

# BONE CAVITATIONS

In current dental/medical literature, cavitations are being referred to as **NICO** (neuralgia inducing cavitational osteonecrosis). In the past, it has been called Roberts bone cavity, Ratner bone cavity, alveolar cavitational osteopathy, alveolar cavitational osteopathosis, and trigger point bone cavity. NICO's are a chronic, low-grade form of non-suppurative osteomyelitis of the jaws, and seldom produce inflammatory changes (redness and swelling) within overlying gum tissues. They often present at surgery as completely hollow or partially blood-filled bony cavities similar to traumatic bone cysts. NICO's are usually not detectable by x-rays, magnetic resonance imaging, computed axial tomography, or scintoradiography, but about 33% of NICO's can be identified with the technitium-99 bone scan. A newer technology called the Cavitat uses ultrasound imaging to identify cavitational porosity. It should be noted that NICO's have been found in patients without extractions, root canal therapy, and sinusitis. NICO's are usually associated with chronic facial pain or trigeminal neuralgia from "unknown" causes, but another concern is that NICO's frequently contain mutated macrophages and toxins that may cause auto-immune diseases. The typical NICO occurs years after an extraction or tooth infection, leading to the speculation that the disease smolders quietly for years prior to the onset of symptoms. Patients with multiple NICO's may be those with a history of corticosteroid therapy, high-level estrogen therapy, hyperbaric occupation, alcoholism, and anemia. A balanced discussion of NICO can found at the following web site: <http://facial-neuralgia.org/conditions/nico.html>. Some of the treatment options that have been used:

1. Surgical debridement
  - Surgically entering old extraction sites to mechanically remove and rinse out any pathologic tissue. Emdogain gel may accelerate the healing of surgery sites.
2. Omura O-ring technique
  - The O-ring detection method is a variation of kinesiology testing using the patient's fingers. It's intent is to detect infected areas and determine an appropriate medicine to treat the infection.
3. Photon sound beam
  - Photobiotic photon energy delivered by both an ionized Noble Gas energy field and a penetrating radio wave. It's intent is to stimulate the movement of the lymphatic system by electrical fields.
4. Hyperbaric oxygen therapy
  - Health problems can be complicated by low oxygen tissue levels. Oxygen under increased pressure can correct this deficiency by activating the reticuloendothelial system. Optimal tissue healing occurs when pO2 rises to between 50 and 80 mmHg.
5. Far-infrared heat
  - Infrared rays can be divided into 3 categories (near, mid, and far) based on wavelength. For humans, the therapeutic wavelength of far infrared is 5.6 – 14 microns. It is used to increase circulation and oxygen supply to damaged tissues.
6. Qiqong
  - A 5,000 year-old Traditional Chinese Medicine technique used to cultivate and direct energy. It's intent is to cure chronic disease and promote health.
7. Low level laser
  - Lasers that operate in the 600-900 nm wavelength and 1-500 milliwatt range. Sometimes combined with isopathic (Sanum) remedies. Studies show effects on general biological systems, such as the immune system, SOD activity, ATP production, cell membrane permeability, release of transmitter substances, etc.

*This information is provided for educational purposes only, and should not be considered a recommendation for any particular treatment, product, or philosophy. You have the sole responsibility to examine the benefits and risks of available options and decide what treatment, if any, is to be rendered. The First Amendment of the U.S. Constitution grants the right to discuss openly and freely all matters of public concern, and to express viewpoints no matter how controversial or unaccepted they may be.*