New research is confirming that jawbone diseased tissue is able to produce inflammatory messengers that are implicated in heart disease, cancer, rheumatoid arthritis and other major inflammatory diseases. The research was summarized at the March 2011 meeting of the International Academy of Oral Medicine and Toxicology (IAOMT) in a presentation by Johann Lechner, DMD, a research dentist in Munich, Germany. The published research done by Lechner and others has identified four inflammatory messengers that are commonly found in the diseased jawbone tissue. These “cytokines” produce the inflammation that causes cancer, heart disease and many other causes of disability and death. The research suggests that the jawbone disease known popularly as “cavitations,” and in some technical publications as “NICO,” serves as a fundamental cause of these major illnesses, through the inflammatory cytokines that they produce.

Jawbone cavitations are hollow dead spaces in the jaw bone, where the bone marrow is dying or dead. These fatty degenerative dead areas are dumping grounds for toxic metals, such as come from dental mercury amalgams or toxic crowns, and they are always infected and extremely toxic. The most common causes of cavitations are probably root canaled teeth (which, themselves can become very toxic and badly infected) and improper tooth extractions (with failure to clean out the toxic, infected tooth socket properly). Other common causes include toxic metals, trauma, such as being hit in the face in a sports injury or a car accident, and gum infections. Cavitations may produce intermittent or chronic and terrible facial pain but they can also be silent, with few clues offered to the lurking threat. They have long been believed to weaken the immune system, cause fatigue, and have been suspected to be a factor in many chronic illnesses. Now the mechanisms of harm – the actual messengers for inflammation – are becoming understood.

RANTES One of the most striking discoveries is the finding that the messenger known as RANTES is found at high levels in every one of the cavitational tissues tested. RANTES is implicated in many serious illnesses. RANTES inflames the lining of the heart and arteries, thereby causing cardiovascular disease. RANTES inflames the joints, causing rheumatoid arthritis. RANTES is found in malignant tumors, and is considered to be a cause of Hodgkin’s disease, breast cancer, cervical cancer and is a key in the metastasis of cancers. RANTES targets the central nervous system and is able to cause multiple sclerosis, and Parkinson’s disease. In targeting mast cells, RANTES causes allergies, alopecia (marked by hair loss), and thyroid disorders.

Jawbone cavitations also produce other harmful inflammatory cytokines beside RANTES. The main other ones are PDGF, FGF-2 and MCP1; and all of which are also associated with serious health consequences, FGF-2, for example, also is able to promote tumors, rheumatoid arthritis and cardiovascular disease.

Case Reports In one case described by Dr. Lechner, the patient had had rheumatoid arthritis, with pain in the knee joints for 12 months. He was having difficulty getting out of bed in the morning and going down stairs. After surgical clean-out of his jawbone disease sites, he was able to stop his use of Prednisone and Methotrexate – powerful drugs with potentially serious long term side effects – and he declared, “I’m 95% free of pain.”

A second case involved a 49 year old woman with a long history of serious illnesses. In 1976 she was diagnosed with Hodgkin’s disease, a form of cancer. In 2005, she was diagnosed with multiple sclerosis. In 2006, she had breast cancer. But, in Lechner’s view, the cleaning out of her jawbone cavitations may well now end her susceptibility to chronic disease. “RANTES was very high in diseased jawbone tissue taken from the left lower wisdom tooth and retro-molar area,” he
reported. This may have been a case of one patient, one immune signal (RANTES), and three diseases. RANTES may have been able to cause all three diseases.

The spread of cancer Scientists at the Whitehead Institute in Cambridge, Massachusetts, have found that the messenger RANTES aids in changing tumor cells into metastasizing cancer cells but they have found that “…this enhanced metastasis ability is reversible and is dependent on CCL5/RANTES signaling.” Lechner described the case of a woman with breast cancer who was operated on in 2009. She was found to have a jawbone cavitation on the same side of the body as the breast cancer. It was surgically cleaned out to prevent the recurrence of the cancer. “The bad boy in breast cancer is RANTES,” Lechner told the academy.

Root canal question Lechner sees at least an indirect connection between toxic, infected root canaled teeth and RANTES and the illnesses it causes. Since diseased and toxic root canaled teeth are one of the most common causes of jawbone cavitations, he said, we have to conclude that badly infected, toxic root canaled teeth can indirectly cause the same array of serious health problems.

The challenge. The challenge posed by these discoveries is clear: awareness of jawbone cavitations need to spread throughout medicine and dentistry so that this important cause of illness is no longer being overlooked. Jawbone disease is easily overlooked by dentists and doctors, because of the diagnostic difficulties. Many doctors and dentists are unfamiliar with jawbone cavitations despite there being over 600 published papers on them in scientific journals. The diagnosis and treatment of cavitations is still not included in dental or medical school curricula. The presence of a jawbone cavitation is often not entirely obvious from examination of a panorex or other x-rays. Diagnosis is aided by using a Cavitat, an ultrasonic device that scans the density of the jawbone and images the density in a color-coded fashion. But relatively few dentists and doctors have the Cavitat, even in the community of biological dentists. Lechner uses the Cavitat frequently in his research and dental work in Germany. But, because of opposition in the USA by certain insurance interests and some of the state medical boards to the use of the Cavitat, and even to the treatment of jawbone cavitations, the Cavitat Medical Corporation no longer actively markets Cavitats in the USA.

Treatment for more advanced stages of jawbone cavitations requires surgery. The success of such surgery is by no means guaranteed and it depends on the technique and the skill of the dentist doing the surgery. The work of such dentists is valuable, as their work in removing the diseased, dead fatty cavitational tissue from the jawbone may be the key to reversing the course of cancer, heart disease, MS, rheumatoid arthritis and other chronic diseases.