that a handle incline forward to the palatal side. In this way, you can put the bone of the palatal side to the labial side. In the case of with a drill, because it slips in an extraction socket, it becomes considerably difficult technique. In the case of with augmeter, you can control that is delicate and revise with the finger sense of the practiced hand.

Fig.03-08 : After augmeter  $\phi 1.4$  use. The bone of the palate is put to the labial side little by little.Fig.03-09 : After augmeter  $\phi 2.0$  use. The bones which moved almost fill up the tip of extraction socket.





Fig.03-10 : After augmeter  $\phi 2.6$  use.



Fig.03-11 : After augmeter  $\phi 2.8$  use. Furthermore, an extraction socket was filled.



Fig.03-12 : After augmeter  $\phi 3.2$  use. An implant floor is recognized clearly, and a considerable bone is put to the labial side.



Fig.03-13 : As for the implant, it buriedburied Screw-Vent (in plastic tex Co.,Ltd.) of  $\phi 3.75$ . An implant floor is recognized clearly, and a considerable bone is put to the labial side.



Fig.03-14 : Filled minimum bone filling materials around fixture neck.



Fig.03-15 : For the purpose of blood clot and hold of bone filling materials, a mattress sewed up Colla tape (Hakuho Co.,Ltd.) after sheeting.



Fig.03-16 : pay attention to the filling level of bone filling materials.



Fig.03-17 : Implant direction slants toward the palatal side in comparison with the reamer insertion and can observe it a position being improved. Not only the part of front tooth where aesthetic appreciation is demanded, what can revise implant direction has an influence on the success or failure of the implant treatment.



Fig.03-18 : Intraoral views after the superstructure setting.

### Operation of spongy bone movement

Above-mentioned immediate placement are having the apical lesion which is a cause of the tooth extraction, and there is the uncertainty of the foresight including the bone resorption of after having implant

If it is implant embedding after I wait for healing of infection and the epithelium, the above-mentioned risk is secured to some extent.

However, the dental treatment that the writer aims at is not given priority to an implant, and I think that you must give priority to the preservation of the tooth with endodontic treatment and the periodontal disease treatment. But, a lot of cases that the absorption of the buccal side tooth socket tabula is not avoided exist before it leads to tooth extraction.

In the case of a drill type, the center point of the drill of the first step becomes the center point of the last implant floor.

In the case of OAM implant system, it is one of the characteristics that an origin is not necessarily the center point of the implant floor.

If approach a bone mass-rich part with augmeter and can move a bone to the lack part of the bone, I can make up with a self bone ideally without putting GBR for cleavage region in bone filling materials. As for the self bone which I moved, blood supply is secured like existence stem valve transplant enough.

It is not so difficult to move spongy bone of the cleavage part from a

### Method of the art of spongy bone movement (Fig. D-①~Fig. D-⑤)



Fig.D-① : The origin lets you comply with the lingual side cortical bone of the position from a cleavage part.



Fig.D-② : With size up of augmeter, spongy bone moves to the cleavage area.



Fig.D-③ : Augmeter moves towards a cleavage part without a practiced hand being conscious like that; is imaged.

bone mass-rich part if I use augmeter. If I insert augmeter in the bone mass-rich part, spongy bone moves to the part without the support of the cortical bone namely buccal side dehiscence part.

It is thought that this is the good point that the size up at the 0.2mm interval was able to make.



Fig.D-④ : Condense more by the movement of the spongy bone, the bony-hardness in the socket is improved, too.



Fig.D-⑤ : I use appliance till expected size, so I can fill it up with the spongy bone which moved a cleavage part.



**CASE 04**  
A patient: Woman, 36 years old  
Main complaint: Came to clinic by 6 sharp pain.



Fig. 04-01 : It is the views in the oral cavity just after the tooth extraction.

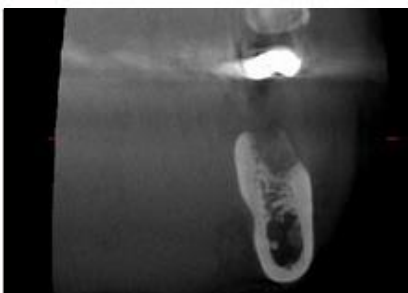


Fig.04-02 : It is a CT image four and a half months after the tooth extraction.





Fig.04-03 : Intraoral views of just before implant burying  
(After tooth extraction 18 weeks)



Fig.04-04 : I did reaming after the origin formation. In this case, I set an initial point along lingual side cortical bone, and fill up the buccal side tooth socket tabula cleavage area with buccal spongy bone.



Fig.04-05 : The loss of the buccal side alveolar bone can look early in the augmeter start clearly.



Fig.04-06 : With the expansion of the alveolar bone, the expansion of the implant floor neighboring bone and the cleavage of the centrifugal buccal side part become narrow.



Fig.04-07 : Furthermore, with the expansion of the alveolar bone, the crack of the cleavage section becomes small.



Fig.04-08 : Intraoral views at the time of the last implant floor formation. The buccal side cleavage section is almost filled with moved spongy bone.

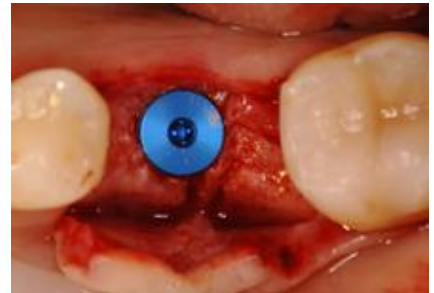


Fig.04-09 : Intraoral views of fixture immediately after buried.



Fig.04-10 : It is the intraoral views at the time of the second operation of 12 weeks after surgery. The spongy bone moved to changed to hard cortical bone.



Fig.04-11 : Intraoral views after the second operation end.



Fig.04-12 : Intraoral views after insertion of abutment.



Fig.04-13 : Intraoral views after insertion of superstructure.

CASE 04 : An image offer: Dear Professor Mitsuo Suzuki  
Dental design clinic international (Tokyo)  
OAM instructor of advanced implant official recognition

### Convenient tool

#### 1) JAW RETAINER

With OAM implant system, you approach it in a bone for a finger sense delicately.

It is necessary to prevent of the shaking of top and bottom right and left of the jaw to perform it effectively.

In the case of lower jaw, shaking of the jaw place happens during augmeter operation.

Therefore shaking arrester "JAW RETAINER (Fig.30)" was developed.

Bind a neck like a corset for necks and support it near a mandibular rim and clavicle surely.

If you use JAW RETAINER, due to the finger can show strong driving force rubbing it without damping power, so an operation is pushed forward without increasing extra power.

The patient can keep the state that is opening without being tired when you attach a mouth gag to the other side of implant.

#### 2) HEAD RETAINER

When I use a chair for treatment for an implant operation (upper jaw in particular), I am worried about the big bend of the back part when put weight

The implant is one of the required surgery of the precision.

If unprepared movement occurs in



Fig.30 : Movement prevention device "JAW RETAINER" (Medical Apex Co. Ltd.)



Fig.31 : When you wrap around jaw retainer the neck of the patient and operate, the patient can keep the state that is opening without being tired.

operation, it may lead to an accident.

It may consider about it that the operating table for exclusive use of the implant is sold.

However, may not introduce the operating table without the utility value into the doctor's office space for the medical practitioner with the limit other than the implant operation.

The writer was looking for the product that stand use to operation which can stabilize a chair for treatment until recently.

Meanwhile, I was able to develop "HEAD RETAINER(Fig.32)" which could fix a dental headrest strongly.

When you set HEAD RETAINER between backrest and a floor, a head part is stable without an expensive operating table for exclusive use of the implant. The power of the surgical instrument of OAM implant



Fig. 32 : A head part is stable without an expensive operating table for exclusive use of the implant by set "HEAD RETAINER" (Medical Apex Co., Ltd.)

system acts effectively, and the unprepared movement decreases, and an operation is pushed forward efficiently in peace.

## Conclusions

### 1) Safety

The implant placement technique not to sharpen a bone is not a dream anymore.

The operation method not to reduce bone has many merits, good initial fixation, high foreseeability.

The practiced hand and patient need safety, the operation is for recovery of the oral cavity function, but the dangerous thing wants to remove it. The sense trained by endodontic treatment is the bone sounding using the reamer.

And it facilitated three-dimensional image of the intraosseous.

Maintaining a vertical bone mass regardless of upper lower jaw, it enable an operation based on preoperative data.

### 2) Blood supply

The factor that the blood supply is important to the success or failure of the implant treatment.

If blood supply is good, there are many success factors, prevention of the bone resorption, the infection prevention, certain substitution to the bone of transplant materials etc. Because there is little bone deletion with the drill in OAM implant system, keep spongy bone and can secure maximum blood supply.

As for the effect like general ridge expansion, lengthwise cut to a tooth socket tabula is accomplished as an unnecessary.

This contributes to maintenance of

the blood supply and there is an advantage to be provided as for the good initial fixation.

### 3) Immediate implant placement •

Art of spongy bone movement

You can bury an extraction socket with an existing bone if you apply OAM implant system to a tooth extraction real time implant.

It is thought that a bone reproduces so that an extraction socket heals and to use bone agent a little is enough if you use.

In addition, the art of spongy bone movement buries even the dissiliency of the buccal-side bone, and can change 3 wall-related inevitable implant floors into 4 walls characteristics.

### 4) Breakaway from an established concept.

It is the almost European and American origin of the dental treatment technique not only implant treatment and may not be only the technique that is applicable to an Oriental (Mongoloid).

It may be counterattacked by the living body if you do not try a Mongoloid by a suitable method to a Mongoloid.

The EBM in the Western medicine is important and necessary, but clinician thinks that it is responsibility to think out a method based on a law learned by experience.

It is the result that put failure on success for many years that the writer is particular about “the real minimally invasive”, and operate on by the method that the living body expects. And there is no happiness more than satisfaction of the patient for dentist. I hope heartily that many clinicians are particular about “the real minimally invasive”, and put yourself in the patient’s shoes and cure them.

### Address of thanks

On the occasion of writing of this report, I thank for the offer of the case image from Motomori Oomura, Kazushige Saitou, Mitsuo Suzuki. (The three members are instructor of OAM advanced implant official recognition.)

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### Introduce the writer



Hiroshi Ohguchi  
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