



Dental Implant

# JD N/S/L®

JD Nasal surgical procedure.



## PRE-OPERATIVE EXAMINATION OF THE PATIENT.

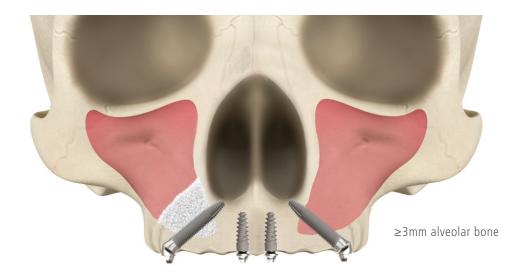
The clinician must attend a specific advanced training beyond the supervision of expert implantologysts about the JDNasal<sup>®</sup> implant placement. In a severely resorbed maxilla, JDNasal<sup>®</sup> Implants can be used to make use of the maxillary bone surrounding the nose. The implant site begins in the alveolar bone at the pre-molar and ends in the bone separating the maxillary sinus and nasal cavity. The specialized implants need to be extra-long to span across the sinus. It is important to note that bone grafting is recommended when the alveolar bone thickness is less than 3mm.

#### Radiographic examination

As with any implant patient case, a radiographic assessment is essential. As far as the Nasal Implant protocol is concerned, the main objectives are twofold:

- 1. To detect the presence of any pathology in the maxillary sinuses, bearing in mind that the thickness of the antral mucosa should not exceed 6mm
- 2. To evaluate the volume of the maxillary bone surrounding the nose.

#### NASAL ANCHORAGE.



In a severely resorbed maxilla Nasal Implants can be used to make use of the nasal bone. JDNasal<sup>®</sup> Implants enable use of the maxillary bone surrounding the nose. The implant site begins in the alveolar bone at the pre-molar and ends in the bone separating the maxillary sinus and nasal cavity. The specialized implants need to be extra-long to span across the sinus and they need to be angulated. JDNasal<sup>®</sup> Implant is available up to a length of 26mm. Full product details and drilling protocol follow overleaf. The surgeon can choose to add a bone graft or not.

It is mandatory to have no signs of sinus infection before deciding to proceed with this procedure.



#### SURGICAL PROCEDURE.

The drills provided with the surgical kit must be used with external irrigation to prevent excessive heating of the bone tissue.

Drilling must be interrupted if it is not possible to verify irrigation. Drill with an in and out pumping motion without excessive force.

When doing this movement, you will have to take out the drill completely to check that irrigation is taking place correctly.

Drills are characterised by their inclined wedges allowing the homogeneous distribution of the cooling physiological solution, as well as the conservation of cortical bone shavings resulting from the drilling process after the preparation. If the sharpness of the drill diminishes, the latter must be pulled out of the handle for cleaning. Proceed until you are able to take the drill to the desired depth. Should there be adjacent natural teeth interfering with the head of the contra-angle, the drill extension must be used.

It is advisable to use surgical motors with adjustable speed and torque.

**Important:** The initial drill head is of the precision type. Drill heads must be substituted approximately every 20 osteotomies, or when their cutting efficiency diminishes.

#### Non Guided Protocol

- 0. Initiate the site preparation with the Ø2mm JDNasal® drill through the alveolar bone.

  It is advised to open a window in the lateral sinus wall and gently reflect the Schneiderian membrane without perforating it.
- 1. If the alveolar has more than 3mm of good bone, use the Ø2mm JDNasal® drill to drill through the alveolar, into and across the sinus, engaging the lateral nasal wall.



2. The 26mm depth probe can be used to palpate the hole depth for implant selection.



3. Drill to final depth with the Ø2.4mm JDNasal® drill.





# SURGICAL PROCEDURE.

4. Continue with standard twist drill Ø2.8 mm at the entrance for 6 mm.



5. Continue the osteotomy with standard twist drill Ø3.2 mm at the entrance for 6 mm.



6. Complete the osteotomy with standard twist drill Ø3.6 mm at the entrance for 6 mm.



7. Place the implant till to reach the final position.



8. NB: The surgeon can choose to open a window in the lateral sinus wall. Gently reflect the Schneiderian membrane and insert bone graft into the sinus.





## SURGICAL PROCEDURE.

### **Computer Guided Protocol**

- 1. Start the osteotomy using the first JDGuided Drill JDGD24-060  $\varnothing$  2.4 x L 6 mm.
- 2. Continue using JDNasal® Guided Drill  $\emptyset$  2.0 at the same implant length to be inserted (Choose among JDNasal® Guided drills L 20-22-24-26 mm).
- 3. Continue using JDNasal® Guided Drill  $\emptyset$  2.4 at the same implant length to be inserted (Choose among JDNasal® Guided drills L 20-22-24-26 mm).
- 4. Continue with JDGuided Drill Ø2.8 mm x L 6 mm.
- 5. Continue the osteotomy with JDGuided Drill Ø3.2 mm x L 6 mm.
- 6. Complete the osteotomy with JDGuided Drill Ø3.6 mm x L 6 mm.





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