



# Dental Implant JDN/S/L

JDNasal surgical procedure

## JD NASAL

#### PRE-OPERATIVE EXAMINATION OF THE PATIENT

The clinician must attend a specific advanced training beyond the supervision of expert implantologysts about the JDNasal implant placement. In a severely resorbed maxilla, JDNasal 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.

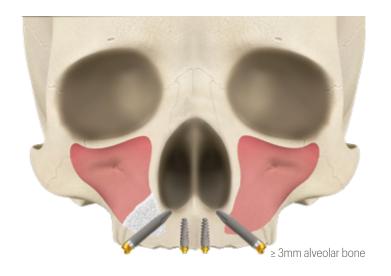
#### **RADIOGRAPHIC EXAMINATION**

A radiographic assessment is essential for every implant case, a radiographic assessment is essential. As far as the Nasal Implant protocol is concerned, the main objectives are the following:

- 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, JDNasal Implants can be employed to make use of the nasal bone, because they enable use of the maxillary bone surrounding the nose. The implant site begins in the crestal bone at the premolar and ends in the bone separating the maxillary sinus and nasal cavity at the canine pillar. The implants used for these cases need to be longer to span across the sinus and they need to be tilted. JDNasal Implants are available up to a length of 26mm. Full product details and drilling protocol follow overleaf. The surgeon can choose to graft or not the sinus simultaneously to the implant placement. It is mandatory to have no signs of sinus infection in patients, 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 after 30 uses, or when their cutting efficiency diminishes.

## JD NASAL

### NASAL SITE PREPARATION SEQUENCE

#### Non-guided protocol















- 1. Initiate the site preparation with the longer  $\emptyset$  2.0mm JDNasal drill through the crestal bone and reach the cortical bone of the nose.
- 2. Use the 26mm depth probe to verify the depth of the site, in order to support the clinician in the choice of the implant with the appropriate length.
- 3. Drill to final depth with the longer Ø 2.4mm JDNasal drill.
- **4.** Continue the osteotomy with standard twist drill  $\emptyset$  2.8mm at the entrance for 6mm.
- **5.** Continue the osteotomy with standard twist drill  $\varnothing$  3.2mm at the entrance for 6mm.
- **6.** Complete the osteotomy with standard twist drill  $\varnothing$  3.6mm at the entrance for 6mm.
- 7. Place the implant till to reach the final position. The implant shall be inserted with an insertion torque between 25 Ncm and 80 Ncm.



## JD N/S/L

#### TRANS-SINUS SITE PREPARATION SEQUENCE

#### Non-guided protocol













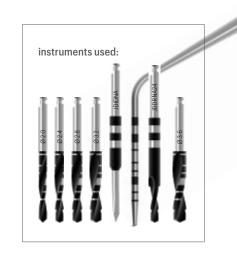








- 1. Open a window in the lateral sinus wall and gently reflect the Schneiderian membrane without perforating it. Initiate the preparation of the implant site with standard twist drill Ø 2.0mm in order to reach and perforate the floor of the maxillary sinus. Keep the drill with a right inclination towards the canine pillar.
- 2. Continue with standard twist drill  $\emptyset$  2.4mm till to reach and perforate the floor of the maxillary sinus.
- **3.** Continue with standard twist drill  $\emptyset$  2.8mm till to reach and perforate the floor of the maxillary sinus.
- **4.** Continue with standard twist drill  $\emptyset$  3.2mm till to reach and perforate the floor of the maxillary sinus.
- **5.** Insert the Initial drill JDNasal into the canal created into the bone before. Drill through the alveolar process, into and across the sinus, engaging the nasal bone in correspondence with the canine pillar.
- **6.** Use the 26mm depth probe to verify the depth of the site, in order to support the clinician in the choice of the implant with the appropriate length.
- 7. Use the longer Ø 2.4mm JDNasal drill to drill like the previous one through the alveolar process, into and across the sinus, engaging the nasal bone until the final depth in correspondence with the canine pillar.
- **8.** Complete the osteotomy with standard twist drill Ø 3.6mm in the alveolar process.
- **9A.** Place the implant and reach the final position without adding bone graft. The implant shall be inserted with an insertion torque between 25 Ncm and 80 Ncm
- **9B.** Optional: place the implant, reach the final position and insert bone graft into the sinus. The implant shall be inserted with an insertion torque between 25 Ncm and 80 Ncm



## JD NASAL

### SITE PREPARATION SEQUENCE

#### Computer guided protocol

- 1. Start the osteotomy using the first Guided Drill Ø 2,4mm x L 6mm\*
- 2. Continue the osteotomy using the Guided Drill Ø 2,4mm x L 10mm\*
- **3.** Continue the osteotomy using the Guided Drill Ø 2.4mm x L 15mm\*
- 4. Continue the osteotomy using the Guided Drill Ø 2,4mm at the same implant length to be inserted. Choose among Guided drills L 18-20-22-24-26mm inserted in the JDGuided Surgery Kit Extra Drills
- **5.** Continue the osteotomy with Guided Drill Ø 2.8mm x L 6mm\*
- **6.** Continue the osteotomy with Guided Drill Ø3,2mm x L 6mm\*
- 7. Complete the osteotomy with Guided Drill Ø3,6mm x L 6mm\*
- **8.** Place the implant till to reach the final position. The implant shall be inserted with an insertion torque between 25 Ncm and 80 Ncm





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