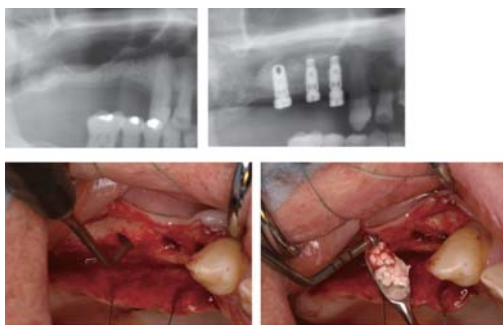


## **K2 Crestal Sinus Lift Approach increase the success rate in sinus lift.** (Crestal Sinus approach)

The socket lift technique has an advantage of a minimally invasive operation compared with the lateral window technique. However, patients suffer from beats by a mallet and there is a limitation to increase a vertical bone height. K2 Crestal Sinus Approach was developed as a safer, and simpler, more minimally invasive technique with high success by Dr. Miyoshi and Dr. Shiratori who are ones of experts in the field of dental implant.

- **Minimal invasion can be achieved, compared with the lateral window technique.**
- **There is no impact like beating by a mallet.**
- **Due to reducing strain of the maxillary sinus membrane, the membrane damage would be prevented and more higher sinus membrane lift could be achieved.**



(Photo by Shiratori Dental Clinic Implant Center)

### **New technique of sinus lift**

I think everyone feels "An implant treatment in the maxillary molar region is difficult" because of limited bone quantity due to the presence of maxillary sinus cavity and poor bone quality. Even though high success rate of the sinus lift can be expected, once complication, such as infection, occurs, not only the patient, but the clinician will be affected too. Furthermore, it has been observed that, sometimes, bone around the implant apex has resorbed a few years later, resulting in the appearance of implant protruding into the maxillary sinus cavity. This technique was introduced to ensure a "predictable and safe" sinus lift procedure. (Dr. Shiratori)



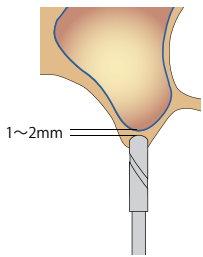
(Photo by Miyoshi Dental Clinic)

### **New minimally invasive technique of Sinus lift**

The lateral window technique is generally selected for the sinus lift, however, stress of patients after the surgery such as a pain, swelling and infection is severe. I thought the crestal sinus approach technique could reduce the risk of invasion. However, there was no suitable instrument for the technique at that time. Therefore, I created this with Dr. Shiratori. This instrument can be approached through the implant osteotomy to elevate the maxillary sinus and place an implant with a minimally invasive technique. In addition, the flapless surgery could be operated with this technique in some cases, this would be a big advantage for the patients. (Dr. Miyoshi)

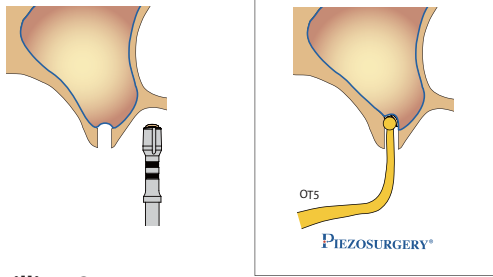


## K2 Crestal Sinus Approach



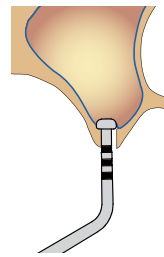
### **Drilling-1**

Perform the osteotomy at 1-2mm below the maxillary sinus floor.



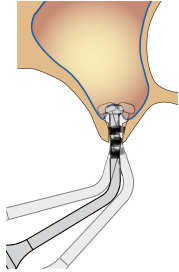
### **Drilling-2**

Perforate the sinus floor by K2 drill in accordance with the diameter of the implant.  
\*In case the maxillary sinus floor is not flat, Piezosurgery is helpful.



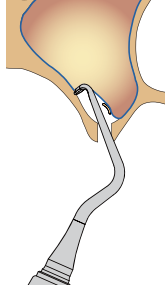
### **Detachment-1**

Detach the schneiderian membrane around the aperture using the tip of the K2 instrument #1 hanging on the sinus floor.



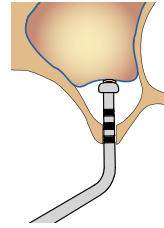
### **Detachment-2**

Push up the head of the K2 instrument #1 toward to all direction in sinus.



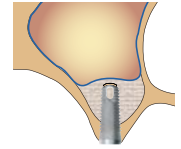
### **Detachment-3**

Detach the sinus membrane higher using the tip of the K2 instrument #2 or #3 along the sinus cavity. Each end of #2 and 3 faces a different direction, therefore, all directions could be covered using both #2 and 3 as the right figure showing.



### **Measuring (checking)**

Measure and check the elevated height using the K2 instrument #1.



### **Implant Placement**

Fill the bone graft if needed, and insert the implant.