Wisdom Teeth in Adults. Strategy and Management Based on a Rare Case.

By Dr. Benoit Philippe, UAE

Extractions of wisdom teeth in adults are known to have sometimes certain peculiarities in particular ankylosis and increased frequency of extensive cystic lesions favouring immediate or secondary iatrogenic fractures.

The objective of this publication is to present, from a specimen case as per the size and two-sidedness of the abnormalities noted, the thinking that preceded the surgical procedure and the execution of the surgical art.

Diagnosis Circumstances

The patient is an adult male aged 48, without specific medical and surgical history. He was referred for medical advice and possible surgical care with regard to his asymptomatic impacted third molars. The clinical situation contrast with the radiographic table found.

At the Mandible

- The cystic envelope and the pedicles foci (besides the risk of bleeding) nerve traumas (Figures 3a and 3b).
- Concerning 28, the subtotal development of the endo-antral cystic lesion exposes a meningitis risk by complete blockage of the sinus entrance of the risk of infra-oral communication, 38 clasping and radiologically asymptomatic is maintained as it is (there is especially no endo-antral image).

Information and Informed Consent Strengthened

The surgical indication is confirmed to the patient despite the absence of symptoms. The option of general anesthesia is selected because of the difficulty of the surgical procedure.

Given the mandibular anatomical lesions and especially their bilateral nature, the information provided to the patient insist on the increased intraoperative and postoperative risk of mandibular fracture and destruction of the alveolar nerve by direct hit (section, burning) of indirect hit (in case of fracture). The information stresses the same way on the risk of direct or indirect hit of the lingual nerve itself particularly fragile and located in the immediate vicinity of the roots of 48 because of the high localization of 28 and the divergence of its roots, the risk of oral sinus communication is clearly indicated.

Surgical Strategy

In order to perform the surgery in the best technical conditions (especially in the absence of trauma as a result of an anatrophic decompen- sation) it is recommended to perform these extractions ‘in cold situation’ and in two times (high fracture risk) 38 and 48 are programmed in a first phase and 28 in a second phase to 6 months.

Surgical Procedures and Anaesthesia

In order to have the best accessibility, the intubation is performed using an endotracheal tube during both surger- ies.

Concerning 38, several technical fau- tures are worth mentioning:
- The route for the approach and the separation are expanded (the incision covers the entire silon of 17 and the retromolar triangle and is completed by two long discharge incisions).
- The use of ultrasound allows, due to ankylosis, an efficient cleavage between the dental tissue and the bone tissue.
- The separation of the cystic lesion is performed using the micro rapi- dity on the flat.

At the Maxilla

Two maxillary wisdom teeth high- positioned, leaning against the pterygo-palatine junctions and which endo-antral roots are diver- gent 28 shows a very large intra sinus lesion of liquid density, not visible in the dental panoramic, filling substantially all of the sinus (Figures 4a and 4b). Although asymptomatic and despite a signifi- cant risk of intraoperative and postoperative complications in such a context, the extraction of mandibu- lar wisdom teeth and the extraction of the left maxillary wisdom teeth are confirmed. Indeed, as regards 38 and 48, the inevitable development of bone defects (cystic lesions) inevit- ably exposes to:
- A mandibular fracture
- An infectious decomposition re- quiring urgent extraction (with an increased risk of postoperative complica- tions due to low accessibility generated by the trismus accompa- nying the infection).
- The progressive and fatal destruc- tion of the bone alveolar we note, on the right and on the left the disappearance of the bony canal in the vicinity of the pericoronal cysts.

Clinical Case

Given the inflammatory adhesions, a special attention is given to the lower part of the cystic lesion:
- The enucleation of the pericoronal cyst is performed without any pull- ing on its envelope.

The vestibular ostectomy carried out using the piezosurgery, spreads over the entire height of 28. The cystic lesion (polyp) is enucleated in full (Figure 5).

Concerning 48, despite a widened approach path (in which the vestibul- lar sagittal plane is extended from the distal surface of the tooth until the anterior edge of the ramus), the procedure is to keep intact the outer table and the basilar margin of the mandible. The extraction is performed through the lingual path. Careful subperiosteal separation concerns the lingual table with regard to 47 and the retromolar triangle. A malleable blade to protect the lingual nerve is gradually posi- tioned in the separation space.

The double vertical ostectomy of the lingual table framing 48 impacted is performed with ultrasound under heavy irrigation with refrigerated serum. A controlled fracture of the lingual bone flap made with Og- wegger raspatory will complete the procedure, 48 lingually dislocated (Figures 6a to 6c).

In addition to the systematic recommen- dations given to the patient, preoperative and postoperative in- formation insist particularly on the prevention of secondary mandibu- lar fracture (soft diet for 45 days) and on the prevention of oro-antral com- munication (sneezing mouth open and gentle nose blowing during 45 days).

The histological analysis of the man- dible lesion confirms the diagnosis of cystic lesion and eliminates any unusual or suspi- cious element of malignancy.

Postoperative, Medium Term Monitoring

Apart from an acute painful episode on the right side that occurred dur- ing chewing on the third postopera- tive day (pathological radiographic image), no complication was noted and in particular no fracture or nerve symptoms (dental nerve, lingual nerve) in immediate post-operative and secondary postoperative period (due to scarcing mechanisms in the vicinity of nervous pedicle).

The panoramic shot of late medical supervision reveals a satisfactory bone healing, in particular the dis- appearance of radiolucient images in 38 and 48 and the absence of opacity in the left sinus cavity which is a proof of a good ventilation (Figure 7).

Conclusion

With impacted wisdom teeth in adults, the importance of anoma- lies (ectopia, ankylosis, cystic laceration, nervous vicinity) imposes an in- creased obligation to provide further information. Nevertheless, with le- sions having a possible risk of acute infectious decompensation, the preventive extraction in the absence of infectious lockjaw seems to be rec- ommended. The two-sidedness of the lesions makes a two-step proce- dure. Despite the implementation of a sequence and a suitable surgical technique, nervous or fracture com- plications are always possible due to adhesions, ankylosis and loss of pre- operative cystic and postoperative iatrogenic bone substances.

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Dr. Benoît Philippe

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Dr. Benoit Philippe
Maxillofacial Surgery and Stomatologist
Dr. Roze & Associates Dental Clinic

Dr. Benoit Philippe
Maxillofacial Surgery and Stomatologist
Dr. Roze & Associates Dental Clinic

Dr. Benoit Philippe
Maxillofacial Surgery and Stomatologist
Dr. Roze & Associates Dental Clinic

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