

## **Palliative Radiation And Cancer Care**

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There are many different types of palliative treatments. Palliative treatment means that treatment is not intended to cure but rather to relieve pain and suffering. There are many kinds of palliative treatments including surgical, chemotherapeutic and radiation for cancer patients. Even hospice care can be construed as palliative in the cancer world.

Palliative does not offer a chance of cure but rather comfort. Yet there are many reasons for palliative care. They are physical, psychological, social as well as spiritual. It is reasonable often to treat people with cancer knowing that cure is not possible but that improvement of symptoms is. Part of the informed consent process includes discussing risks, benefits and alternatives including of course no treatment.

Surprisingly though, patients I have treated over the years with palliative intent sometimes do much better than expected. Several patients I routinely see were treated with so-called palliative intent more than seven years ago. Yet, they remain cancer free today. Perhaps we eliminated the last nodule of metastatic cancer. All hope for this, of course.

A recently reported study by Huang and published in the prestigious Journal of Clinical Oncology evaluated factors predicting and affecting the use of palliative radiation in Ontario Canada. One must realize that there are many differences between Canadian and U.S. medicine. For that reasons and others, one cannot assume there are no differences.

There are many indications to use radiation in a palliative setting. These include pain from bone metastases (cancer having deposited itself in the bone) treatment to improve neurologic function of those with brain or spinal cord metastases (cancer spread to the brain or spinal cord) or patients with local symptoms such as those with lung cancer having cough, shortness of breath, hemoptysis (blood in the sputum) and infection. It has been estimated that about half of the patients being treated in the United States are done so with palliative intent.

In Ontario there are no direct payments for radiation oncology. So there are no financial incentives or disincentives to get radiation. Yet, Canadians have noted that despite lack of financial barriers access to the system is not always optimal. In the United States that differs also. Usually here physicians are paid for their services.

Authors in this study note that, "The rate of radiotherapy use in initial treatment of cancer has been shown to be generally low by international standards and very low indeed in areas remote from the regional cancer centers. Furthermore, increasing demand for radiotherapy, coupled with resource limitations, led the development of long waiting lists for radiotherapy in many Ontario cancer centers in the late 1980's, a problem that has since persisted despite large capital investments in the system in 1990's."

"Waiting times for radiotherapy in many parts of the province have often been longer than it is considered acceptable by the majority of radiation oncologists, and it has been suggested that waiting lists have become an implicit form of rationing. There is some evidence that the use of palliative radiation therapy at Ontario cancer centers may have diminished because of this. Given the importance of palliative radiation therapy and the symptomatic care of patients with advanced cancer and these general concerns about adequacy of access to radiotherapy in Ontario, this study was undertaken to describe the use of palliative radiation therapy in Ontario and to identify aspects of health care systems that influence access to palliative radiation therapy."

Ontario is comprised of eleven million people. There is a regional cancer registry that collects information about those with cancer. Radiation records are available at eight regional cancer

centers in Ontario and the Princess Margaret Hospital in Toronto. There are computerized lists of all courses of radiation there. This was the basis of evaluation.

The authors studied 193,253 cancer patients who died of cancer. Included in these were 51,019 patients who had at least one course of palliative radiation therapy within two years prior to death. This was about 26% of all people dying of cancer in those years. The majority of those treated, or 61.7%, had only one course of palliative radiation therapy in their lifetime. While 22.9% had two courses and 15.4% had three or more courses.

The most common indication for palliative radiation was cancer that had spread to the bones. This occurred in 44% of all the cases described. Other frequent sites of radiation for palliation included the chest in 20%, the brain in 14%, abdomen and pelvis in 6%, lymph nodes in 5%, and skin superficial tissues in 2%. The typical patient had six radiation treatments per course. This broke down to 6.6 fractions to the brain, 6.5 fractions to the chest in people with lung cancer and 3.8 fractions to the bone.

Thirty four and a half percent of males younger than 40 years old had palliative radiation while only 13.7% of males older than 80 years had radiation. In females, 42.5%, less than 40 years had palliative radiation compared to 8.9% of those 80 years or older.

More than 30% of patients with breast, lung or genitourinary cancers had radiation. Only 20% to 30% with head and neck cancer had palliative radiation and were less for other groups. Head and neck cancers are those of the upper respiratory and digestive tracts.

In the genitourinary category 40% of men with prostate cancer had palliative radiation; 26.4% with kidney cancer had palliative radiation and 20% with bladder cancers. Of patients with gastrointestinal cancers, those having rectal cancers had palliative radiation 24.5% of the time; colon cancer 9.7%; stomach cancer 8.5%, and pancreas 4% of the time.

For hemopoietic diseases, myeloma patients had palliative radiation 28% of the time, Hodgkin's disease 10.7% of the time, Non-Hodgkin's lymphoma 20.5% of the time and leukemia 5.1%. Patients who were diagnosed in a hospital that had a cancer center or located in a county with a cancer center had a higher rate of palliative radiation than those who did not. Overall younger patients - those 40 years or less were 4.5 times more likely to receive palliative radiation than those older than 80. Patients from wealthy communities were 1.17 times more likely to receive palliative radiation than those from poor sections.

The researchers noted, "We believe that the strong negative association observed between age and the use of palliative radiation therapy cannot be fully explained by the decreasing functional status with aging. There is evidence that the decline in the use of palliative radiation therapy for advanced breast cancer, prostate cancer and myeloma is more rapid than the decline in functional status with age. Moreover, a number of clinical studies have demonstrated that radiotherapy is tolerable for older patients and that advanced age alone does not necessarily make a patient ineligible for palliative radiation therapy."

"It is also unreasonable to assume that the difference in the use in palliative radiation therapy by age would mainly be attributable to the variation of treatment preferences among different age groups, although limited studies in this field are available for reference. Given the absence of other plausible explanations for the age effect, we postulate that older patients may be treated differently from young patients for reasons unrelated to patients' needs and wishes, and this is borne out by evidence that the referral rate for palliative radiation therapy by primary caregivers in the oldest patients is only one-half of that in the young patients of this population."

Furthermore, it was found, "Patients who lived in a county without a cancer center were 24% less likely to be treated with palliative radiation therapy."

Educating the medical establishment, patients and their families about the potential benefits of palliative therapy remains a key ingredient. Certainly, here radiation facilities are available to treat those with metastatic and symptomatic cancers. Articles like this are useful to instruct the population about treatment options. Others use medical libraries or the internet to obtain up-to-date information. One's physician is an important source of information.

One can easily call and contact a radiation oncologist about potential benefits, risks and alternatives of palliative radiation therapy.

At our institution we have many patients from Canada who seek care. Many treatment options exist even for the patient with incurable cancer. One need only ask.

Radiation and radiosurgery certainly can help people – even palliate symptoms. Radiation has been used for many years to control pain, bleeding, obstruction and other complications from cancer. While not every patient can be cured, many patients can gain benefit. Gaining benefit can mean improved quality of life and possible even length of life.

Stereotactic radiosurgery offers more precise radiation and allows us to quickly deliver precise high-dose radiation to areas of concern. These areas may be causing pain, bleeding or suffering. We have a group of experts to review each case and have set up a hot line to answer your questions – 212-CHOICES, or e-mail questions to [gil.lederman@rsny.org](mailto:gil.lederman@rsny.org). We have seminars open to the public on a regular basis to discuss new treatment technologies.