

Wisdom teeth

What is an impacted tooth?

The term "impacted tooth" describes a tooth that has not completely erupted in the mouth within a normal period of time. The 3rd inferior and superior molars, commonly known as wisdom teeth, are the last ones to erupt in the mouth. As a result, they are the teeth that are most frequently impacted. Statistics indicate that 95% of 3rd molars that can erupt will have done so by the time one reaches 24 years of age. Because of their position in the mouth, they are often of no use in the chewing process. In fact, because of their partial growth or their total impaction due to lack of space, they cannot be functional. It has been estimated that only 5% of the general population have jaws large enough to accommodate four healthy and functional wisdom teeth.

While there are clear indications for extracting symptomatic teeth, this is not true for non-symptomatic cases. The dentist's clinical judgement is required to determine if the preventive extraction of the impacted molars may be beneficial to the patient. In order to ascertain this, one must take into account the preoperative evaluation of the patient. The indications and contraindications regarding the extraction and the postoperative risks and complications must also be evaluated. The degree of difficulty of the procedure increases with age as do the risks of complications and postoperative difficulties. Therefore, one must not wait until the impacted tooth causes problems to undertake an extraction.

Indications and contraindications for extracting the 3rd molars

Although this is not a complete list, there are a few clear indications that the extraction of these teeth is necessary to prevent or to treat pericoronitis (irritation of soft tissues surrounding the erupting tooth): when there is a dental pathology (caries of the 2nd or 3rd molar), a periodontal pathology of the supporting tissues of the tooth (the gum or the bone) or when it is apparent that some damage has been done to the adjacent tooth (resorption). The extraction of non-symptomatic impacted 3rd molars is contraindicated in older patients as adjacent structures may be irreversibly damaged. These risks increase with age.

Preparatory planning

To avoid endangering the patient's health during surgery, the dentist must proceed with a complete evaluation of any medical condition. Clinical evaluations and X-rays are also especially important. In fact, the relationship between an impacted tooth and its neighbour, its position in the jaw and the presence of nearby structures such as the maxillary sinus and the neurovascular bundle (inferior dental nerve, lingual nerve) are all important elements in the planning of the extraction of an impacted 3rd molar. Taking high-quality X-rays is vitally important. These X-rays serve to evaluate the position of the tooth, its long axis or its relation to the anterior side of the ramus of the mandible and its vertical position (**Fig. 1 to 7**).

POSITION OF THE TEETH

According to the long axis of the tooth as the inferior maxillary

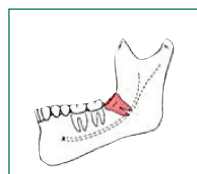


Fig. 1
Mesio angular (45%)

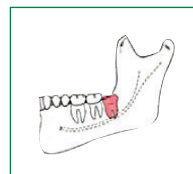


Fig. 2
Vertical (40%)

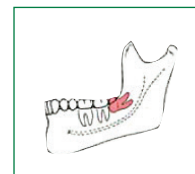


Fig. 3
Horizontal (10%)

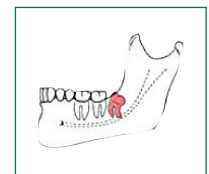


Fig. 4
Disto Angular tooth (5%)

According to the long axis of the tooth as the superior maxillary

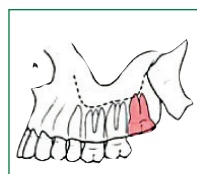


Fig. 5
Vertical (63%)

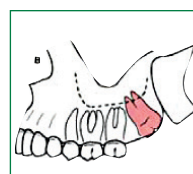


Fig. 6
Disto angular (25%)

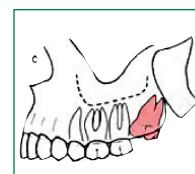


Fig. 7
Mesio angular (12%)

What are the risks and complications associated with the extraction of impacted 3rd molars?

a) Damage to the adjacent nerves

Trauma to a sensory nerve, either the inferior dental nerve or the lingual nerve, can lead to paresthesia, defined as the loss of sensation in the chin, the lips or the tongue for a certain period of time. Usually the numbness is temporary, but in rare instances, it can be permanent.

b) Damage to the superior maxillary sinus

The maxillary sinus is a pneumatic cavity situated in the upper jaw. If the sinus is large, it could extend to the apices of the roots of the maxillary teeth. A bone fracture, as well as a communication between the sinus and the oral cavity, can occur.

c) Damage to the surrounding teeth

This could be caries or a fracture of the crown.

d) Risk of radicular (root) fracture

If the shape of the root is unfavourable for the procedure, the risk may be high. At times, a partial odontectomy may be indicated.

e) Risk of a mandibular fracture

A fracture of the lower jaw or mandible may occur.

f) Risk of infection

This can occur following the extraction. In certain cases, it can be caused by food buildup in the alveolar socket, a residual dental fragment or a foreign object.

g) Risk of alveolitis

This is the most frequent postoperative complication and is described as the premature loss of the blood clot from the tooth socket causing a superficial osteonecrosis of the alveolar bone. This can happen three to five days following the extraction and manifests as bad breath and a sharp pain that can radiate up to the ear.

h) Other inconveniences

- Pain and discomfort
- Bleeding (hemorrhage)
- Edema (swelling)
- Trismus (muscle spasms)
- Myofascial pain
- Temporomandibular joint disorder

The postoperative follow-up period

This period can bring significant deterioration to the patient's quality of life, especially within the first five days. For example, swelling has an impact on comfort, function and aesthetics. These side effects may create both physical and social difficulties. The period will vary depending on the complexity of the surgery and on the way the patient follows postoperative recommendations concerning diet, medication, etc. Good psychological preparation is a prerequisite for success.

Informed consent

Your prognosis is: Good Average Unfavorable

Informed consent is the result of a discussion between the patient and the dentist. This document is provided for information purposes and may be completed or modified during discussions with your dentist. Some dentists may provide adequate information without giving this document to the patient.

Explanations

Informed consent for the extraction of a wisdom tooth

I understand the necessity and the limits of the extraction of wisdom teeth and the risks and complications related to this type of intervention. I understand that, following the extraction, there could be a period of numbness in the jaw and some swelling and bleeding, tissue discoloration and discomfort. I understand that the exact position of the nerves in the region of the impacted tooth cannot be determined by an X-ray unless a CBCT is used. An injury to a nerve is possible and could result in the loss of sensation in the chin, lips and tongue for a certain amount of time. I was told that usually the numbness is temporary, but, in rare instances, it could be permanent. The success of the surgery depends on my cooperation with regard to keeping all appointments, following instructions given for oral hygiene at home, following dietetic recommendations, taking the medication as prescribed and advising the dental office of any changes in my health as soon as possible.

I have discussed all of the foregoing with my dentist and he/she has answered all of my questions. I hereby consent to the treatment.

Patient's signature

Date

Dentist's signature

Date