

Reality Bites*
Chemo, cancer and your teeth

**by Brian Alexander, a contributing editor of LIVESTRONG Quarterly magazine, spring 2011.*



Seattle dentist Mark Schubert, DDS, MSD hadn't been in practice long when he was confronted with an unusual case: A patient, with poor dental health had been treated for cancer with a stem cell transplant. His *new* immune system (obtained from the transplant) *was attacking his body*. He was suffering from graft-versus-host disease (GVHD). This is a common complication of transplants, but Dr. Schubert was inexperienced at providing oral care to transplant patients and there was virtually nothing in the medical literature at the time.

In a bind, Schubert extracted all the patient's teeth to relieve his pain. The result was very dramatic – the GVHD went away. Schubert tells the story to illustrate something many cancer survivors don't realize and many oncologists and dentist do not fully appreciate: **Oral health is a vital element in cancer care and survivorship.**

According to Schubert, who has since become a well-known figure in the field through his work with the Seattle Cancer Care Alliance, there may be only about 140 or so experts like him in the country. **They know how important oral health is to cancer treatment and recovery and they want everybody else to understand, too.**

This can be tough because different cancers and different treatments have varying consequences for oral health; the issue is more complex than it might seem. But the root of the oral fallout from cancer almost always has something to do with how the environment of the mouth has changed.

Saliva, a miracle of multipurpose function, lubricates the mouth, kick-starts the digestive process, maintains oral pH (acid balance) to keep from dissolving, helps clear food particles from teeth, and has antibiotic properties. But the salivary glands are often severely damaged or destroyed by radiation, leading to xerostomia, *or dry mouth* – a serious quality-of-life issue.

Our dentists at HDC are well aware of the effects of xerostomia on oral health, since HIV/AIDS hinders the performance of the salivary glands. "We are seeing many patients who had or have had cancer treatments. The results of cancer treatment can vary from xerostomia to different degrees of soreness, and are fairly similar to the results of HIV medications. Maintaining good home care and palliative care for oral mucosa affected by cancer treatment is essential", states our Dental Director, Dr. Mirela Giurgiu.

Your mouth is not only home to your smile; it is your "energy portal" to the world – and thus the world's portal to your body. Schubert's GVHD patient was suffering because his bad teeth had become repositories for infection. Those infectious bacteria affected his whole body, which caused his *new* immune system to react. When Schubert pulled the teeth, he eliminated the infection and the survivor's immune system settled down.



Beyond the mouth, oral health has a big impact on our overall health. Regular flossing and brushing, for example, have been shown to lower the risk of cardiovascular disease. Likewise, there are steps cancer patients and survivors

can take to not only maintain oral health, but to boost the effectiveness of cancer therapy, too.

The first and perhaps most important step is prevention. Ideally, before cancer treatment even starts, a patient should see a dental professional familiar with prophylactic mouth care. Schubert strongly endorses pre-treatment, but recognizes a problem. “We need the awareness on the oncology team, a willingness to participate, or the problem quickly becomes that not every dentist knows what to do,” he says. Each patient’s needs may be different depending on treatment. Best to seek out an expert or, at least insist on coordination between the cancer care team and the oral health professional.

Survivors also should be aware of how their diets may have changed. Many find comfort in certain foods, such as carbohydrates. Carbs may soothe, but they also help feed cavity-making bacteria. Of course, survivors (and all of us) should see a dentist regularly, more often if they have ongoing symptoms such as dry mouth. A dentist can not only check for cavities, but can prescribe treatments such as fluoride applications to prevent cavities, and drugs to stimulate the salivary glands. With this good care, survivors will truly be able to celebrate their return to health.

The Dental Oncology Education Program (doep.org/home.html), spearheaded by Kathleen Rankin, DDS, based at Baylor College, features a complete handbook geared for professionals (but understandable by lay people), complete with possible side effect and treatments for oral complications of cancer. The National Cancer Institute’s helpful information on matters of the mouth is at cancer.gov/cancertopics/pdq/supportive_care/oral_complications. It was co-authored by Mark Schubert, DDS, MSD.