





# **ABSCESSED TOOTH AWARENESS:**



Dr. Marwan Al-Obeidi, Clinical Head Dr. Michael's Dental

## What is an abscessed tooth and what causes it?

n abscess is a term Aused to describe the collection of bacteria and their products (pus) around the causing agent which is usually the tooth and its surrounding structures. A presenting dental abscess can be classified broadly into: a) Periapical abscess: This

is by far the most common abscess and usually occurs at the tip of the root of the tooth

### b) Periodontal abscess:

Arises as a result of infection in the supporting tissues of the tooth (the gums and bone).

- c) Gingival abscess: A localized abscess in the gums around the tooth and only affects the gums.
- d) Pericoronal abscess: An infection usually associated with teeth which are not fully erupted, for example wisdom teeth

#### e) Combined periodontal and periapical abscess.

There are many reasons why an abscess would occur. The most common would be an untreated dental cavity. Poor oral hygiene and food particles getting stuck in the gums could be the causative factor in a gum abscess. A fractured or cracked tooth could also lead to an abscess as could a very deep filling which is too close to the nerve (owing to the decay being very deep). Occasionally, overheating of the tooth due to a dental procedure may cause rise to a situation where the nerve inside the tooth becomes infected leading to an abscess. A failed root canal treatment may also be a cause for an abscess.

#### What are the symptoms?

Abscesses can be completely symptomfree for a varying length of time. They can lie dormant not causing any

symptoms of discomfort or pain and may even be picked up as a chance finding by a dentist at your regular checkup appointments.

However, when an abscess does cause symptoms they are usually of discomfort especially to biting and eating, and the discomfort is usually deep- seated in nature and occasionally have a throbbing feel to it. Sensitivity to cold and hot may also present and pressure may aggravate the pain. These symptoms can be accompanied by signs of a swelling in the infected area. If the abscess perforates the bone, a small pin size point may appear in the swelling, draining a liquid (which can give some relief to the pain symptoms) and sometimes a facial swelling may appear. The abscess may also drain to other parts of the body causing discomfort especially in the lymph node areas of the neck making it tender and occasionally difficult to swallow.

# How is it diagnosed?

It is imperative to make an accurate diagnosis of the abscess type as explained earlier as there are different types of dental abscesses and making the correct diagnosis is critical in the correct management and treatment.

The dentist usually initially asks a few questions to establish a full history of the symptoms to illicit the type of discomfort (if any), how long has it been present, and the symptoms the patient is complaining of.

The dentist then usually does a clinical examination where the extraoral



Swelling caused by abscess

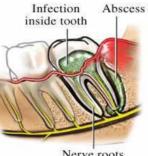
examination is carried out first. This includes checking to see if any obvious swellings are present. The lymph nodes in the neck are also checked at this point. An intraoral examination follows and this is initially again to check for any obvious decay or swellings. There are a few clinical tests that need to be carried out at this stage. These include:

- a) A tenderness to tapping test. This usually gives a good indication as to which tooth is causing the pain and whether the pain is of a gum origin or a tooth origin.
- b) Probing the gums around the tooth to see if the gums are affected.
- c) Vitality testing. This is a test to see if the nerve inside the tooth is healthy or not. This can either be done with a cold test or an electric tester. d) An x-ray (radiograph) needs to be taken. This is to confirm the size of the abscess and occasionally can be used in adjunction with the above tests to make the diagnosis. It is also useful to see the underlying cause of the abscess if this is not obvious clinically.

# How is it treated?

The purpose of treatment is to reduce and eliminate the offending bacteria and the cause of their accumulation. A large abscess may need to be drained prior to any further treatment and a course of antibiotics would also be indicated.

Each dental abscess is treated according to the



Nerve roots

causative factors. a) The most common abscesses, the periapical abscesses are treated in the following manner: If the tooth is restorable then root canal treatment would be the first line of action followed by a restoration of the tooth (a crown is the preferred choice in most cases). Occasionally. further treatment may also be necessary and a regular followup of the root canal treatment is necessary to ensure adequate healing. If the tooth is deemed unrestorable, an extraction of the offending tooth would be necessary.

- b) For gingival and periodontal abscesses, a deep debridement of the tissues surrounding the tooth is necessary. This is in adjunction with antiseptic and antibacterial medication. Again, a follow up is usually necessary.
- c) For pericoronal abscesses. either a debridement of the area in adjunction with some surgery (usually LASER) to expose the tooth to the oral environment or if the impaction is deep then extraction of the offending tooth would be necessary. d) For combined periodontal and periapical abscesses, a combined treatment of root canal therapy as well as localized debridement of the area would be indicated.

# What are the dangers of untreated tooth abscess?

If left untreated, an abscess may grow and perforate the bone extending to the surrounding structures causing a severe bone infection known as osteomyelitis or into the soft tissues causing cellulitis. This can then follow the path of least resistance spreading into the soft tissues around the area and affecting adjacent structures such as the eyes and in the most severe cases, the brain. An untreated abscess can also drain into the neck compromising the airways and again, in severe cases, can become life threatening. If the abscess drains into the adjacent blood vessels it can lead to septicaemia and can affect vital organs such as the heart.

### How can it be prevented?

Avoiding tooth decay and gum infections is key to preventing an abscess. Maintaining the highest standards of oral hygiene is the first line of defense against bacteria which cause tooth decay and gum disease so brushing twice a day with an electric tooth brush and using fluoride tooth paste is the

easiest way to avoid an abscess. Flossing is just as important as it cleans the part of the tooth your toothbrush will not reach. Using an antiseptic mouthwash (and fluoridated mouthwash) will also help prevent cavities and keep your teeth strong and disease-free.

A healthy diet and limiting sugar intake are both imperative in the fight against any disease. We should avoid snacking in between meals and if it is necessary, choose a healthy snack of fruits and vegetables. A healthy diet is also key to a healthy immune system to help us fight any infections.

Regular visits to the dentist and hygienist are a must to prevent an abscess from forming as early diagnosis is key to early intervention which is very important in the outcome of treatment. It is recommended that you visit your dentist at least every 6 months even if you are symptom-free for them to check that your mouth is healthy and disease-free.

