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

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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 twoness of the abnormailities noted, the thinking that preceded the surgical procedure and the execution of the surgical act.

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 this asymptomatic impacted third molars. The clinical situation contrast with the radiographic table found.

Dental Pan

Four (4) impacted third molars are highlighted: 38 is positioned along the dental pedicle, ventral and shows a pericoronal cyst in the vicinity of the dental nerve. 48 vertical is particularly low-located, its roots projecting on the area of the basal border. 28 and 48 included high-located, show divergent roots positioned in the sinus cavities. Radiographic ankylosis is objected to the absence of periodontal radioluent area. (Figure 1)

Scanner

The computed tomography examination specifies the diagnosis and confirms the surgical difficulty of these extractions.

At the Mandible

As a complication to the surgical approach, a mandibular fracture (Figure 4) and a deviation of the left sinus cavity which is a proof of a good ventilation (Figure 7).

Clinical Case

Given the inflammatory adhesions, a special attention is given to the lower pole of the cystic lesion.

Concerning 48, the subalveolar incision spreads from 26 until the impacted tuberosity, completed by two wide vertical discharge incisions led until the bottom of the vestibule.

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

Concerning 48, despite a widened approach path (in 47, the vestibular sulcular incision 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 positioned in the separation space.

The double vertical osteotomy 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 Obwegeser raspatory will complete the procedure, 48 is lingually dislocated (Figure 6a to 6c).

In addition to the systematic recommendations given to the patient, preoperative and postoperative information insist particularly on the prevention of secondary mandibular fracture (soft diet for 45 days) and on the prevention of oro-antral communication (sterilizing mouth open and gentle nose blowing during 45 days).

The histological analysis of the mandibular lesion confirms the diagnosis of cystic lesion and shows the absence of any unusual or suspicious element of malignancy.

Procedure and Anesthesia

In order to perform the surgery in the best technical conditions (especially in the absence of trismus as a result of an inflammatory decompression) 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 47 in a second phase to 6 months.

Surgical Strategy

In order to perform the surgery using an endoscopic probe during both surgeries.

Concerning 38, several technical features are worth mentioning:

- The route for the approach and the separation are expanded (the incision covers the entire sillon of 37 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 raspatory on the flat.

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, no complications were reported. 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 scarification mechanisms in the vicinity of nervous pedicle).

The panoramic shot of late medical supervision reveals a satisfactory bone healing, in particular the disappearance of radioluent images in 28 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 anamnesis (ectopia, ankylosis, cystic lacera, nervous vicinity) imposes an increased obligation to provide further information. Nevertheless, with lesions having a possible risk of acute infectious decompensation, the preventive extraction in the absence of infectious lockjaw seems to be recommended. The two-sidedness of the lesions imposes a two-step procedure. Despite the implementation of a sequence and a suitable surgical technique, nervous or fracture complications are always possible due to adhesions, ankylosis and loss of preoperative cystic and postoperative iatrogenic bone substances.

References


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