



Radiation Medicine Program, Princess Margaret Cancer Centre, University Health Network

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# conne Xions

# SMART TREATMENT FOR MALIGNANT PLEURAL MESOTHELIOMA

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HOW DO YOU MANAGE A RARE, COMPLEX CANCER THAT IS DIFFICULT TO DIAGNOSE? This is the question that Drs. John Cho and Marc de Perrot have attempted to answer using a multidisciplinary, collaborative approach and the **SURGERY FOR MESOTHELIOMA AFTER RADIATION THERAPY** or "SMART" treatment program at the Princess Margaret Cancer Centre. The SMART program aims to optimize treatment and prolong life for patients with malignant pleural mesothelioma (MPM), a rare thoracic cancer.

MPM is most commonly caused by occupational or environmental exposure to asbestos and affects the lining of the lungs (pleura). Symptoms are often non-specific and include progressive shortness of breath, cough, and chest wall pain. The diagnosis is challenging; patients typically undergo a series of tests and referrals, which may delay treatment.

In addition, the aggressive nature of MPM necessitates intensive treatment, which invariably increases the side effects and complications that patients experience. Due to these diagnostic and treatment challenges, the prognosis for patients with MPM remains poor, with a median survival of 12 months after diagnosis and rare long-term survival. Consequently, the management of MPM requires novel treatment options, multidisciplinary collaboration, and efficient coordination between medical specialties.

CONTINUED ON PAGE 2.

# SMART TREATMENT FOR MALIGNANT PLEURAL MESOTHELIOMA PAGE 1

B.C. JOHN CHO, MD, PHD, FRCPC

## CLINICAL TRIALS HIGHLIGHTS PAGE 3

MESOTHELIOMA CANCER TRIALS AT RMP B.C. JOHN CHO, MD, PHD, FRCPC AND MARC DE PERROT, MD, MSc

**DID YOU KNOW?** PAGE 3
MEET OUR NEWEST RADIATION ONCOLOGISTS

**HOW TO FIND US PAGE 4** 

"I won the lottery,
I survived.
Somebody up
there is looking over
me, but boy did I
ever have a lot of
help down here. I
can't say enough
about The Princess
Margaret."

—EDWARD EWING

"I WAS IN HOSPITAL FOR 14 DAYS AND DR. DE PERROT CAME IN TO SEE ME EVERY SINGLE DAY, EVEN ON THE WEEKENDS.

THE WAY THAT DR. CHO AND **EVERYONE AT** THE PRINCESS MARGARET LOOKS AT ME AND TALKS TO ME IS JUST PHENOMENAL."

-EDWARD EWING

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#### IN THE NEXT ISSUE...

INTEGRATING MR INTO CERVICAL CANCER CARE

#### **COVER STORY CONTINUED**

The SMART treatment program includes radiation therapy (RT) prior to surgery. Although about half (52%) of patients experienced severe surgical complications with this aggressive approach, SMART is associated with a doubling of historical three-year overall survival, from 32% to 72%, and most surgical complications eventually resolve. For patients like Edward Ewing, a retired industrial worker, volunteer fire-fighter, and construction millwright, SMART has provided a "second chance at life".

EDWARD EWING has come a long way since his MPM diagnosis in November 2010, when he was given 18 months to live, whether or not he had chemotherapy. Fortunately, he became the eleventh patient to benefit from the SMART program. Under the supervision of Dr. Cho, Edward Ewing was treated with RT daily for five days. On day seven, Dr. de Perrot removed his left lung and several back ribs; Edward was up and walking the next day!



In addition to innovative treatment approaches, multidisciplinary collaboration is integral to handling clinically complex cases such as Mr. Ewing's and is essential for the optimal delivery of programs like SMART. Being cognizant of this, a new Mesothelioma Clinic, with all three oncologic disciplines (Thoracic Surgery, Radiation Oncology, and Medical Oncology) is located in the same physical space, facilitating faster referrals and multidisciplinary care. By concentrating the necessary clinical and research expertise into one clinic, the Princess Margaret Cancer Centre is able to provide more complete and specialized quality care for our MPM patients. Patients like Mr. Ewing, who benefited from SMART, experience shorter treatment, fewer complications, and faster recovery, which improves quality of life.



### Clinical Trials Highlights MESOTHELIOMA CANCER TRIALS AT RMP

B.C. JOHN CHO, MD, PhD, FRCPC

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ASSOCIATE PROFESSOR OF SURGERY, UNIVERSITY OF TORONTO, DIVISION OF THORACIC SURGERY, TORONTO GENERAL HOSPITAL

#### Early Diagnosis of Lung Cancer and Mesothelioma in Prior Asbestos Workers

Pls - Demetris Patsios and Marc de Perrot

There is no currently accepted, non-invasive tool for the early diagnosis of mesothelioma or lung cancer in asbestos-exposed subjects. This study aims to develop low-dose computed tomography (CT) as a tool to serially image pleural plaques, quantify their individual and overall volume, compute the growth rate with time, and identify the presence of mesothelioma before symptoms occur. Results may prevent delays in treatment start times, thereby improving prognosis. Eligible Patients: Ontario patients with prior asbestos exposure (at least 20 years ago) and/or documented pleural plaques (chest x-ray evidence).

ClinicalTrials.gov Identifier: NCT00188890

#### Short Neoadjuvant Hemithoracic IMRT for MPM: The SMART (Surgery for Mesothelioma After RT) Study

PI - John Cho

Tumour spread outside the chest cavity may result in distant metastatic disease, a major cause of death among patients with MPM. This interventional study evaluates whether giving patients a short, intense course of chest radiation prior to surgery will sterilize tumour cells, thus avoiding or reducing spread to the areas outside of the chest cavity. The results of this study may reduce the incidence of distant metastatic disease in this patient population, ultimately improving survival. Eligible Patients: Patients who have been diagnosed with early stage resectable MPM.

ClinicalTrials.gov Identifier: NCT00797719

# DID YOU NEW RECRUITS TO THE RADIATION MEDICINE PROGRAM

THE RMP AT THE PRINCESS MARGARET CANCER CENTRE IS COMPOSED OF AN INTERNATIONAL, INTERDISCIPLINARY TEAM that is committed to providing exemplary care to our patients. The RMP has recently welcomed three radiation oncologists who bring experience and expertise in several aspects of radiation oncology.



DR. DAVID SHULTZ completed his MD/PhD at Case Western Reserve University in Ohio in 2009. He brings experience from Stanford University where he completed his postgraduate training in Radiation Oncology (RO) and worked as an instructor prior to joining the RMP in August 2015. Dr. Shultz is a member of the Central Nervous System (CNS) and Sarcoma site groups.

DR. JENNIFER CROKE completed her MD at Memorial University in Newfoundland in 2008 and her RO residency at the University of Ottawa in 2013. She completed a one-year Clinical Research Fellowship at the Princess Margaret, specializing in Gynecologic Oncology and MR-guided brachytherapy. She worked as a Radiation Oncologist in Newfoundland before returning to the Princess Margaret in September 2015. Dr. Croke is a member of the Gynecological (GYN) and Breast site groups.

DR. ALEJANDRO BERLIN completed his MD at Pontificia
Universidad Católica de Chile in Santiago, Chile, in 2007 and his RO
residency at the Universidad del Desarrollo in Chile. He worked for two
years as a Radiation Oncologist in Chile and completed a two-year
Research Fellowship at the Princess Margaret while obtaining a MSc
degree from the Institute for Medical Sciences (IMS) at the University of
Toronto. Dr Berlin is a member of the Genitourinary (GU) and CNS site
groups.

# HOW TOFINDUS OR YOUR REFERRALS We offer three ways to facilitate your requests for consultation:

#### 1. Site Group Coordinators

Site group coordinators serve as a liaison for referring physicians, radiation oncologists and the Princess Margaret Patient Referral Centre.

#### 2. Princess Margaret New **Patient Referral Centre**

Tel: 416.946.4575 Fax: 416.946.2900

#### 3. Direct to Specific Radiation **Oncologists**

Referrals to specific radiation oncologists should be directed to site group coordinators.

#### Palliative Radiation Oncology Program (PROP)

Direct palliative radiation referral patients to our PROP coordinator. Within 24 hours, she will contact you with an appointment. Patients will be seen within a few days. PROPReferrals@rmp.uhn.ca

Coordinator Melanie Robson Tel: 416.946.2901 Fax: 416.946.4657 melanie.robson@rmp.uhn.ca

Leader Dr. Laura Dawson Tel: 416.946.2127 laura.dawson@rmp.uhn.ca **Emergencies** For patients requiring same day consultations (e.g. spinal cord compression), please contact our Palliative Radiation Oncology referral coordinator (416.946.2901) who will identify the radiation oncologist that is best able to respond to your requests.

#### **After-Hour Requests**

Please page the radiation oncologist on call through the switchboard at 416.946.2000.

**UPDATED APRIL 2016** 

#### **BREAST**

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#### **ENDOCRINE**

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**SARCOMA** 

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#### **QUICKSTART BREAST PROGRAM**

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