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# MIDWEST DENTAL IMPLANTOLOGY

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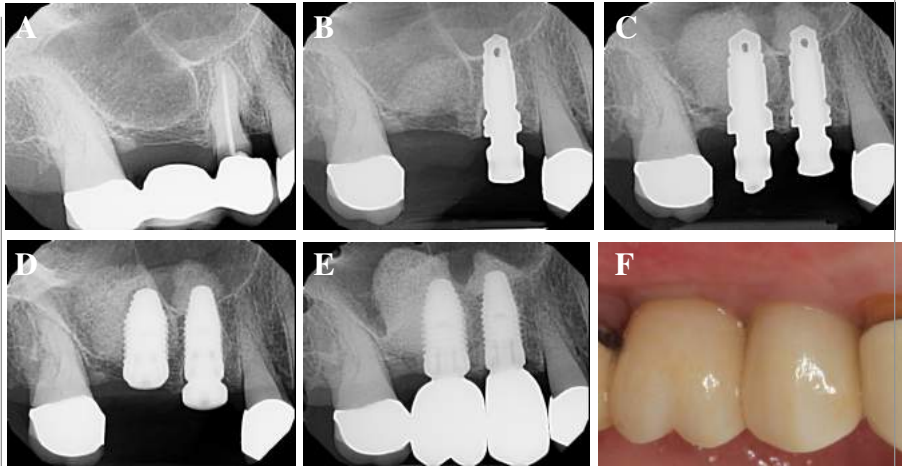


## Our Crestal Approach to Sinus Augmentation

Having inadequate bone height in the posterior maxilla does not constrain our patients to a life with a fixed bridge or partial denture. Over the years several techniques have been developed to rebuild bone in this area. The two main approaches are the “**lateral window**” sinus augmentation and the crestal “**sinus bump**” elevation. The traditional technique is the “lateral window” sinus lift. This procedure involves creating a small window in the lateral border of the maxilla, elevating the sinus membrane and placing the bone graft material in order to stabilize the elevated membrane. While this approach can be quicker than a crestal approach, it requires greater surgical access (flap elevation) in order to complete. This elevation often leads to a greater amount of post-operative swelling and discomfort. The second, more minimally invasive technique, is the crestal approach or “sinus bump”. This involves elevating the sinus membrane through the osteotomy created on the crest of the ridge. This approach minimizes the use of vertical tissue incisions and thus limits the amount of post-operative discomfort, swelling, and bruising. This approach also lessens the amount of grafting materials required to complete the technique which translates to a **decreased cost to your patients**. A sinus bump can be utilized in a healed site with 1-8 mm of native bone or in conjunction with an extraction and immediate implant. This elevation has become our technique of choice. Next we will review two clinical situations highlighting this approach.

## Sinus Bump: Healed and Immediate Sites

Tooth #4 was an anterior abutment for a bridge and diagnosed with severe decay (A). CBCT evaluation revealed 2 mm of bone height in the #3 site and #4 root tip touching the floor of the sinus. The bridge was sectioned at the mesial of tooth #2 (B). Tooth #4 was extracted and sinus bumps were performed in the #3 and 4 positions (B,C). Notice the "dome of bone" elevating over the guide pins. (D) Represents the final implant placement. The implants were allowed to integrate for 6 months prior to final restoration. (E,F) represent the final restorations in place two years later.



### Benefits

- Minimally invasive
- Minimal post op swelling/discomfort
- Lower risk of infection
- Less volume of graft - less expensive

### Drawbacks

- Technique sensitive
- More challenging to use when placing multiple implants (3+)
- Sinus perforations require use of the lateral window

## Sinus Bump: Extraction/ Immediate Implant

The case to the right represents a sinus bump in conjunction with an extraction and immediate implant placement. Tooth #13 is non-restorable. Notice the position of the sinus in relation to the root (A). Following extraction, the sinus membrane is visualized (B). The sinus membrane is freed and gently elevated utilizing bone graft (C,D). (E) shows the final guide pin in place with the "dome of bone" elevated around the distal apex. If no graft would have been completed, the distal half of the implant would have been in the sinus. (F) shows the final crown and restoration one year later.

