# Holistic Protocol for High Risk Dental Surgery Using Far Infrared Photon Energy (FIRE)

## Introduction

The profile of the high risk patient falls into several categories but usually is characterized by:

1. Uncontrolled Diabetes in Type I & II patients.
2. Cancer patients receiving radiation and chemotherapy drugs.
3. Patients being treated for autoimmune diseases with immune depressing drugs such as prednisone, etc.
4. Antibiotic resistant bacteria because of long history of antibiotic dependence.
5. Poor absorption of nutrition thru the gut wall (leaky gut) that creates multiple allergies and sensitivities.
6. Patients with transplanted organs on immune depressing drugs.

Our major objective is to prevent a dry socket (toxic osteitis) that results in a cavitation or incomplete healing. These patients are referred by an attending physician with the accompanying medical test work up.

## Steps

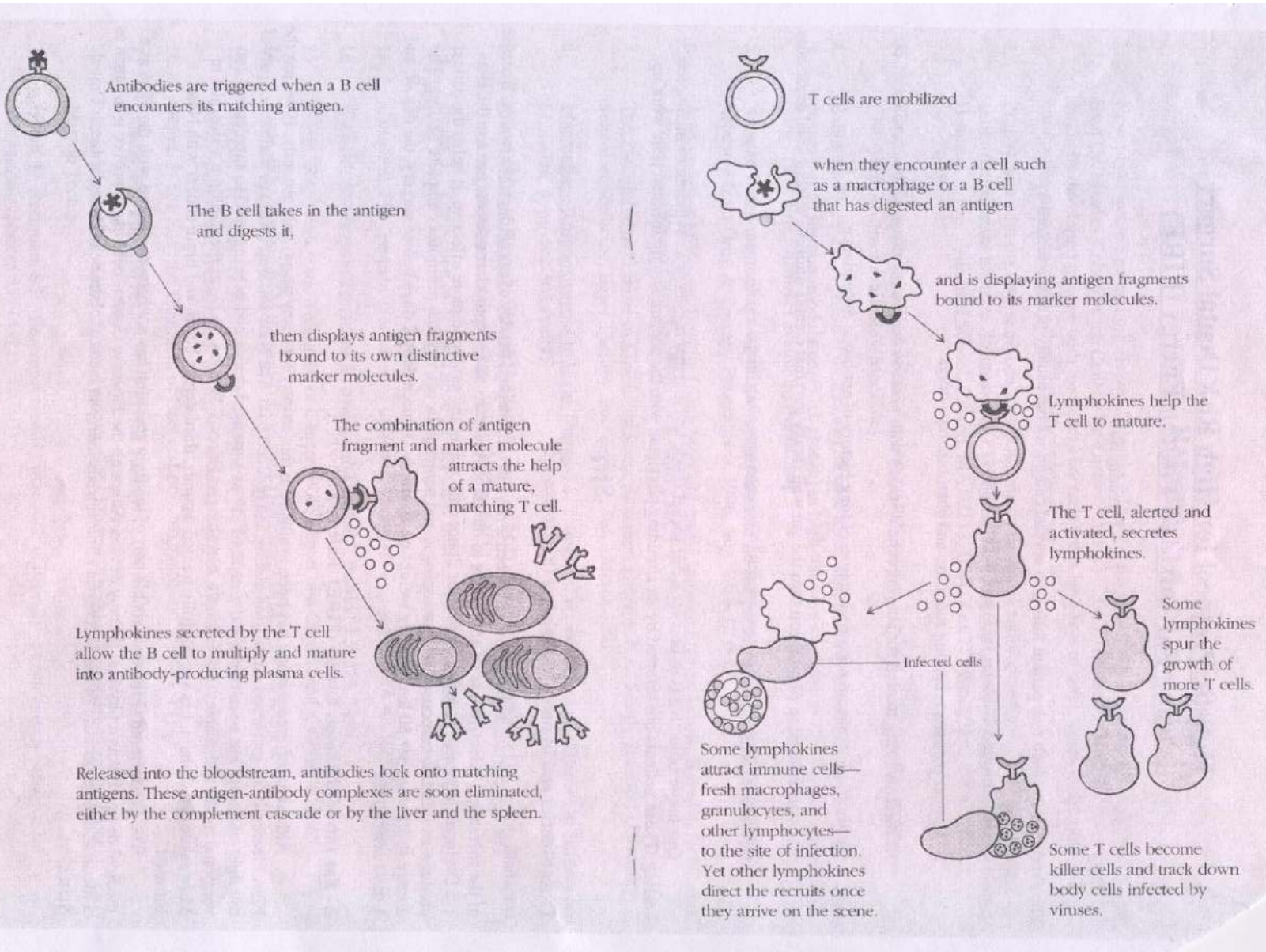
**1 – Antibiotics and Immune Modulators** (References 1-5)

The appropriate antibiotic is prescribes 2 days before surgery, the day of and 4 days afterwards. Because of the increasing infectiveness of antibiotics to the staphylococcus and streptococcus strains, we use the Beta 1-3 D glucon, a proven immune modulator. It not only makes the antibiotic more effective, it helps the patient produce an immune response thru macrophagic and neutrophilic activity that promotes complete healing. The dosage of 500 mm per 50 lbs. Of body weight on an empty stomach daily 2 days before surgery, the day of and 4 days afterwards.

**2 – Far Infrared Photon Energy (FIRE)** (References 6-9)

Although Infrared therapy has been available in this country for many years, only recently, 1994, has the FDA cleared it for increased circulation claims and reduced pain. The Near Infrared (NIR) or visible red part of the light spectrum has been registered with the FDA as a medical device and is being used to supplement conventional medical therapies. For example Neurologist Harry T. Whelan, M.D., at the Children's Hospital in Milwaukee, Wisconsin, has successfully treated wounds, third-degree burns, and brain cancer with Near Infrared.

The Far Infrared (FIR) or invisible part of the light spectrum has not been registered with the FDA as a medical device but as a physical therapy device. Although the Japanese Government has approved it in Japan as a medical device because of the successful clinical trials there, no medical claims can be made in the United States.


Antibodies are triggered when a B cell encounters its matching antigen.
The B cell takes in the antigen and digests it,
then displays antigen fragments bound to its own distinctive marker molecules.
The combination of antigen fragment and marker molecule attracts the help of a mature, matching T cell.
Lymphokines secreted by the T cell allow the B cell to multiply and mature into antibody-producing plasma cells.
Released into the bloodstream, antibodies lock onto matching antigens. These antigen-antibody complexes are soon eliminated, either by the complement cascade or by the liver and the spleen.
T cells are mobilized
when they encounter a cell such as a macrophage or a B cell that has digested an antigen
and is displaying antigen fragments bound to its marker molecules.
Lymphokines help the T cell to mature.
The T cell, alerted and activated, secretes lymphokines.
Some lymphokines spur the growth of more T cells.
Infected cells
Some lymphokines attract immune cells—fresh macrophages, granulocytes, and other lymphocytes—to the site of infection. Yet other lymphokines direct the recruits once they arrive on the scene.
Some T cells become killer cells and track down body cells infected by viruses.

The scientific mechanism of both NIF and FIR, in my opinion, was strongly suggested in the 1998 Nobel Prize in Medicine Award. Scientists Murad, Furchgott, and Ignaro found that when nitric oxide gas is produced by hemoglobin and immune cells, there is a positive effect on heart attacks, cancer and cardiovascular disease. Dr. Valentin Fuster, president of the American Heart Association, called the nitric oxide discovery "…one of the most important in the history of cardiovascular medicine." The 1999 publication by Lon R. Horwitz, et al., in Advances in Wound Care, strongly suggests that Far Infrared produces Nitric Oxide gas in the recovery of the patients in that study.

After evaluation both NIR and FIR I have elected the FIR for my patients for 4 reasons:

1. Safety – There is a high risk for eye injury with NIR but very little from FIR. Medical supervision is required for NIR while FIR can be used at home with adults and children.
2. Penetration – FIR penetrates 1 ½" to ¾" of NIR which is an advantage for the dental surgeon who deals with bone as well as soft tissue.
3. Area covered – The unique, patented, ceramic construction of the FIR Dome covers a much larger area with the 160-degree angles. In my opinion, the one hour use of the FIR Dome daily for 5 days will produce a much larger body production of nitric oxide gas for increased circulation, reduced pain and swelling and faster healing.
4. Cost – The FIR Dome cost is approximately 1/3 the cost of the approved NIR medical devices.

**3 – Diet and Enzymes** (References 10-19)

The immune compromised patient does best on an alkalizing diet of raw, green vegetable juices. A low-grade fever is to be encouraged which means an enhanced immune response. Large amounts of pure water are mandatory. The acid PH of infection needs the mineral, potassium (found in green vegetables), to move the body PH alkaline.

Pancreatic enzymes are one of the immune systems greatest allies. Pancreatic enzymes, however, only work in an alkaline PH. Attend to diet first. The FIR Dome is also helpful in the detoxification process by resonance of water and the gentle elevation of the body temperature.

Animal pancreatic enzymes (porcine source) have been found by published medical research to be the most effective. Bone can only be formed in the presence of osteoblasts that require a balanced calcium phosphate enzyme combination.

The dosage of pancreatic enzymes is 6 capsules on an empty stomach ½ hour before meals 3 times a day and 6 capsules at bedtime. The immune system is at its most active time period of 11:00 p.m. to 1:00 a.m., which coincides with the liver meridian.

# References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