



The South African Society of Maxillo-Facial & Oral
Surgeons

Die Suid Afrikaanse Vereniging van Kaak- Gesigs- en Mond-
Chirurge

DRY SOCKET

By Dr. Jason Erasmus

Dry socket (alveolar osteitis) is a dental condition that occurs when the blood clot at the site of a tooth extraction is dislodged, exposing underlying bone and causing increasing pain. It's the most common complication following tooth extractions, such as the removal of impacted wisdom teeth. But with proper postoperative dental care and avoidance of risk factors, dry socket often can be prevented. When it does occur, treatment usually provides immediate relief.

SIGNS AND SYMPTOMS

Dry socket is a condition that sometimes occurs after a tooth extraction. It has several tell-tale signs and symptoms, including:

- Partial or total loss of the blood clot at the extraction site, which you may notice as an empty-looking (dry) socket
- Visible bone in the socket
- Pain that increases between one and three days after tooth extraction and that typically becomes severe and unrelenting
- Pain that radiates from the socket to your ear or eye on the same side of your face
- Bad breath or a foul odor coming from your mouth
- Unpleasant taste in your mouth
- Swollen lymph nodes around your jaw or neck

CAUSES

Normally, a blood clot forms at the site of a tooth extraction. This blood clot serves as a protective layer over the underlying bone and nerve endings in the empty tooth socket. The clot provides the foundation for the growth of new tissue and bone.

In some cases, though, the clot doesn't form properly or is physically dislodged before complete healing. With the clot gone, bone and nerves in the socket are exposed to air, fluids and food. This can cause intense pain, not only in the socket but also along the nerves radiating to the ear and eye on the same side of your face.

But the precise cause of dry socket remains the subject of study. Some researchers believe that several issues may be at play, including:

- Bacterial contamination of the socket
- Difficult or traumatic tooth extraction surgery
- Roots or bone fragments remaining in the wound after surgery

Dry socket occurs in about 3 percent to 5 percent of all tooth extractions, but it's much more common after extraction of wisdom teeth and impacted wisdom teeth in particular.

RISK FACTORS

Certain factors can increase your risk of developing dry socket after a tooth extraction. These include:

- **Smoking and tobacco use.** Chemicals in cigarettes or other forms of tobacco may contaminate the wound site. In addition, the act of sucking on a cigarette may physically dislodge the blood clot prematurely.
- **Taking oral contraceptives.** High levels of estrogen can greatly increase the risk of dry socket by dissolving the blood clot.
- **Not following post-extraction guidelines.** If after oral surgery you don't follow instructions, such as avoiding certain foods or caring for your wound properly, your risk of dry socket increases.
- **You've had dry socket in the past.** Having dry socket once means you're more likely to develop it again.
- **Tooth or gum infection.** Current or previous infections around the tooth to be extracted increase the risk of dry socket.

WHEN TO SEEK MEDICAL ADVICE

When you've had a tooth extracted, any discomfort you experience normally gets better with each passing day. If you develop new or worsening pain in the days after your tooth extraction, don't try to tough it out. Contact your oral surgeon right away so that you can get properly assessed and treated.

SCREENING AND DIAGNOSIS

In order to determine if you have dry socket, or another condition, your oral surgeon will ask about your symptoms and examine your mouth. He or she will check to see if you have a blood clot in your tooth socket and whether you have exposed bone. You may also need to have X-rays taken of your mouth and teeth to rule out other conditions.

COMPLICATIONS

Dry socket can cause a variety of complications. Pain, of course, is the major complication. Because of the pain and repeat trips to your dentist or oral surgeon for treatment, you may miss time at work or school.

Dry socket also delays the healing process after a tooth extraction. Gum tissue normally takes three to four weeks to heal, while bone can take up to six months to heal, and dry socket can delay this process.

Dry socket can also interfere with the placement of dental implants or with other dental procedures, and these may need to be rescheduled until you've healed completely. In addition, infection sometimes develops after dry socket, but that's uncommon.

TREATMENT

Treatment of dry socket is mainly geared toward reducing its symptoms, particularly pain. Treatment includes:

- **Medicated dressings.** This is the main way to treat dry socket. Your dentist or oral surgeon generally packs the socket with medicated dressings. You may need to have the dressings changed several times in the following days. The severity of your pain and other symptoms determines how often you need to return for dressing changes or other treatment.

- **Flushing out the socket.** Your dentist or oral surgeon will flush the socket to remove any food particles or other debris that has collected in the socket and that contributes to pain or infection.
- **Pain medication.** Talk to your doctor about which pain medications are best for your situation. If over-the-counter pain relievers aren't effective, you may need a stronger prescription pain medication.
- **Self-care.** You may be instructed how to flush your socket at home to promote healing and eliminate debris. To do this, you'll be given a plastic syringe with a curved tip to squirt water, salt water, mouthwash or a prescription rinse into the socket. You may need to continue to do this daily for three or four weeks.

Once treatment is started, you may begin to feel some relief in just a few hours. Pain and other symptoms should continue to improve over the next few days. Complete healing typically goes smoothly and generally takes about 10 to 14 days.

PREVENTION

Steps that both you and your oral surgeon take may go a long way in helping prevent dry socket or to reduce your risk.

What your oral surgeon can do

Although dry socket has been recognized since the late 1800s, medical science has yet to develop a surefire way to prevent it. Some research suggests that treatment with certain medications such as antibiotics before or after oral surgery may reduce your risk of dry socket. However, this practice remains controversial, and some believe that preventive treatment with antibiotics isn't appropriate because it may contribute to problems such as antibiotic-resistant bacteria.

Talk to your oral surgeon about using these medications or precautions when you have tooth extraction surgery:

- Antibacterial mouthwashes immediately before and after surgery
- Oral antibiotics
- Antiseptic solutions applied to the wound
- Medicated dressings applied after surgery

What you can do before tooth extraction surgery

- If you take oral contraceptives, try to time your extraction to days 23 to 28 of your menstrual cycle, when estrogen levels are lower.
- Stop smoking and the use of other tobacco products at least 24 hours before tooth extraction surgery.
- Talk to your oral surgeon about any prescription or over-the-counter medications or supplements you're taking, as they may interfere with blood clotting.

What you can do after tooth extraction surgery

- Avoid spitting for the first few days.
- Don't drink with a straw for the first few days.
- Don't drink carbonated beverages for two to three days after your tooth extraction.
- Gently brush teeth adjacent to the extraction site.
- Don't rinse your mouth vigorously or excessively.
- Resist the desire to touch the extraction site with your fingers or tongue.

- Eat soft foods and foods that don't have residuals, which are particles that may lodge in your socket. Avoid pasta, popcorn and peanuts, for example. Instead, eat mashed potatoes, pudding, or clear or cream soups.

SELF-CARE

Dry socket rarely results in infection or serious complications. But getting the pain under control is a top priority. You can help promote healing and reduce symptoms during treatment of dry socket by:

- Holding cold packs to the outside of your face to help decrease pain and swelling
- Taking pain medications as prescribed
- Not smoking or using tobacco products
- Drinking plenty of clear liquids to remain hydrated and to prevent nausea that may be associated with some pain medications
- Rinsing your mouth gently with warm salt water several times a day
- Brushing your teeth gently around the dry socket area
- Keeping scheduled appointments with your oral surgeon for dressing changes and other care
- Calling for a sooner appointment if your pain returns or worsens before your next scheduled appointment