# Jawbone Cavitations - Causes, Diagnosis and Treatment

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Teeth are anchored by the roots of the tooth extending down into the jawbone. A front tooth has one such root, but the molars may have three or four curvy roots that embed down into the bone. Both the teeth and the jawbone are living organs; but both can become sick and even die when attacked by poison and by infection. A dying or dead infected, toxic tooth can adversely affect the jawbone around it and vice versa. It is often smart to remove a root canaled tooth, as such teeth are dead and often toxic from their inevitable infections; but the dentist and the patient cannot avoid the likely possibility that the root canaled tooth has produced a jawbone disease around it and, if so, that jawbone disease will continue on, even after the root canaled tooth has properly been extracted (i.e. the periodontal membrane has all been scraped out and dentist has gotten down to healthy bone.) The reason is that the jawbone disease will often lurk deeper down in the jawbone and not be visible to the dentist at tooth extraction time, even with a tooth extraction done thoroughly and properly.

The price of ignoring these hidden jawbone disease problems that are deeper down can be major, and yet ignorance is the common state of affairs. The dental patients and their dentists focus so intently on the teeth – their cracks, their cavities, their pains – that jawbone disease issues are ignored. Today, dental school instruction still ignores something that has become abundantly clear from the literature: jawbone disease is very common, it can cause facial, neck and shoulder pain, it can weaken the immune system, and it can impair overall health. Perhaps jawbone disease is being ignored because of the embarrassing fact that common toxic dental materials and the all-too-common root canal procedures are themselves responsible for most of the jawbone disease.

Patients and dentists all acknowledge the problem of abscesses, which areas of rotting bone tissue right next to the roots of a tooth. We say “the tooth is abscessed” and everyone knows that action is needed. And when the dead, abscessed tooth is extracted and the diseased periodontal ligament and the abscessed areas are thoroughly cleaned out, then healthy bone will re-grow to fill in the site. But sometimes the work is not thorough and parts of the periodontal ligament are left behind or a diseased portion of the bony socket is not taken out. Wisdom teeth extractions (whether they were erupted teeth or never erupted) can also be an example of this failure to clean out soft tissues and diseased areas. As a result, tooth extraction sites often become the places where jawbone disease begins.

Other beginnings of jawbone disease are **dead teeth and root canaled teeth** (which are also dead teeth) that become very toxic; they are loaded with anaerobic bacteria and their waste products. Toxic root canaled teeth and dead teeth can spew their poisons out through the roots into the bone, eventually causing loss of bone density and even holes and these are what is known as jawbone “cavitations.” A fancier scientific term for a cavitation is “ischemic osteonecrosis;” osteo meaning “bone,” and necrosis meaning “death,” and ischemic meaning “without blood flow.” We use the more popular, more slang word “cavitation.” Since there is no blood flow, our body can no longer fight off infection there and the diseased regions in a cavitation harbor anaerobic bacteria and their waste products, and also accumulate toxins such as mercury, tin and copper from dental amalgam fillings and copper, palladium, nickel and gold from gold crowns. Other **toxic insults** can be delivered from toxic metals such as nickel, chromium and cobalt, which are all too often used in bridges and of course, toxic metals (vanadium, aluminum, possibly nickel) from the metal alloy base that so often provide an anchor in the jawbone for a tooth implant. Dentists and their patients often fail to arrest **periodontal infections** - the infections in the gums around the teeth - and the bacteria and their wastes of these infections can also attack the jawbone; in fact, periodontal infections can cause cavitations all by themselves.

**Trauma** is another possible source of cavitations, as occurs when a person is hit in jawbone, in a car accident or sports collision. Rarely with the doctors who are attending to jawbone disease symptoms such as chronic fatigue, a weakened immune system and neurological disorders including ALS or MS to a sports injury, a car accident that caused injury to the jawbone. And rarely will a doctor link such chronic diseases to chemical injury by toxic dental materials or to improper tooth extractions by a dentist. And just as rarely will a dentist make the link; more likely they will scoff as the suggestion of even a possibility of such a link. Physicians helping in the management of ALS, Parkinson's disease, MS, Alzheimer's disease, depression and other auto immune and neurological diseases are often educated enough to look to jawbone disease, root canal treated teeth or other dental factors as possible cause from these serious conditions. As a result, the connection to chronic illnesses is most often missed and the patients do not often get the dental and medical help they so desperately need.

**Toxic metals** tend to make the blood too thick, causing a tendency to clot excessively. This excessive clotting can a heart attack but alternately can cause bone attack in which a portion of the jawbone loses its blood flow and dies. Dentists who use a vaso-constrictor in a local anesthetic add to the risk of clotting by reducing blood flow in the jawbone. Mercury and other toxic metals harm hormonal function also and improper hormonal function may severely harm to bone health. Another bone poison is fluoride, which is another poison that is promoted and defended by the dental establishment. Fluoride tends to accumulate in bone and connective tissue, where it causes inferior collagen formation; collagen is the main protein that bone, connective tissue and blood vessels are made out of.

## Testing and Evaluation

Poor bone density and holes in the jawbone ("cavitations") are detected in several ways: x-rays, the Cavitat, (an ultrasonic scanner), EAV screening and, occasionally, by MRIs and CT scans. The most important x-ray taken is the panorex x-ray, which gives a full, panoramic view of the mouth area, top and bottom, from one end to the other. While the panorex x-ray can reveal the cavitation problems when they are larger and more advanced, they are poor at revealing bone density loss in earlier stages (e.g. less than 50% bone loss). Therefore, x-rays are not good at detecting the problem until it has become quite severe; and even then, it takes a trained eye to see what may be a major cavitation problem. Much more sensitive than the x-ray is the Cavitat (showing where the cavitation is at). Since the Cavitat uses ultrasound there is no x-ray exposure involved. An ultrasound signal is send from outside the cheek into the face and through a portion of the jawbone site; the ultrasound signal that is received inside the mouth is converted into an electrical signal and analyzed to tell whether the bone has normal density or zero density (a hole is there) or something in between. The computer produces a color picture on a computer monitor screen: with different colors used to indicate the quality of the bone density there. A green color means the bone has normal density and is healthy; yellow is less dense and less healthy, etc, and red is the worst because it means that the bone density is zero – there is a hole there, although it may be filling with toxic liquid and not really be empty. Because of the cost of a Cavitat, few dentists have them, but it is am important device for helping determine where the cavitations are located in a jawbone, how bad they are, and whether surgery is needed.

EAV testing is also quick and non-invasive and can sometime reveal the presence of cavitations; the problem with EAV testing, though, is that it cannot reveal the three dimensional detail the way a Cavitat can and it can miss detecting some sites. MRIs and CT scanners are too expensive to be found in dental offices and so are found at hospital sites. Of these, the MRI is safer, but still involves very strong magnetic field exposures; some patients have serious adverse side effects from MRI scans. The CT scan is powerful and revealing but it gives massive x-ray exposure (equivalent to 100 chest x-rays); such heavy radiation actually damages bone and other body parts, and is best avoided if at all possible. .

Surgery is indicated for the treatment of major jawbone loss and holes (cavitations) in the jawbone. A skillful, experienced oral surgeon or dental specialist should be sought for the diagnostic workup, treatment plan and the surgery, if needed. If amalgams, toxic root canals and other dental problems are being treated, jawbone disease should also be evaluated and a plan for treating them should be part of the overall treatment plan. The attitude "I'll worry about the jawbone later – its expensive and may involve surgery," is a common attitude, but it doesn't make sense to spend thousands of dollars changing crowns and fillings for teeth that will later have to be extracted as part of a jawbone surgery and treatment plan.

Earlier stage jawbone disease can often be reversed without surgery; this is another reason for evaluating the jawbone for possible problems sooner rather than later. Supplementation with an enzyme products such as nattokinase and Lumbrokinase can improve circulation and break up small clots, helping restore good bone density to bones that are in the early stages of density loss and are in danger of developing bad cavitations.

***Beyond Amalgam, the Hidden Dangers of Jawbone Cavitations***, by Suzin Stockton is a paperback book that offers more information and viewpoints on all aspects of cavitations. It is available from DAMS. 651-644-4572

You may also call DAMS with follow up questions and to dentists who are specialists qualified in the diagnosis and treatment of jawbone disease.