HOT SPOT

The Newsletter of the Rapid Response Radiotherapy Program
of the Odette Cancer Centre

Sunnybrook ODETTE CANCER CENTRE
A Cancer Care Ontario Partner

Volume 13, Issue 3, August 2011

Editorial

By Dr. Toni Barnes, MD, FRCP(C)

I hope everyone has been enjoying the summer! In our August issue of **Hot Spot**, one insert features Dr. Simron Singh presenting the new multidisciplinary Neuroendocrine Clinic at the Odette Cancer Centre, and he reviews the latest advances in the treatment of pancreatic neuroendocrine tumours. The insert by Dr. Carlo DeAngelis reviews the use of fentanyl for breakthrough pain. The ethics issue from Mr. Blair Henry examines the impact of medical error on hospital staff. The research article by Dr. Kristopher Dennis describes the newly opened randomized control trial of dexamethasone versus placebo in the prevention of flare pain following palliative radiotherapy for painful bone metastases. Dr. Karen Fergus reports on the role of the psychologist in the cancer post-treatment period. Dr. Patrick Cheung presents the new oligometastases stereotactic radiotherapy study at the Odette Cancer centre and gives guidelines for referring patients. Dr. Margaret Fitch writes on "distress" being the sixth vital sign and the importance of monitoring patients' symptoms during the cancer journey. Finally, Dr. Ewa Szumacher provides a list of upcoming CME events.

Odette Cancer Research Program welcomes new director

Dr. Greg Czarnota, an Imaging Scientist at Sunnybrook Research Institute (SRI) and Radiation Oncologist at Sunnybrook, has been appointed Director of the Odette Cancer Research Program. He had served as the interim director since November 2010. Dr. Czarnota's work focuses on using ultrasound imaging for cell-death detection and as a new anti-vascular cancer therapy. As director, Dr. Czarnota will aim to strengthen connections between the Odette Cancer Program and SRI, toward providing cancer patients with leading edge, evidence-based care. Sunnybrook Research Institute recruited Dr. Czarnota in 2005, after he completed first his PhD, and then his medical training and residency at the University of Toronto. Dr. Czarnota is an Associate Professor at U. of T. in the departments of medical biophysics and radiation oncology.

Hot Spot congratulates our colleagues

1. **Professor S. Lawrence Librach** for his appointment as the Sun Life Chair in Bioethics and Director of the Joint Centre for Bioethics at the University of Toronto, effective July 1, 2011. Dr. Librach will continue his work at the Temmy Latner Centre for Palliative Care focusing on education, quality improvement, and pain management.
2. **Dr. Margaret Fitch** for being awarded by the National Council of Canadian Cancer Society the prestigious Award for Excellence in Medicine and Health. This recognizes her longstanding continued and pioneering work in survivorship and psychosocial oncology.
3. **Drs. Monica Branigan, Amna Husain** and **Jeff Myers** from the Department of Family & Community Medicine for their promotion to the rank of Associate Professor at the University of Toronto, effective July 1, 2011.

In this issue of Hot Spot:

Medical error and its impact on staff

By Blair Henry, Ethicist, Sunnybrook Health Sciences Centre

In the May 2011 issue of **Hot Spot**, Dr. Hebert outlined the serious and fatal outcomes resulting from a delayed disclosure of potential errors in a hormone receptor status test conducted of women who had received a breast biopsy in Newfoundland between 1997 and 2005. As Dr. Philip Hebert noted, this was a large-scale adverse event where hundreds of patients were harmed and many died, as a result of not being given alternative treatments, which may have placed their cancer into remission. These patients and their families are considered to be the "primary" victims of medical error and they require a compassionate, transparent and open encounter with the medical team throughout the disclosure process and follow-up stages.

In this article, I have tried to pick up on the theme of medical error, but turned the focus around to look specifically at its secondary victims: the clinical team directly involved with the care of the patient in which the error occurred. In most situations, the patient and family rightly become the focus of attention following an event. However, the team directly involved needs also to be given support by the hospital or health centre involved.

My interest in writing on the issue of medical error and its impact on the staff comes from recent debriefings with staff following a couple of serious medical errors at our own hospital—and seeing firsthand the impact of these events on the people involved.

I was curious to learn more about how frequently error and serious events happen within the health care setting. I came across an article, published in the Canadian Medical Association Journal (Baker et al., 2004), on the incidence of adverse events in acute care hospitals in Canada. The study concluded that as many as 87,500 patients admitted annually to Canadian acute care hospitals experience an adverse event. This translates to an odds ratio of one in 13 for adult patients admitted to a Canadian hospital for encountering an adverse event during their stay! Regrettably, of this total, 24,000 patients die each year due to "adverse events."

Medical errors or serious adverse events rarely have a malicious or direct intentionality to them. Typically they are a result of a system or human factor error that is not intentional and, yet, can result in grave consequences to patients and families. A famous research study conducted by Harvard Medical School (Brennan et al., 1991) determined that more than half of all injuries caused by medical management (in other words, not caused by the patient's initial injury or disease) were preventable, and another quarter of those incidents were caused by negligence.

The statistics I've quoted could translate into a harsh reality at the level of care provision; namely, that every week hundreds (approximately 460 based on the CMAJ study) of Canadians die due to an adverse event—of which up to 50% could have been prevented! This sobering statistic points to a significant stressor for all clinical staff involved and at a much higher frequency rate than I'd originally suspected.

A highly recommended read for those interested in the downstream effects on staff who are involved with medical error would be Dr. Patrice Weiss's article, Medical Errors and the Second Victim (Weiss, 2011). In this article, Dr. Weiss addresses the concern some staff encounter when dealing with the outcomes of a medical error: namely, feeling singled out, agonizing over the events, replaying of the event many times over in their mind, and seriously questioning their own competency. Those without healthy coping mechanisms in place may turn to more dysfunctional responses to protect themselves from this psychic assault.

Much of what has been written on how errors impact staff has generally focused on medical staff (i.e., residents) (West, 2008) and, therefore, more research is needed to better understand the impact to nursing and allied health staff who also work at the front lines and are often intimately involved in the events leading up to the medical error/adverse event. In the wake of recent events that happened at Sunnybrook, we used a debrief model to bring staff members together shortly after the event to provide a more formal emotional support geared towards avoiding the more counterproductive responses to stress. A safe place needs to be provided for the staff to express the typical emotional responses to medical error: guilt, shame, distress and depression. The more serious the patient outcome is, and the higher the degree of personal responsibility to the event the staff may feel are good indicators that reliance on informal supports may be insufficient to help staff deal with the after effects of a medical error or adverse event.

My intention, in writing this article, is not to take attention away from what should be two fundamental priorities in health care when it comes to serious adverse events: 1) Continued vigilance by health care providers, in cooperation with patients and families, to drive forward important quality and safety initiatives to see the numbers of serious adverse events reduced within the health care system. Though limited in its scope, a small U.S. study on follow-up to quality and safety initiatives has shown only a very modest impact on rates of medical error (Landrigan et al., 2010); and 2) To ensure each health care facility has appropriate policies and procedures in place that support timely, honest and sensitive disclosure to patients and families in the wake of medical errors and serious adverse events. However, my hope would be that a third priority might be realized: 3) Given the inevitability that medical errors will occur and knowing the impact this can have on staff, that health care facilities have programs and supports in place to assist staff in healthy coping strategies in times when errors do occur.

References

Baker, G.R., et al. (2004, May). The Canadian Adverse Events Study: The incidence of adverse events among hospital patients in Canada. *CMAJ, 170*(11).

Brennan, T.A., et al. (1991, Feb.). Incidence of adverse events and negligence in hospitalized patients. Results of the Harvard Medical Practice Study I. *NEJM, 324*(6) 370–6.

Hebert, P. (2011). Disclosure delayed. *Hot Spot, 13*(2), 3.

Landrigan, C.P., et al. (2010, Nov.). Temporal trends in rates of patient harm resulting from medical care. *N Engl J Med, 363*, 2124–2134.

Weiss, P.M. (2011, Feb.). Medical Errors and the Second Victim. *The Female Patient, 36*, 29–32. Retrieved from www.thefemalepatient.com

West, C. (2008, Jan.). *How do providers recover from errors?* U.S. Department of Health and Human Services. Agency for Healthcare Research and Quality. Retrieved from http://webmm.ahrq.gov/case.aspx?caseID=167

Preventing radiotherapy-induced pain flare with dexamethasone

**By Kristopher Dennis, MD, FRCPC, Research Fellow,
Rapid Response Radiotherapy Program, Sunnybrook Odette Cancer Centre**

External beam radiotherapy is the standard localized treatment for the palliation of uncomplicated bone metastases. More than two-thirds of patients derive pain relief from treatment, which can improve their level of functioning and quality of life. Treatment is generally well tolerated, and when side effects occur they are usually due to irritation of adjacent organs and tissues by the therapeutic beams.

However, new research has shown that up to 40% of patients receiving palliative radiotherapy for bone metastases may develop a 'pain flare'. This is a sudden and transient worsening of pain at the site of the irradiated bone metastasis that typically occurs in the first five to 10 days following treatment. A pain flare is distressing, it worsens quality of life, and it can deter a patient from receiving palliative radiotherapy for subsequent painful bone metastases. A pain flare is usually treated with a temporary increase in opioid analgesics, which can also lead to bothersome side effects. Although the mechanisms underlying pain flare are not completely understood, it is postulated that there is a surge in the release of inflammatory mediators following irradiation that contributes to the increased level of pain in predisposed patients.

Dexamethasone is a synthetic glucocorticoid with powerful anti-inflammatory properties. Led by investigators from the Odette Cancer Centre, an international phase II study demonstrated that a short course of low-dose prophylactic dexamethasone given at the time of palliative radiotherapy for bone metastases reduced the incidence of pain flare. The beneficial effect of dexamethasone was believed to be due at least in part to its anti-inflammatory properties and its ability to modulate cytokine-related processes. Dexamethasone was safe and well tolerated in this setting.

The National Cancer Institute of Canada Clinical Trials Group has chosen to use its infrastructure to support this important research into pain flare. The NCIC CTG SC.23 phase III double-blind randomized placebo-controlled trial, which opened in May 2011 at 16 Canadian centres, will definitively compare the effectiveness of five-day courses of prophylactic dexamethasone and placebo for the prevention of pain flare. Patients planned to receive a single 8Gy dose of palliative radiotherapy for up to two painful bone metastases will be eligible. Accrual is expected to take 2.5 years and final analyses and reporting are expected in 2014.

The primary objective is to compare the incidence of pain flare between the two arms from the time of irradiation until 10 days following treatment. Secondary objectives include comparing the incidence of pain flare at specific points in time and documenting changes in quality of life. A companion correlative biology study using patient saliva and urine samples will also investigate whether pain flare is associated with a surge of inflammatory cytokines, or with baseline levels of bone turnover markers. It will also investigate whether failure of dexamethasone prophylaxis is due to rapid metabolism of the drug in certain patients.

If dexamethasone safely reduces the incidence of pain flare in the SC.23 trial, then patients and radiation oncologists will have a standard, evidence-based therapeutic solution for preventing this common and troublesome side effect of treatment.

Psychology's role in the post-treatment period

**By Karen Fergus, PhD, CPsych, Clinical Psychologist, Patient and Family Support Program,
Sunnybrook Odette Cancer Centre; Assistant Professor, Department of Psychology, York University**

Once the active phase of treatment is complete, there is another equally significant leg to the cancer journey. Some call this period 'survivorship,' while others think of it more practically as 'recovery' or simply 'life after cancer.' However one chooses to term it, the post-treatment period poses unique challenges affecting most life domains. It is what Magee and Scalzo (2006) referred to as "picking up the pieces" in their book of the same title. Although psychological interventions may influence many, if not all aspects of survivorship, the focus of this article is on the emotional and existential aftermath of cancer and the role psychologists play in facilitating the process of psychological recovery.

The patient's and family's primary focus during treatment is on managing the side effects and life disruptions caused by the illness to the best of their abilities. This period is what I think of as the 'nose to the grindstone' stage of the illness. Patients often adopt a task-focused approach to coping—doing what needs to be done in order to get through treatment while maintaining their other responsibilities as well as possible. The intensity and routine of treatment, combined with the intrusive side effects, ensure that the medical aspects of the illness are foregrounded. Thus, although the physical and emotional demands on the person are experienced simultaneously, the deeper emotional repercussions associated with cancer often get placed on the back burner for a period of time.

In many ways, this kind of emotional compartmentalization makes sense; treatment is, after all, a matter of survival. No one has an infinite set of coping resources, and so lines get drawn whether we are aware of it or not. Once active treatment is over, however, a lot of time and energy is freed up to address, indeed even to notice, some of the other impacts that cancer has had on the person.

One of the first challenges patients meet after active treatment ends is their own often too-high expectations about what recovery from cancer should be like. Understandably, many are eager to 'put cancer behind' them and resume their pre-cancer lives. However, on a concrete level, physical limitations such as pain, fatigue and loss of energy make this goal difficult to achieve—at least in the short term. On an emotional and more enduring level, patients often state that they don't feel like the same person any more. This shift in identity is related to permanent or prolonged bodily changes such as unsightly scars, or living with an ostomy; the loss of a breast, testicle, or prominent facial feature; or due to physical impairment such as erectile dysfunction or loss of fertility. Each of these changes has unique and profound impacts on a person's sense of self, future, and personal efficacy.

Another challenge following treatment is the feeling that one is no longer working as actively and directly to eradicate the disease. Patients often will say that as difficult as the acute phase of treatment was, there was some reassurance in knowing that everything possible was being done to rid them of their disease. Without the protection of treatment, patients often feel 'cut adrift' or 'out on a limb', as they enter the follow-up phase of care. It is at this juncture that existential concerns become particularly pronounced.

Stereotactic radiotherapy for oligometastases: An evolving treatment option and new clinical trial at Sunnybrook Odette Cancer Centre

By Dr. Patrick Cheung, MD, FRCPC, Staff Radiation Oncologist, Sunnybrook Odette Cancer Centre

Stereotactic radiosurgery (SRS) and fractionated stereotactic radiotherapy (SRT) is an established non-invasive treatment option for a solitary or limited number of brain metastases. More recently, stereotactic *body* radiotherapy (SBRT) has become a treatment option for extracranial tumours. Like SRS/SRT of the brain, SBRT allows us to deliver very intense doses of radiation in a very focused manner, where the intent is eradication or long-term local control of relatively small tumour targets in the body. At the Sunnybrook Odette Cancer Centre, there are now SBRT programs for lung, liver, and spine tumours, in addition to the long-standing SRS/SRT program for brain tumours.

The most common indication for SBRT has been for solitary tumours. Examples include stage 1 lung cancer, or a solitary liver metastasis. In such scenarios, SBRT can be an effective alternative to surgical resection and radiofrequency ablation (RFA), where the goal is to eradicate a single area of known malignancy.

However, there has been increasing interest in using stereotactic radiotherapy in patients with "oligometastatic" disease, where there are a limited number of metastases (two to five) seen on imaging. If one believes that metastases can seed further metastatic deposits, then treating the known areas of disease aggressively may be beneficial for some patients in the long term, similar to surgical metastectomies that are performed in some patients with limited metastatic disease. This is becoming an active area of research in the radiation oncology field. We are receiving an increasing number of referrals for such a situation, usually for younger patients who desire a more "aggressive" approach for the treatment of their metastases. This approach of trying to eradicate visible areas of metastases is very different from classical "palliative" low-dose radiotherapy, where the intent is simply to reduce or prevent symptoms from metastatic disease.

At the Sunnybrook Odette Cancer Centre, we have just opened a new clinical trial within our Rapid Response Radiotherapy Program (RRRP) that explores the use of stereotactic radiotherapy in treating patients with five or fewer metastatic tumours. Below is a brief summary of the eligibility criteria.

- Pathologic diagnosis of a cancer (excluding leukemia, lymphoma, myeloma, primary CNS cancers, and germ cell cancers).
- Presence of five or fewer metastases as seen on conventional staging investigations.
- Baseline staging investigations complete within 30 days of study entry (CT/MRI brain, CT chest, abdomen, pelvis, bonescan, and/or PET-CT).
- Metastases confined to the lung, liver, brain and/or bone.
- Presence of three or fewer metastases in each organ system.
- All areas of gross tumour amenable to stereotactic radiotherapy (clinically felt to be safely achievable, meeting established radiation dose constraints for organs at risk).
- Primary tumour treated with no evidence of local recurrence, or planned radical treatment to primary tumour in patients who present with oligometastatic cancer at initial diagnosis.
- Performance status of ECOG 0-1.
- Written consent obtained from patient.

Endpoints of interest include toxicities, quality of life, local control of the treated tumours, and probability of developing new sites of metastases in the future.

At this time, metastatic lymphadenopathy and adrenal metastases are not eligible. Ideally, tumour targets should be relatively small (<5 cm in the lung and liver). All potential patients will be discussed at our "Oligometastases Tumour Board" to review the clinical history and imaging investigations and to determine whether patients are eligible for study entry. Once deemed to be eligible for inclusion into the study, the exact sequence and nature of treatments will be determined for each patient. Close collaboration with each patient's oncologist(s) will be necessary to coordinate the radiotherapy with any other potential therapy. Depending on the clinical scenario, stereotactic radiotherapy can be delivered as a "debulking" treatment prior to systemic therapy, as consolidation treatment to areas of residual disease after systemic therapy, or as the sole treatment in patients who have had previous systemic therapy or who are felt to be not fit enough or not appropriate for systemic therapy. For patients who are initially diagnosed with stage 4 cancer with oligometastases, stereotactic radiotherapy of the metastatic sites can be performed either before or after radical treatment of the primary tumour.

If you have a patient who may be eligible for this trial, you can fax a referral to our New Patient department at 416-480-6179, indicating "oligometastases study" on our referral form. Alternatively, you can talk to one of the study investigators directly by phone, and we will be glad to answer any questions about the study or our stereotactic radiotherapy program.

Patrick Cheung: 416-480-6165
Arjun Sahgal: 416-480-5329
Hans Chung: 416-480-4834

Learning to live with uncertainty is a common focus for psychological intervention in the transition from 'patient-hood' to survivorship. Frank (1991) describes the 'loss of innocence' that accompanies a cancer diagnosis due to the fact that we live in a death-denying culture where the norm is to suppress thoughts of mortality. In many ways there is no easy solution to living with such a 'loss of innocence.' Coping as effectively as possible with this altered worldview often entails developing a new attitude toward life and living. The shape this takes will, of course, vary from individual to individual, but may entail such shifts as reprioritizing how one spends one's days, picking up dreams or goals that got left behind, and/or focusing on nurturing one's most important relationships.

Fears of recurrence are the cognitive manifestation of living on a day-to-day basis with the possibility that cancer can come back. One of the *sine qua non* features of cancer, as an illness, is that there are never any guarantees that it is over and done. There are only probabilities. Thus, it is often hard to shake the 'what if' thinking and bodily vigilance so common during the post-treatment period. Cognitive and mindfulness-based strategies for managing intrusive, fearful thoughts can be powerful tools in coping with such existential uncertainty. One woman with a cancer history described this as cultivating 'a mental discipline.'

At a broader level, psychologists assume the role of helping patients integrate the traumatic life event of cancer into the larger context of their lives. The diagnosis and treatment of cancer imposes what Bury (1982) referred to as a biographical disruption on a person's life. Through the dialogic process of counselling and psychotherapy, this breach may be mended. Each patient need not go about 'picking up the pieces' on his or her own. By reflecting on one's history in relation to an altered present due to cancer, patients are more able to reinstate a sense of coherence in their lives and move forward.

References

References are available upon request.

Distress is the sixth vital sign

By Margaret I. Fitch, RN, PhD

Cancer and its treatment have more than a physical impact. There are emotional, psychosocial, spiritual, and practical consequences as well for the individuals diagnosed with the disease (Fitch, 2008). These may occur at any time throughout the person's experience with the illness, as patients confront the reality of their situation and seek ways to cope with what is happening to them. Distress is a common response for both patients and families across the cancer journey.

Distress is conceptualized as an unpleasant experience of an emotional, psychological, social or spiritual nature that interferes with the ability to cope with cancer (NCCN, 2010). It extends along a continuum, ranging form common normal feelings of vulnerability, sadness, and fears to problems that can become disabling such as depression, anxiety, social isolation, and existential crisis (NCCN, p. 5). Although all cancer patients experience distress, approximately 35% to 45% of individuals diagnosed with the disease experience a significant level of distress and would benefit from referral to an appropriate supportive care service and tailored intervention. If unchecked, this distress can result in poor quality of life, poor adherence to treatment, and increased emergency and office visits (Carlson & Bultz, 2004).

Identifying and responding to this distress is considered a critical aspect of quality cancer care (Carlson & Bultz, 2003; Jacobsen, 2009). Recently, Accreditation Canada has incorporated the expectation of routine screening for distress as a standard of care within the Qmentum Program for Cancer Care and Oncology Services (**www.accreditation.ca/accreditation-programs/qmentum**). Early identification of distress has the potential for preventing its escalation and reaching significant levels.

Over the past several years, experience has been growing in terms of how best to incorporate a standardized approach to screening for distress into routine cancer practice. Guides for implementing a programmatic approach are available on the websites for the Canadian Partnership Against Cancer (**http://canadianpartnershipagainstcancer.org**) or Cancer Care Ontario (**www.cancercare.on.ca/toolbox/symptools**).

First, using a validated, standardized screening tool is important for consistent measurement and monitoring over time. The Cancer Journey Action Group has been providing national leadership for this work and has recommended the use of the Edmonton Symptom Assessment System (ESAS) coupled with the Canadian Problem Checklist (see Figure 1). The ESAS helps to identify symptoms that may be of concern to the patient while the Problem Checklist items focus on psychosocial and practical concerns. Scores of seven and above on the ESAS items constitute a need for immediate assessment and intervention. In essence, the scores become a starting point for the conversation with the patient about what is of concern and what assistance the person would like to receive at that point in time. A critical aspect of implementing screening for distress is determining which health care professional will be designated to review and respond to the scores on a clinic-by-clinic basis.

Second, follow-up with regards to elevated scores is imperative. This follow-up will need to be tailored to the patient and the available resources. An important step in implementing a programmatic approach to screening for distress requires the staff in cancer programs to determine what resources are available and how current gaps in services can be filled through new partnerships. In many instances the partnerships may need to be with community-based cancer support agencies such as Wellspring, Gilda's, Willow, and other similar organizations.

Third, although interventions need to be tailored to the patient and the local situation regarding resources, they also need to be based on current evidence. The Cancer Journey Group has produced a number of evidence-based practice guidelines regarding supportive care topics for practitioners in cancer care. These guidelines not only contain summaries of the current research evidence, but also user-friendly algorithms (short one-page summaries) outlining the assessment and intervention options. Guidelines cover topics such as anxiety, fatigue, depression, sleeplessness, pain, dyspnea, and nausea and vomiting for palliative patients. A guideline for psychosocial care of survivors has also been produced. These documents are available on CPAC and CCO websites (see above). In addition, Cancer Care Ontario has developed applications for handheld devices to allow easy access to the algorithms wherever clinicians and patients are located.

Ultimately, screening for distress and responding effectively will require an interprofessional team effort and the team will need to include a vision for working beyond the walls of an institutional cancer program.

Figure 1. ESAS and Canadian Problem Checklist

Screening for Distress

Edmonton Symptom Assessment System:

Date of Completion:_____ Time:_____ Completed by: ❑ Patient ❑ Family ❑ Health Professional ❑ Assisted by family or health professional

Please circle the number that best describes:

No pain	0	1	2	3	4	5	6	7	8	9	10	Worst possible pain
Not tired	0	1	2	3	4	5	6	7	8	9	10	Worst possible tiredness
Not nauseated	0	1	2	3	4	5	6	7	8	9	10	Worst possible nausea
Not depressed	0	1	2	3	4	5	6	7	8	9	10	Worst possible depression
Not anxious	0	1	2	3	4	5	6	7	8	9	10	Worst possible anxiety
Not drowsy	0	1	2	3	4	5	6	7	8	9	10	Worst possible drowsiness
Best appetite	0	1	2	3	4	5	6	7	8	9	10	Worst possible appetite
Best feeling of well-being	0	1	2	3	4	5	6	7	8	9	10	Worst possible feeling of well-being
No shortness of breath	0	1	2	3	4	5	6	7	8	9	10	Worst possible shortness of breath
Other problem	0	1	2	3	4	5	6	7	8	9	10	

Canadian Problem Checklist: Please check all of the following items that have been a concern or problem for you in the past week including today:

Emotional:
❑ Fears/Worries
❑ Sadness
❑ Frustration/Anger
❑ Changes in appearance
❑ Intimacy/Sexuality

Practical:
❑ Work/School
❑ Finances
❑ Getting to and from appointments
❑ Accommodation

Informational:
❑ Understanding my illness and/or treatment
❑ Talking with the health care team
❑ Making treatment decisions
❑ Knowing about available resources

Spiritual:
❑ Spiritual and/or religious concerns
❑ Faith

Social/Family:
❑ Feeling a burden to others
❑ Worry about family/friends
❑ Feeling alone

Physical:
❑ Concentration/memory
❑ Sleep
❑ Weight

References

References are available upon request.

Continuing Medical Education 2011–2012

By Ewa Szumacher, MD, FRCP(C)

Continuing Medical Education (CME) can update health care professionals on the latest advances for modifications to their clinical practice. At the request of the CME organizers, Hot Spot will list the national and international CME activities in palliative medicine that are of interest to our readers. Please forward details of the CME activities to: **Ewa.Szumacher@sunnybrook.ca**

- **September 14–17, 2011**
  25th Canadian Association of Radiation Oncology (CARO) Annual Scientific Meeting, Winnipeg/Manitoba, Radiation Oncology
  E-mail: **caro-acro@rcpsc.edu**
  http://www.caro-acro.ca/

- **October 2–6, 2011**
  American Society for Radiation Oncology's (ASTRO) 53rd Meeting, Miami/Florida, Radiation Oncology
  http://www.astro.org/Meetings/AnnualMeetings/index.aspx

- **October 9–12, 2011**
  19th International Congress on Palliative Care, Montreal, Quebec, Other Specialties
  E-mail: **secretariat@pal2012.com**
  http://www.palliativecare.ca/en/index.html

- **October 27–29, 2011**
  2nd Annual Canadian Grief & Bereavement Conference, Toronto/Ontario, Other Specialties
  E-mail: **registration@griefconference.org**
  http://www.griefconference.org/

- **November 27–30, 2011**
  Canadian Cancer Research Conference, Toronto/Ontario, Oncology
  E-mail: **patricia.falzon@oicr.on.ca**
  http://www.oicr.on.ca/events/ccrc/index.htm

- **November 29–30, 2011**
  Breast Cancer Controversies 2011, United Kingdom/London, Obstetrics/Gynecology, Oncology Surgery
  E-mail: **breastscreening@kenes.com**
  www.breastcancermeeting.co.uk

- **December 2, 2011**
  Best of Oncology Conference, Toronto/Ontario, Oncology
  E-mail: **info@oncologyeducation.ca**
  http://www.regonline.ca/builder/site/Default.aspx?EventID=954549

- **December 6–10, 2011**
  34th Annual San Antonio Breast Cancer Symposium, Texas/San Antonio, Oncology
  E-mail: **sabcs@uthscsa.edu**
  www.sabcs.org

- **February 23–25, 2012**
  American Psycho-social Oncology Society (APOS) 9th Annual Conference, Miami/Florida, Oncology, Supportive Care
  E-mail: **info@apos-society.org**
  http://www.apos-society.org

- **March 21–24, 2012**
  8th European Breast Cancer Conference, Austria/Vienna, Oncology, Other Specialities
  E-mail: **ebcc8@ecco-org.eu**
  www.ecco-org.eu/conferences-and-events/ebcc-8/page.aspx/2163

- **May 31–June 1, 2012**
  New Frontiers in Persistent Pain, France/Paris, Pain Management
  E-mail: **events@abcam.com**
  www.abcam.com/index.html?pageconfig=resources&rid=12881

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Founders: Dr. L. Andersson, Dr. C. Danjoux

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Editorial and Financial Manager: Ms. K. Facchini

Odette Cancer Centre,
Sunnybrook Health Sciences Centre,
2075 Bayview Avenue, Toronto, ON M4N 3M5
Tel: 416-480-4998, Fax: 416-480-6002
E-mail: **kristina.facchini@sunnybrook.ca**
Website:
http://www.sunnybrook.ca/content/?page=2341

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Fentanyl for breakthrough cancer pain (BTCP)

HOT SPOT

Carlo De Angelis, PharmD, Clinical Pharmacy Coordinator – Oncology, Department of Pharmacy, Odette Cancer Centre, Sunnybrook Health Sciences Centre

Breakthrough cancer pain

Breakthrough pain is a cause of significant morbidity in cancer patients and is associated with decreased satisfaction in overall pain control and reduced quality of life.

Patients who experience BTCP have higher pain scores, overall and functional impairment.

BTCP has a significant impact on the quality of life, including detrimental effects on activities of daily living, sleep, social relationships and enjoyment of life.

Patients with poorly controlled BTCP are more likely to seek medical attention.

The Association for Palliative Medicine of Great Britain and Ireland Task Force define breakthrough pain as "a transient exacerbation of pain that occurs either spontaneously, or in relation to a specific predictable or unpredictable trigger, despite relatively stable and adequately controlled background pain."

The key elements of this definition are:

- The increase in pain is transient and is either spontaneous or associated with a trigger.
- Background pain is adequately controlled, thus pain that occurs during the titration phase of pain management would not be considered breakthrough pain.
- The occurrence of an end of dosing interval increase in pain is not considered breakthrough pain, since this phenomenon suggests that the patient requires additional adjustment to their around-the-clock analgesic medication requirements to improve control of their background pain.

Breakthrough cancer pain can be categorized as either:

- spontaneous—where it is unpredictable with no identifiable trigger or
- incident—with a clear trigger that can be either the result of a voluntary or non-voluntary act or procedure.

Clinically, breakthrough cancer pain is characterized as being sudden in onset, moderate to severe in intensity and short in duration.

- Onset of BTCP occurs rapidly, within three minutes.
- Occurs one to four times a day.
- Each episode may last for mere seconds or hours. The average duration of a BTP episode is approximately 30 minutes.

Traditionally, breakthrough cancer pain is managed by the use of supplemental doses of opioid medication without regard to its nature or cause.

The ideal agent for managing breakthrough cancer pain would:

- Address the pathophysiology of the breakthrough pain
- Have a rapid onset of action (several minutes)
- Have a short duration of action (less than 30 minutes)
- Be available in a formulation that is easy and convenient to administer
- Have minimal side effects.

Currently there is no "ideal" agent to manage BTCP, but recent development of new formulations of fentanyl address some of these issues.

Fentanyl

Fentanyl, a synthetic opioid, possesses many of these qualities making it highly suitable for the management of BTCP.

Fentanyl is a μ-opioid receptor agonist with an analgesic potency 80 to 100 times that of morphine.

Fentanyl has poor oral bioavailability as a result of extensive first-pass metabolism, resulting in only approximately one third of the swallowed dose being systematically available.

The high lipophilicity of fentanyl allows it to be rapidly absorbed through cellular layers and to cross the blood brain barrier to quickly exert its action on the μ-opioid receptor to alleviate pain.

These characteristics make fentanyl suitable for transmucosal delivery.

Intranasal and oral transmucosal formulations of fentanyl have been developed for the management of BTCP.

The formulations available or soon to be available in Canada are reviewed on the reverse of this insert.

Generously supported by an unrestricted educational grant from Paladin Labs

paladin

Fentanyl Preparations							
Brand name	**Dosage form**	**Indication**	**Pharmacokinetic and related issues**	**Onset duration**	**Side effects**	**Contraindications and caution**	**Dosing/Convenience**
ORAL TRANSMUCOSAL							
Abstral®	**Sublingual Tablet** Strengths: 100, 200,300, 400, 600, 800 mcg Non-PH dependent rapidly disintegrating sublingual tablet	Breakthrough cancer pain for opioid tolerant patients	Absorption occurs across the oral mucosa and avoids first-pass metabolism BA: 54% Time to first detectable plasma levels: 8–11 minutes Elimination Half-life: 5.4–6.1hr Dose proportionality tested across dose range of 100 to 800 µg. Dose after single and multiple dosing	**Onset:** After a 400mcg dose there was significant improvement in pain intensity after 10 minutes. Duration: at least 60mins	Well Tolerated No formulation specific SE found Typical opioid side effects • N/V • dizziness • somnolence Side effects are not dose related	Opioid non-tolerant patients e.g. use in acute or post-operative pain, treating headache or migraine pain, dental pain Severe respiratory depression or severe obstructive lung conditions	SL tablet (do not swallow, suck or chew) Tablet disintegrates within 30 seconds 100mcg: repeat dose if inadequate pain relief within 15–30min If 2 × 100mcg is inadequate—consider increase to 200mcg for next episode with supplemental second tablet after 15–30min Continue dose escalation until adequate analgesia Maximum 4 tablets per episode Each dose must be separated by at least 2 hours
Onsolis®	**Film** Fentanyl Buccal Soluble Film (FBSF) PVP film delivers fentanyl across mucosa in pH dependent manner Dose: 200, 400, 600, 800, 1200 mcg buccal strip	Breakthrough pain for cancer patients • only for opioid tolerant patients	BA: 71% (51% from buccal mucosa, 49% from slow GI absorption) Time to first detectable plasma levels: 9.0 ± 4.8 (SD) minutes Elimination half-life: 14 hours Median Time to maximum plasma concentration (for 800 mcg dose): 60 minutes (range: 45–240) Dose proportionality demonstrated after single dose across dose range of 200 to 1200 mcg	**Onset:** 15 minutes	Well Tolerated No formulation specific SE found No evidence that mucositis is worsened Typical opioid side effects • N/V • dizziness • somnolence	Opioid non-tolerant patients e.g. use in acute or post-operative pain, treating headache or migraine pain, dental pain Severe respiratory depression or severe obstructive lung conditions	Buccal and transmucosal products are not bioequivalent—do not substitute mcg per mcg basis—always initiate treatment with recommended start dose for the product and titrate **Titration:** Start 200mcg buccally × 1 Titrate dose by 200mcg/episode prn Each dose must be separated by at least 4 hours Max: 1 dose/episode **Maintenance:** Use single film once dose established Max: 1200mcg/dose 4 doses/day Film dissolves within 15–30 min
INTRANASAL							
*Instanyl®	50, 100 and 200 micrograms/dose nasal spray	management of breakthrough cancer pain in patients on maintenance opioid therapy for cancer pain e.g. those taking: ≥ 60 mg of oral morphine daily ≥ 8 mg of oral hydromorphone daily ≥ 30 mg oxycodone daily ≥ 25 micrograms/ hour transdermal fentanyl patch Patients must be on opioid for a week or longer	single doses of 50 to 200 micrograms fentanyl per dose produces a C_{max} of 0.35 to 1.2 ng/ml. with a median T_{max} of 12–15 minutes	**Onset:** Significant pain intensity difference within 10 minutes of administration Duration of benefit up to 60 minutes	No formulation specific side effects no reports of nasal mucosa irritation	previous facial radiotherapy, recurrent nosebleeds	Each patient requires individual titration Start with 50 mcg/dose strength Administer dose in one nostril only An additional dose for a given BTCP episode may be used if no pain relief in 10 minutes Wait at least 4 hours prior to treating another BTCP episode Maximum daily dose: treat up to four breakthrough pain episodes, no more than two doses per episode

* European Union Product information
Abstral – Health Canada Notice of Compliance given, product available through access program
Onsalis – Health Canada Notice of Compliance given, product availability pending
Instanyl – Health Canada Notice of Compliance pending

Latest advances in pancreatic neuroendocrine cancer

HOT SPOT

Dr. Simron Singh, MD, MPH, Medical Oncologist, Sunnybrook Odette Cancer Centre

Background

- Pancreatic Neuroendocrine (pNET) cancers are uncommon malignancies arising from the endocrine cells of the pancreas
- Annual incidence is one per 100,000
- Incidence and prevalence are increasing
- pNETs may be under-diagnosed and are often diagnosed late
- Approximately 2/3 of patients present with metastatic disease
- pNETs can be "functionally" active secreting a variety of hormones such as insulin, glucagon, gastrin, serotonin, and vasoactive intestinal peptide with associated syndromes
- Most PNETs are "non-functioning"

Historical treatment options

- Surgery remains the only curative treatment option
- Liver direct treatment can also be useful and may include embolization as well as tumour debulking surgery
- Previous systemic treatment options were limited to streptozocin-based chemotherapies (given with either 5FU or doxorubicin)
- Older studies have reported response rates (RR) to streptozocin-based chemotherapy as high as 69%. However, these studies used older criteria for response such as physical examination
- Toxicity is significant with streptozocin-based treatment including nausea, vomiting and bone marrow toxicity, as well as renal impairment
- More recent studies have been unable to reproduce such high RR
- Currently there is debate regarding the role of streptozocin-based chemotherapy considering the questionable response rates and high toxicity
- Streptozocin is not available on the Canadian open market at present time and needs to be imported into Canada, making access to the drug difficult

Generously supported by an unrestricted educational grant from Pfizer

Pfizer Oncology

Newer treatment options

Temozolomide

- The oral alkylator temozolomide has shown activity in treating metastatic pNETs
- Temozolomide is converted to the active alkylating agent MTIC through spontaneous conversion
- A phase II trial showed the combination of temozolomide and thalidomide had RR of 45% in metastatic pNETs
- A single arm study of 30 chemotherapy naïve patients with metastatic, well or moderately differentiated pNETs showed an RR of 70% with the following chemotherapy regimen:
  - Capecitabine (750mg/m^2) bid × 14d with temozolomide 200mg/m^2 daily, days 10–14
- Common grade 3 and 4 toxicities included elevated AST/ALT (3%), leukopenia (3%) and thrombocytopenia (3%)
- Temozolomide is a promising agent in pNETs and further investigation is warranted in randomized trials

Sunitinib (Sutent)

- pNETs are considered to be hypervascular tumours and often have a typical hypervascular pattern on radiological imaging
- Vascular endothelial growth factor (VEGF) plays an important role in angiogenesis in pNETs
- Sunitinib is known to inhibit VEGF2 and VEGF3, as well as other kinases
- Sunitinib has previously shown activity in mouse models, as well as phase 1 and 2 trials in patients with pNETs
- Sunitinib has now been shown to be effective in treating pNETs in a recently published large, multinational, randomized, double-blinded, placebo controlled phase 3 trial (n=171)
- Patients enrolled had well-differentiated pNETs with documented disease progression in the last 12 months and had either locally advanced or metastatic disease not eligible for surgery
- Most of the patients had been previously treated with systemic chemotherapy
- This trial was discontinued early by independent data and safety committee due to the effect of the drug
- Dosage administered was 37.5 mg po daily continuously with patients on the study drug on treatment for a median of 4.6 months (range 0.4 to 17.5 months)
- Median progression-free survival (PFS) was 11.4 months in the sunitinib group versus 5.5 months in the placebo group (HR=0.42, p<0.0001) (Figure 1)
- Objective response rate (complete response + partial response) was 9.3% in the sunitinib arm versus 0% in the placebo arm
- Hazard ratio for death was 0.41 (p=0.02) in favour of sunitinib before study closure and crossover. Post-crossover median overall survival (OS) for sunitinib and placebo was 30.5 months versus 24.4 months respectively (p=0.1926)
- Most common grade 3 and 4 toxicities were neutropenia (12%), hypertension (10%) and hand-foot syndrome (6%), as well as diarrhea, fatigue and asthenia (all 5%)
- Based on these results sunitinib has received Health Canada approval for use in unresectable pNETs

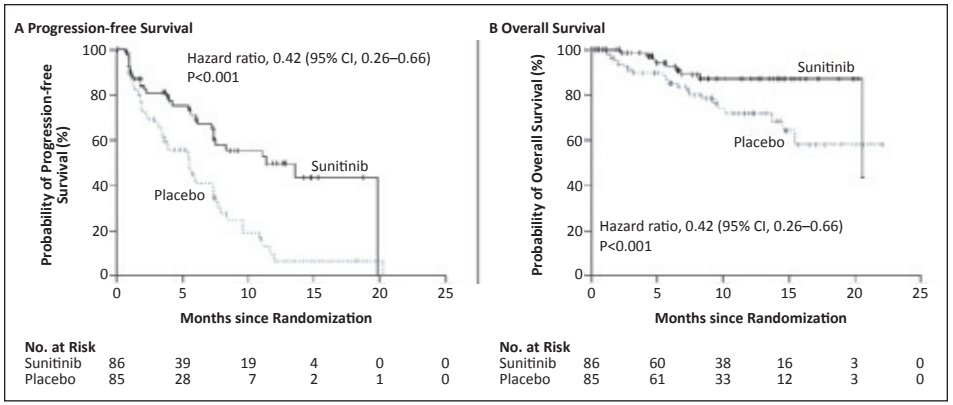

Figure 1.

Everolimus (Afinitor)

- Mammalian target of rapamycin (mTOR) signalling pathway has been shown to be involved in the proliferation of pNET tumour cells (mediated through insulin-like growth factor pathway)
- Everolimus is an mTOR inhibitor and has shown promising activity in two Phase 2 cells involving pNETs
- Everolimus was tested in a large (n=410), multicentre, double-blinded, placebo-controlled, phase III study with crossover design
- Patients enrolled had low or intermediate grade unresectable or metastatic pNETs with radiological documentation of progressive disease in the last 12 months
- 50% of patients had received prior chemotherapy, and there was no difference in median progression-free survival (PFS) between those who received chemotherapy and those who did not
- Everolimus was administered at a dosage of 10mg daily with median duration of treatment of 8.79 months (range 0.25 to 27.47)
- Primary end point of the trial was PFS and was 11.0 months in the everolimus arm versus 4.6 months in the placebo arm (HR=0.35, p<0.001) (Figure 2)
- Most common grade 3 and 4 toxicities were stomatitis (7%), hyperglycemia (5%), anemia (6%) and thrombocytopenia (4%)
- Based on these data, everolimus was approved by the FDA for unresectable pNETs and awaits Health Canada approval

Multidisciplinary care

- Surgical and systemic treatments are often complementary in the treatment of pNETs and all neuroendocrine cancers (NETs)
- Previous studies have shown improved outcomes in NETs patients with multidisciplinary care
- A unique integrated NETs clinic has been established at Sunnybrook Odette Cancer Centre
- The Sunnybrook NETs clinic is patient-centric with integrated care patterns and access to new treatments (Figure 3)
- Patients at this clinic have access to both medical and surgical oncology at the same visit, as well as specialty nursing care

Future trends

- pNETs is an uncommon malignancy, but is increasing in incidence
- Options in the treatments of pNETs have expanded recently with many new exciting options including temozolomide, as well as the biological agents sunitinib and everolimus
- With many new treatment options, the optimal first-line treatment for pNETs is unknown (chemotherapy versus biologic and if biologic, which one)
- Further trials are needed to determine the optimal order of treatments for NETs and may involve biomarker investigations to help individualize treatments
- Multidisciplinary care is going to become an increasingly important part of treatment of pNETs

References

Moertel, C.G., Hanley, J.A., & Johnson, L.A. (1980). Streptozocin alone compared with streptozocin plus fluorouracil in the treatment of advanced islet-cell carcinoma. *N Engl J Med, 303*, 1189–94.

Raymond, E., Dahan, L., Raoul, J.-L., et al. (2011). Sunitinib malate for the treatment of pancreatic neuroendocrine tumors. *N Engl J Med, 364*, 501–13.

Singh, S., & Law, C. (2010). Multidisciplinary reference centers: The care of neuroendocrine tumors. *J Oncol Pract., 6*(6), e11–6.

Strotsberg, J., Fine, R., Choi, J., et al. (2010). First-line chemotherapy with capecitabine and temozolomide in patients with metastatic pancreatic endocrine carcinomas. *Cancer*. Advance online publication. doi: 10.1002/cncr.25425.

Yao, J.C., Hassan, M., Phan, A., et al. (2008). One hundred years after "carcinoid": Epidemiology of and prognostic factors for neuroendocrine tumors in 35,825 cases in the United States. *J Clin Oncol, 26*, 3063–72.

Yao, J.C., Shah, M.H., Ito, T., et al. (2011). Everolimus for advanced pancreatic neuroendocrine tumors. *N Engl J Med, 364*, 514–523.

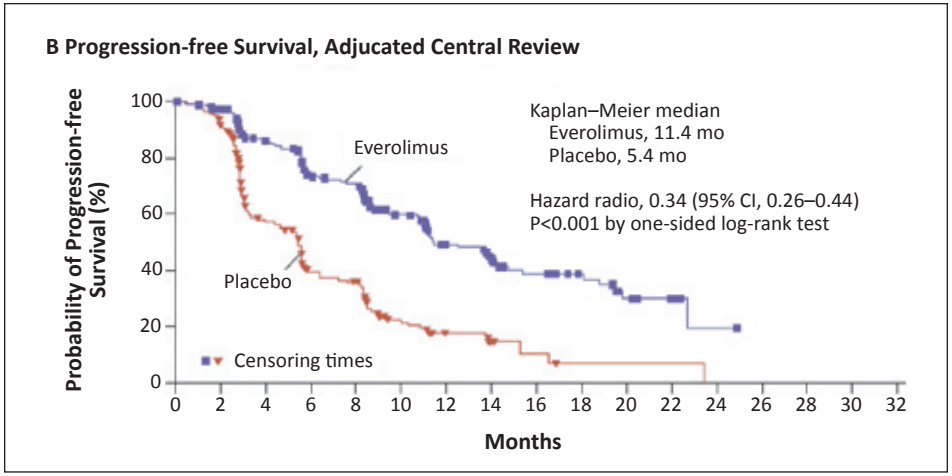

Figure 2.

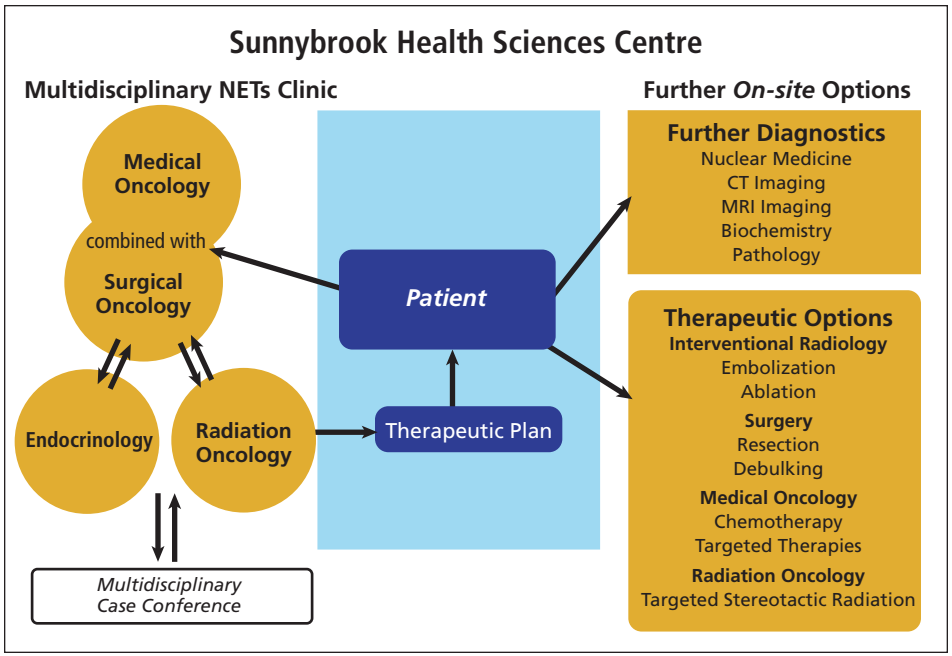

Figure 3.

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EDUCATION CONFERENCE & MEDICAL EXPOSITION

October 24 - 25, 2011 | Metro Toronto Convention Centre

Ideas & Innovations in Cancer Management Along the Cancer Care Continuum

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- Cosmesis
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- Optimizing neoadjuvant therapy in locally advanced breast cancer
- Imaging tumour response

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- Managing the major sequelae of curative abdomino-pelvic treatment
- Imaging advances in rectal cancer – new information for staging and guiding surgical excision
- Current and emerging radiation therapy techniques in rectal cancer
- Consensus guidelines for treating gastric cancer
- Optimizing neoadjuvant therapy for GE junction cancer
- Imaging correlates and biomarkers for assessing response
- Surgical issues in the management of pancreas cancer
- Folfironox in pancreatic cancer
- The management of liver metastases

Supportive and Palliative Care

- Managing oncology emergencies in the community
- Exploring the limits of specialized home palliative care
- Benefits of early palliative care
- Complex case rounds

Survivorship

- Exploring shared care models of post treatment follow-up care
- Family practice integration in the cancer system
- Meeting patients needs over the internet
- New models of community based care and support
- Managing late effects of breast cancer treatment from the provider and patient perspectives

Keynote Topics & Speakers

Science Medicine and Teamwork – The Formula for Success

Evidence-based Cancer Screening

Dr. Anthony Miller
Chair, Occupational Cancer Research Centre
Professor Emeritus, Dalla Lana School of Public Health, University of Toronto

Can We Do Better for Less? No Problem!

Dr. Alejandro Jadad
Canada Research Chair in eHealth Innovation
Professor, Department of Health Policy, Management and Evaluation, University of Toronto

Dr. Malcolm Moore
Chief Medical Oncology, Princess Margaret Hospital
Professor, Department of Medicine & Pharmacology, University of Toronto

Phillip Crawley
Publisher & CEO, The Globe & Mail

Dr. John Haggie
President Elect, Canadian Medical Association
Chief Dept. of Surgery, James Paton Memorial Hospital

Barry Stein
President & CEO, Colorectal Cancer Association of Canada

The Cancer Experience: A Provider-Patient Perspective

Dr. Marla Shapiro
Cancer Survivor & Family Physician
Consultant, CTV National News and Canada AM
Associate Professor, Department of Family & Community Medicine, University of Toronto

Dr. Sandy Buchman
Family Physician, Temmy Latner Centre for Palliative Care
Assistant Professor, Department of Family & Community Medicine, University of Toronto

Faculty

Shabir Alibhai, MD
Phil Bedard, MD
Jean Francois Boileau, MD
Holly Bradley
Fred Brenneman, MD
Christine Brezden, MD
Sandy Buchman, MD
Robert Buckman, MD
Judy Burns, MHA BScN
Catherine Classen, PhD
Phillip Crawley, CEO
Gregory Czarnota, MD PhD
Laura Dawson, MD
Robert Dinniwell, MD
Michael Evans, MD
Daniela Fierini, BASc
Sonal Ghandi, MD
Russell Goldman, MD
Ellen Greenblatt, MDCM
Eva Grunfeld, MD
Sarah Hales, MD
Crystal Helwig, RN
Sender Herschorn, MD
Alejandro Jadad, MD PhD
Jennifer Jones, PhD
Calvin Law, MD
Christine Maheu, RN PhD
Cynthia Maxwell, MD
Dave McLinden, MD
Anthony Miller, MD
Debbie Miller, RN
Malcolm Moore, MD
Shari Moura, RN
Jeff Myers, MD
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Kathy Pritchard, MD
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Christine Simmons, MD
Jacqueline Spayne, MD PhD
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*** Partial List Only – please go to www.TorontoCancer.ca for an up-to-date list of Faculty as more speakers confirm their participation**

TORONTO CANCER 2011
EDUCATION CONFERENCE & MEDICAL EXPOSITION

Schedule-at-a-Glance

Monday, October 24 Please visit www.TorontoCancer.ca to view Faculty

7:00 am -8:15 am	Registration				
8:15 am - 8:30 am	Welcome and Introductions				
8:30 am - 9:30 am	**Opening Keynote - Science Medicine and Teamwork – The Formula for Success**				
9:30 am - 10:10 am	Networking & Exhibit Break				
10:10 am - 12:10 pm	**SESSION 1A** **Selected Surgical Issues in Breast Cancer** · Cosmesis and Breast Cancer Surgery · Measuring Cosmesis-Am I as Good as I Think? · Managing the Axilla	**SESSION 2A** **Systemic Therapy of Breast Cancer - Where We Are in 2011?** · Chemotherapy Update · Endocrine Therapy Update · Personalized Medicine	**SESSION 3A** **Multidisciplinary Management of Locally Advanced & Metastic Rectal Cancer** · Imaging in Rectal Cancer · Image Directed Surgery · Evolving Radiotherapy Techniques for Rectal Cancer · Chemotherapy for Metastatic Rectal Cancer	**SESSION 4A** **Managing Cancer in the Community** · Oncology Emergencies · Specialized Home Palliative Care – What Are the Limits?	**SESSION 5A** **Diagnostic Assessment** · Streamlining Access to Treatment · Update on Provincial Electronic Solutions · Lessons Learned from the Colorectal Diagnostic Assessment Program
12:10 pm - 1:30 pm	Lunch & Exhibit Break				
1:30 pm - 3:30 pm	**SESSION 1B** **General Surgical Considerations in GI Tumours** · Locally Advanced GI Primary: Strategies and Indications for Multivisceral Approach · Rare GI Tumours: What to Do With the Unexpected. · Intraperitoneal Chemotherapy: Primer for Referring Doctors – Who and When	**SESSION 2B** **Systemic Therapy in Breast Cancer - Targeting Breast Cancer Beyond 2011** · Targeted Therapy · Breast Cancer Clinical Trials Consortium	**SESSION 3B** **Multidisciplinary Management of Esophageal and Gastric Cancer** · Esophageal Cancer-The Role of Surgery · Neoadjuvant Therapy in Locally Advanced GE Junction Cancer · Imaging Correlates and Biomarkers of Response · Gastric Cancer: Guidelines for Management · I-Innovate: Use of a Natural Interface to Facilitate Patient Care	**SESSION 4B** **Cure – At What Cost? Managing the Side Effects of Radical Abdominal-Pelvic Treatment** · Sexual Dysfunction · Urological Complications · Abdominal Wall Reconstruction · Nursing Issues	**SESSION 5B** **Issues and Trends in High Risk Screening** · Genetics Guiding High Risk Identification · New Breast Imaging Strategies · HPV Screening
3:30 pm - 4:10 pm	Networking & Exhibit Break				
4:10 pm - 5:00 pm	**Plenary – Evidence-based Cancer Screening - Anthony Miller, Chair, Occupational Cancer Research Centre, Professor Emeritus Dalla Lana School of Public Health**				
5:00 pm - 6:00 pm	Poster Viewing and Reception				

Tuesday, October 25 Please visit www.TorontoCancer.ca to view Faculty

7:00 am -8:15 am	Registration				
8:15 am - 8:30 am	Welcome and Introductions				
8:30 am - 10:30 am	**Joint Symposium – Can We Do Better for Less? No Problem!** Moderator: Alejandro Jadad, Canada Research Chair in eHealth Innovation, Professor Health Policy, Management and Evaluation, University of Toronto Phillip Crawley, CEO Globe and Mail John Haggie, President Elect, Canadian Medical Association, Chief, Department of Surgery, James Paton Memorial Hospital Malcolm Moore, Chief Medical Oncology Princess Margaret Hospital, Professor Medicine and Pharmacology, University of Toronto Barry Stein, President, Colorectal Cancer Association of Canada				
10:30 am - 11:10 am	Networking & Exhibit Break				
11:10 am - 12:40 pm	**SESSION 6A** **Supportive and Palliative Care I** · Interdisciplinary Complex Case Rounds	**SESSION 7A** **Issues in Breast Cancer Management - Neoadjuvant Chemotherapy** · Using Imaging to Assess Response · Surgical Options in the Neoadjuvant Setting · Radiation Options in Neoadjuvant Setting · Standard Therapy for Early Breast Cancer?	**SESSION 8A** **Multidisciplinary Management of Pancreas Cancer** · Neoadjuvant Therapy – Is it Improving Resectablitiy? · Novel Surgical Techniques · New Treatment options - Folfironox · Biomarkers and Molecular Imaging	**SESSION 9A** **Who is Taking Care of Survivors? Shared Care-Towards Better Integration and Coordination** · Family Practice Integration into the Cancer System · Post Treatment Cancer Care · The ACTT Clinic- a New Take on Shared Care	**SESSION 10A** **Virtual Healthcare** · The Networked Patient · Your Office as a Wireless Café · Gyne Gals – On-line Groups Alleviating Sexual Dysfunction
12:40 pm - 2:00 pm	Lunch & Exhibit Break				
2:00 pm - 3:30 pm	**SESSION 6B** **Supportive and Palliative Care II** · Benefits of Early Intervention · Alleviating Distress · Have We Impacted the Quality of Death?	**SESSION 7B** **Issues in Breast Cancer Management - Looking Beyond the Tumour** · Young Women with Breast Cancer: Lessons Learned from the PYNK Program · Breast Cancer and Fertility · Managing Gestational Breast Cancer	**SESSION 8B** **Management Options for Hepatic Metastases** · Panel Discussion	**SESSION 9B** **Managing the Late Effects of Breast Cancer Treatment** · Practitioner Perspective · Self-Management Approaches	**SESSION 10B** **Do They Really Need Us Anymore?** · Creating the Expert Patient · The Virutal Ward · Social Media and Community Based Support
3:30 pm - 4:10 pm	Networking & Exhibit Break				
4:10 pm - 5:00 pm	**Closing Keynote: The Cancer Experience – A Provider-Patient Perspective** Sandy Buchman and Marla Shapiro				
5:00 pm - 5:15 pm	Close and Evaluation				**Program is subject to change*

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Director Oncology Education
Medical Director Cancer Survivorship
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Andy Smith, MD MSc FRCSC
Chief Odette Cancer Program
Head, Division of General surgery
Sunnybrook Health Sciences Centre
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General Surgery, University of Toronto

Planning Committee Members

Sandy Buchman, MD CCFP FCFP
Education Lead and Family Physician
Practicing in Palliative Care
Temmy Latner Centre for Palliative Care
Primary Care Lead, Toronto Regional Cancer
Program, Cancer Care Ontario
Assistant Professor, Family and Community
Medicine, University of Toronto

Robert Dinniwell, MD MSc FRCPC
Radiation Oncologist, Princess Margaret
Cancer Program
Assistant Professor, Radiation Oncology,
University of Toronto

Barbara Fitzgerald, RN MScN
Director Oncology Nursing, Princess Margaret
Cancer Program

Audrey Friedman, MRT(T) BA MSW
Director Cancer Patient Education and
Survivorship, Princess Margaret Cancer
Program
Provincial Head Patient Education, Cancer
Care Ontario

Ralph George, MD FRCS
Director General Surgery, St Michael's Hospital
Associate Professor General Surgery
University of Toronto

Tamara Harth
Program Manager Patient Education
Odette Cancer Program, Sunnybrook Health
Sciences Centre

Calvin Law, MD MHP FRCSC
Surgical Oncologist, Odette Cancer Program
Associate Professor Surgery, University of
Toronto

Barbara-Anne Maier, RN BScN, CON(c)
Nurse Navigator, Colorectal Cancer Diagnostic
Program, Odette Cancer Program, Sunnybrook
Health Sciences Centre/North York General
Hospital

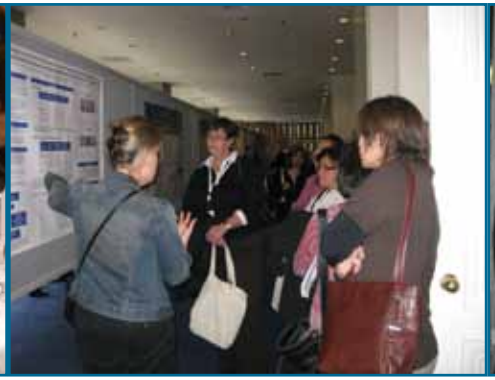
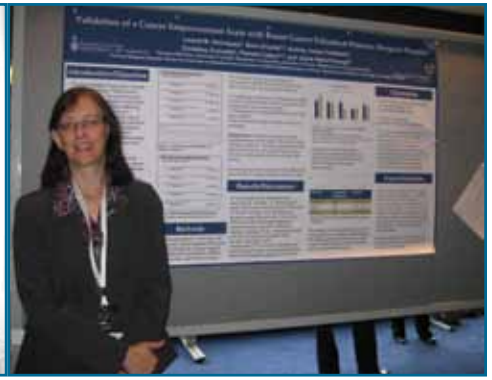
Janet Papadakos, BA Med
Manager Cancer Patient and Survivorship
Education, Princess Margaret Cancer Program

Gary Rodin, MD FRCPC
Head, Psychosocial Oncology and Palliative
Care, Princess Margaret Cancer Program
Professor Psychiatry, University of Toronto

Srikala Sridhar, MD MSc FRCPC
Medical Oncologist, Princess Margaret Cancer
Program
Assistant Professor Medicine, University of
Toronto

Sunil Verma, MD MEd FRCPC
Medical Oncologist, Odette Cancer Centre
Assistant Professor Medicine, University of
Toronto



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1 TORONTO CANCER CONFERENCE CONCURRENT SESSIONS

Please select which sessions you plan to attend to assist us with room sizing. You may attend any session while at the conference.

MONDAY, OCTOBER 24

- ❍ 1A - Selected Surgical Issues in Breast Cancer 10:10 am -12:10 am
- ❍ 2A - Systemic Therapy of Breast Cancer - Where We Are in 2011 10:10 am -12:10 am
- ❍ 3A - Multidisciplinary Management of Locally Advanced & Metastic Rectal Cancer 10:10 am -12:10 am
- ❍ 4A - Managing Cancer in the Community 10:10 am -12:10 am
- ❍ 5A - Diagnostic Assessment 10:10 am -12:10 am
- ❍ 1B - General Surgical Consideration in GI Tumours 1:30 pm - 3:30 pm
- ❍ 2B - Systemic Therapy in Breast Cancer - Targeting Breast Cancer Beyond 2011 1:30 pm - 3:30 pm
- ❍ 3B - Multidisciplinary Management of Esphageal & Gastric Cancer 1:30 pm - 3:30 pm
- ❍ 4B - Cure - At What Cost? Managing the Side Effects of Radical Abdominal - Pelvic Treatment 1:30 pm - 3:30 pm
- ❍ 5B - Issues and Trends in High Risk Screening 1:30 pm - 3:30 pm

Program Subject to Change

TUESDAY, OCTOBER 25

- ❍ 6A - Supportive and Palliative Care I 11:10 am - 12:40 pm
- ❍ 7A - Issues in Breast Cancer Management - Neoadjuvant Chemotherapy 11:10 am - 12:40 pm
- ❍ 8A - Multidisciplinary Management of Pancreas Cancer 11:10 am - 12:40 pm
- ❍ 9A - Who is Taking Care of Survivors? Shared Care-Towards Better Integration and Coordination 11:10 am - 12:40 pm
- ❍ 10A - Virtual Healthcare 11:10 am - 12:40 pm
- ❍ 6B - Supportive and Palliative Care II 2:00 pm - 3:30 pm
- ❍ 7B - Issues in Breast Cancer Management - Looking Beyond the Tumour 2:00 pm - 3:30 pm
- ❍ 8B - Management Options for Hepatic Metastases 2:00 pm - 3:30 pm
- ❍ 9B - Managing the Late Effects of Breast Cancer Treatment 2:00 pm - 3:30 pm
- ❍ 10B - Do They Really Need Us Anymore? 2:00 pm - 3:30 pm

2 DEMOGRAPHIC SURVEY

Name: _____ Institution: _____

Address: _____

City: _____ Prov.: _____ Postal Code: _____

Tel: _____ Fax: _____ Email: _____

Discipline:

❍ Surgeon ❍ Medical Oncologist ❍ Radiation Oncologist ❍ Hematologist ❍ GP/FM

❍ Other Physician (my specialty is) _____

❍ Nurse ❍ Pharmacist ❍ Allied Health ❍ Trainee (Student/PDF/Fellow)

❍ Other Health Care Professional (I am a) _____

❍ Industry Representative

3 FEE SCHEDULE

	Early Bird June 1 – Sept. 23	**Regular** Sept. 24 – Oct. 21	**On-Site** October 22-25
Physicians	$195	$295	$400
Nurse/Pharm/Allied	$95	$145	$200
Trainee	$45	$65	$100
Other HCP	$195	$295	$400
Industry Rep		$1,500	

No one under the age of 18 is permitted to attend. Fees are non-refundable. However, substitutions are permitted provided requests are sent by October 21, 2011. Please include your colleague's full contact information

4 METHOD OF PAYMENT

❍ VISA ❍ MasterCard ❍ Cheque (enclosed)

Card Number: _____ Expiry date: _____ Signature: _____

Name on card: _____ Total Amount: $ _____

Make cheques payable to: Princess Margaret Hospital

QUESTIONS? 1-888-443-6786 (ext. 2228) info@torontocancer.ca **www.TorontoCancer.ca**

TORONTO CANCER 2011

EDUCATION CONFERENCE & MEDICAL EXPOSITION

October 24 - 25, 2011 • Metro Toronto Convention Centre

Oncologists Surgeons GP/FM's Nurses Allied Health

Discover new ideas and innovations of Cancer Management

Emphasis is on topics of practical importance to providers caring for patients along the entire Cancer Care Continuum

Prevention - Screening - Diagnosis - Treatment - Survivorship

Scientific Program Planned & Developed by:

Sunnybrook
ODETTE CANCER CENTRE
A Cancer Care Ontario Partner

Princess Margaret Hospital
University Health Network