

FEBRILE NEUTOPENIA: THE EMPIRICAL STRIKES BACK

Dr. Mark Kristjanson, COMMUNITY ONCOLOGY PROGRAM



For many cancers, cytotoxic chemotherapy remains integral to treatment with curative intent. Many chemotherapy regimens are powerfully myelosuppressive, and patients on such

...to start empirical antimicrobial commonest causes of therapy within 60 minutes

regimens (such as the docetaxel portion of FEC-D for the adjuvant treatment of breast cancer) can be at high risk for rapidly evolving sepsis. For patients on chemotherapy who present with fever, the current standard of care puts

the onus on the treating clinician to establish a working diagnosis of febrile neutropenia and to start empirical antimicrobial therapy within 60 minutes of patient presentation. Infection

remains one of the death in patients who are being treated for cancer;

initiating appropriate antimicrobial therapy in a timely fashion has been shown to save lives.

The degree to which the patient on chemotherapy is at risk for sepsis depends in part on the degree of neutropenia. Severe neutropenia is defined by a neutrophil count <500 cells/uL,(0.5 x 109/L); profound neutropenia by a count <100 cell/ uL. For those chemotherapy regimens which are frequently associated with prolonged (i.e. 7 days or more) or profound neutropenia, the risk of febrile neutropenia can be mitigated by the primary prophylactic use of a colony stimulating factor such as G-CSF (Neupogen). Oncologists also estimate a patient's risk for serious infectious complications of chemotherapy by taking into account the patient's other risk factors, such as age >65, the presence of co-morbidities like diabetes or COPD, a serum albumin < 35 g/L, or an ECOG score of 2 or greater. If a patient should experience febrile neutropenia as a complication of any given cycle of chemotherapy, one commonly used compensatory stratagem is to delay the next chemotherapy cycle or to reduce the

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SOUTHERN HEALTH-SANTÉ SUD SHORTENS WAIT TIMES FOR COLONOSCOPY WITH NEW CENTRAL **REFERRAL PROCESS.**

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KEEPING ABREAST OF DIRECT REFERRAL

NEW PROVINCIAL FORM FOR BREAST IMAGING AND IMPLEMENTATION OF DIRECT REFERRAL - PRACTICAL IMPACTS ON PRIMARY CARE PRACTICE

DIRECT REFERRAL & BREASTCHECK

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UNDERSTAND HOW BREASTCHECK'S EXISTING DIRECT REFERRAL PROCESS FLOWS TO THE NEXT STEPS IN BREAST IMAGING



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dose of the cytotoxic agent. Secondary prophylaxis with a CSF is typically considered if the patient experienced febrile neutropenia with previous chemotherapy cycles and failure to adhere to the intended dose or cycle length might be associated with a worse outcome. The scientific literature relevant to the question as to who is likely to benefit from the primary or secondary prophylactic use of CSFs has been gradually evolving over the past several decades. Under the direction of Dr. Vallerie Gordon, a multidisciplinary committee at CancerCare Manitoba is developing a policy on the use of CSFs based on the best and most recent evidence. That policy will be finalized later in 2015 and will be accessible through the Health Care Professionals section of the CCMB website.

The role for the use of CSFs in the treatment of an acute febrile neutropenic episode (FNE) is limited, and usually restricted to the setting of septic shock or ICU admission. The mainstay of the management of FNE consists of the prompt establishment of a working diagnosis of febrile neutropenia and the initiation of broad spectrum empirical antimicrobial treatment. In the next issue of CancerTalk we will take a closer look at the pathophysiology, diagnosis, and initial management of febrile neutropenia.

2014-15 COMMUNITY ONCOLOGY PROFESSIONAL DEVELOPMENT RECIPIENTS

Congratulations on your participation in professional development and being a resource to the patients and other health care professionals in your community. Applications for 2015-2016 will be posted in the fall at <u>www.cancercare.mb.ca/cpd</u>



BACK L-R: DR. JOEL GINGERICH & RUTH LOEWEN (COP DIRECTORS), DR. MICHAEL STEPHENSON, KATE WOODS, BOB JONES (CCMB FOUNDATION). FRONT L-R: DR. PRADIP GUJARE, DR. SHERINE GUINDY, MARCIA GARVIE, MILAGROS DUQUE, ELIZABETH KAZINA.

Family Physicians:

- Sherine Guindy: Winnipeg
- Pradip Gujare: Gillam
- Michael Stephensen: Winnipeg

Nurse Navigators:

- Milagros Duque: Winnipeg
- Marcia Garvie: Selkirk
- Elizabeth Kazina: Winnipeg
- Kate Woods: Winnipeg

The Community Oncology Program would like to thank the CancerCare Manitoba Foundation their support

Nurse:

- Robyn Denbow: Brandon Pharmacist:
- Alisha McCulloch: Portage

Psychosocial Oncology Clinicians:

- Kristen Bilenky: Winnipeg
- Kirsten Eskildson: Dauphin

Social Worker:

Angela Stewart Lamport: Brandon

CancerCareManitoba FOUNDATION

All funds raised stay in Manitoba.

CCMB CENTRAL REFERRAL OFFICE

FAXTO 204-786-0621 PHONE 204-787-2176

<u>ALL</u> referrals to CancerCare Manitoba for patients that have been diagnosed with cancer or a blood disorder or that require a consult from a CCMB oncologist or hematologist should be sent to the CCMB Referral Office.

Referrals are triaged regularly and patients are called directly if they require an appointment.

This includes "re-referrals" for patients with recurrence or suspected recurrence. DO NOT send referrals directly to other faxes for oncologists or hematologists, as this will delay patients being scheduled for appointments.

If you would like to know the status of a referral or consult, please contact the office at the number above.



In Memorium

It is with great sadness that we remember the passing of Dr. Garry Schroeder on December 28, 2014. Garry was a dedicated physician, passionate husband, loving uncle, kind neighbor, good friend, and genuine humanitarian. He has touched many lives both in CancerCare Manitoba and in the community as a teacher, mentor, friend, and caregiver. 3

SOUTHERN HEALTH-SANTÉ SUD SHORTENS COLONOSCOPY WAIT TIMES

Due to a new Central Referral Process, patients in Southern Health-Santé Sud are now being offered the next available appointment for colonoscopy at five health centres in the region no matter where they live. They can now expect shorter wait times for this diagnostic procedure, which is especially important for those patients who may have colorectal cancer. This improvement is a project that has been undertaken as part of the *In Sixty Cancer Patient Journey Initiative*.

Manitoba's provincial government launched this \$40M initiative in 2011. In Sixty brings together all the stakeholders in the cancer patient journey: patient representatives, Manitoba Health, Cancer Care Manitoba, the Regional Health Authorities and Diagnostic Services of Manitoba to reduce wait times from suspicion of cancer to first treatment within 60 days.

With the support from In Sixty, Rapid Improvement Leads worked with staff from Southern Health-Santé Sud to better understand the colonoscopy patient journey and tackle the task of shortening wait times to meet targets set by the Colorectal Disease Site Group (DSG). Targets set by Colorectal DSG are 13 days for urgent referrals, 27 days for semi urgent referrals and 180 days for an elective/non-urgent referral or consultation.

The first step in improving the patient journey was to create a standard form for



developed to standardize the information provided on referral and to prioritize the patient based on their urgency of their referral indicators. Patients who have a higher suspicion for cancer can also be linked to Cancer Navigation Services. The form is available in paper format or in the Electronic Medical Records (EMRs), providing easy access for physicians as well as auto-populating patient information.

The second key improvement to reduce wait time was the creation of a Central Referral office to receive and coordinate all colonoscopy and gastroscopy referrals. The Central Referral office is able to see wait times across the region and can now match patient referrals to the site or specialist with the shortest waits. By utilizing the resources of the entire region and offering the patient the next available appointment the Central Referral office has the best opportunity to meet the In Sixty pathway target timelines.

The Southern Health-Santé Sud Colonoscopy Central Referral project was phased in during the months of November and December. Early results show dramatic reductions in both patient wait times and variability with urgent and semi-urgent referrals meeting recommended In Sixty targets. For more information or to access to the Southern Health-Santé Sud Gastrointestinal Endoscopy Consultation and Referral form you may contact Val Askin at 204-428-2722.

BLOOD DAY HEMATOLOGY WORK-UP PATHWAYS AVAILBLE ONLINE & IN EMR <u>www.cancercare.mb.ca/diagnosis</u>

Clinical guidance pathways for primary care on the work-up of hematological issues can be found at on CCMB's website and are linked in Accuro (CDS in top menu,) Med Access (Help icon > Open Reference Materials,) and Jonoke (contact vendor.)

Over 11 hematology pathways have been posted, in addition to work-up support for breast, colorectal and lung cancers and lateral neck masses.

Questions about Breast Imaging & Direct Referral?

If you have questions or concerns about the changes to Breast Imaging, please contact UPCON through the CancerQuestion Helpline for Primary Care.

Experts are also available to come to your clinic to talk to clinicians and staff about how to integrate these changes into your clinical practice.

call or text 204-226-2262

email cancerquestion@cancercare.mb.ca

online www.cancercare.mb.ca/cancerquestion

CANCER PATIENT NAVIGATION SERVICES

Primary Care Providers can now access Cancer Patient Navigation services directly for their patients, including:

1. Nurse Navigators link to patients by phone to provide information, education or additional support services during this time of high anxiety and uncertainty.

2. Can inform the ordering FP/NP when tests, referrals or results are delayed compared to the recommended timelines in the In Sixty pathways for breast, colorectal and lung cancers. (www.cancercare.mb.ca/diagnosis)

3. They DO NOT order tests or make referrals as they do not take over patient care. However, they can help provide guidance on the recommended next steps in diagnosing a patient and information to include in the referral package to CancerCare Manitoba.

INTERLAKE-EASTERN RHA	1-855-557-2273
Prairie Mountain Health	1-855-346-3710
Northern Health	1-855-740-9322
Southern Health-Santé Sud	1-855-623-1533
WINNIPEG	1-855-837-5400

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KEEPING ABREAST OF DIRECT REFERRAL

Dr. Mark Kristjanson and Donna Bell, COMMUNITY ONCOLOGY PROGRAM

As of February 2nd, there were two changes to Breast Imaging in Manitoba:

1. There is a NEW provincial form: 'Manitoba Provincial Breast Imaging Consultation Request'. This form is to be used for ordering any diagnostic test for breast imaging at regional and private imaging centres. It does NOT include Breast MRI. Please contact your EMR vendor to access the form.

2. Patients will be automatically referred and booked for further imaging and biopsy if indicated, at the recommendation of the radiologist doing the imaging (Direct Referral.) Primary care providers will be notified of the direct referral by fax with the imaging results, and will also be informed of the date & time of the next appointment.

WHAT ARE THE IMPLICATIONS FOR MY CLINIC PRACTICE AND PATIENTS?

If the FP/NP is passive about this process or unaware of the implications of the new breast imaging direct referral system, the patient can go from screening mammography to surgical consult (if at Breast Health Centre) without

...clinicians will have a window of only 2-3 days to communicate to the patient...

discussing results, their implications or

plans with their primary care provider, and wind up hearing the bad news for the first time from the surgeon.

Primary care clinicians will need to be attentive, for the sake of their patients, to two milestones on the cancer patient journey when an abnormal diagnostic mammogram/exam is received:

1. When the abnormal breast imaging report is received, clinicians will have a window of only 2-3 days to <u>communicate to the patient that they are going to</u> receive a call notifying them of an appointment for the next test (usually image-guided biopsy.) Many clinicians won't have time to bring the patient in for a face to face discussion, but they can give their patient a 'heads up' over the phone.

- For those patients who are alarmed at the speed of subsequent testing and procedures, clinicians can also inform them that it is not a reflection of the outcome of the test, but of an improvement to the testing and diagnostic system in Manitoba.
- For those patients who do require extra support, a referral to Cancer Navigation services can be initiated at this time (or at any time throughout the diagnostic process).

2. During the same call or visit to discuss the abnormal breast imaging, the primary care clinician should also advise the patient to <u>call the clinic nurse</u> or receptionist once they know the date of the biopsy, and to book a follow <u>up with the FP or NP for about nine calendar days after the biopsy</u>. That way, they can have a face to face discussion of the pathology report (which usually takes 7 days from the time of biopsy to reach the primary care clinician.) The patient can have their spouse / support person with them, and have a few days to digest the news and to draw up a list of questions they will have for the surgeon at the time of the initial surgical consult.



Cancer Expert

Versha Banerji, MD, FRCPC CCMB HEMATOLOGIST IN GENERAL HEMATOLOGY & CLL

QUESTION: The WBC of my CLL patient suddenly doubled on Ibrutinib – is this an emergency?

ANSWER: The use of novel oral agents to treat cancer is expanding. Recently, Ibrutinib, a Bruton's Tyrosine Kinase (BTK) inhibitor, became Health Canada approved for chronic lymphocytic leukemia /small lymphocytic lymphoma (CLL/SLL) in patients who have failed at least one line of standard frontline therapy.

BTK is downstream of B Cell Receptor (BCR), which is activated in CLL. Ibrutinib is currently available on compassionate basis but will be available broadly in the near future. The standard dosing in CLL is 420mg orally daily (3 tablets) and is recommended until progression.

Patients are advised against grapefruit juice and orange juice due to the CYP3A4 interaction. In addition, some antibiotics can interact and drug-drug interaction checking should occur. The main toxicities are colitis with diarrhea (early and late onset), cardiac arrhythmias (mainly atrial fibrillation), peripheral lymphocytosis and bruising/ bleeding without thrombocytopenia. The bleeding is caused by platelet dysfunction and the lymphocytosis is due to release of CLL/SLL cells from the marrow and lymph nodes into peripheral circulation.

Do not be alarmed by the continually rising lymphocytosis, as it resolves on average in 3 months, but may persist.

If a patient complains of symptoms related to diarrhea, arrhythmia or bruising please contact the patient's hematologist or the CancerQuestion Helpline for Primary Care (below) and we will be happy to advise.

call or text 204-226-2262 email cancerquestion@cancercare.mb.ca

SEE THE SCREENING CORNER FOR INFORMATION ON DIRECT REFERRALS FROM THE BREASTCHECK PROGRAM



DIRECT REFERRAL & BREASTCHECK

Kristin Bergen, program manager, breastcheck

Since 1999 BreastCheck has coordinated follow-up procedures for women with an abnormal screen through our direct referral program. Participation in BreastCheck's direct referral program ensures that women receive the required test in the shortest time possible, and has been shown to reduce the time to first procedure and diagnosis after an abnormal screen by up to three weeks.

In addition to coordination of follow-up procedures, BreastCheck:

- Phones women to notify them of their screening result and of the followup appointment booked for her. Women are also sent a letter with this information.
- Sends screening results to the woman's primary care provider (PCP) including information on the follow-up appointment that has been booked.
- Once all follow-up is complete BreastCheck sends a letter to the woman and her PCP indicating whether they can return to BreastCheck (benign results) or next steps.

What's New

The direct referral initiative mentioned in the "Keeping Abreast of Direct Referral" article is a new and separate process from BreastCheck's direct referral program. Though similar, it does not change BreastCheck's current practices. The new initiative means that after initial follow-up from a screening mammogram women requiring additional imaging or biopsy, will then be directly referred and booked by the radiologist at the diagnostic center for the second set of follow-up procedures. Please refer to the "Keeping Abreast" article for possible considerations as a result of this new initiative.

If you have any questions about BreastCheck's processes, please contact me at kristin.bergen@cancercare.mb.ca or 204-788-8630.



¹K. Decker, M. Harrison, D. Chateau. "Influence on direct referrals on time to diagnosis after an abnormal breast screening result". Cancer Detection and Prevention 28 (2004): 361-367.

NEW CERVICAL CYTOLOGY REQUEST FORM

In collaboration with the Manitoba cervical cytology laboratories, CervixCheck has created and distributed a new provincial Cervical Cytology Request Form. Changes to the form aim to achieve quality and consistency in data collection.

CervixCheck has requested that the Manitoba approved EMR vendors incorporate this form into their EMR.



Where paper is still in use, primary care should contact their cervical cytology lab service provider to order paper copies of the form.

Please ensure all old electronic Cervical Cytology Request Forms are removed from your EMR and all old paper forms are destroyed by June 1st, 2015.

MARCH WAS COLORECTAL CANCER AWARENESS MONTH!

This year we had a public campaign to improve awareness about and increase screening for colorectal cancer.

To order pamphlets, posters, and other free educational resources for your clinic, please visit

www.ColonCheckmb.ca

DID YOU KNOW ...?

Health care providers and their staff are essential to improving screening rates. Research has found that people are most likely to be screened if they are encouraged to do so by someone they know and trust (especially their doctor).

Talk to your patients about screening for colorectal cancer!



NULDERY REQUEST FORM

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See insert: 'THE PAP TEST PROCEDURE: LIQUID-BASED CYTOLOGY (LBC)'

FOR MORE INFORMATION PLEASE VISIT www.GetCheckedManitoba.ca

> CANCER talk

HOW TO REACH US

CCMB REFERRAL OFFICE

204-787-2176 FAX: 204-786-0621 M-F, 0800-1600, closed Stat Holidays

Emergency Referrals: HSC PAGING: 204-787-2071 ST BONIFACE PAGING: 204-237-2053

CANCER QUESTION? HELPLINE FOR HEALTH CARE PROVIDERS

204-226-2262 (call or text / sms) EMAIL: cancer.question@cancercare.mb.ca ONLINE: cancercare.mb.ca/cancerquestion M-F, 0830-1630, closed Stat Holidays

CCMB SCREENING PROGRAMS BREASTCHECK – CERVIXCHECK – COLONCHECK

1-855-952-4325 GetCheckedManitoba.ca

CANCERCARE MANITOBA

TOLL FREE: 1-866-561-1026 (ALL DEPARTMENTS + CLINICS) www.cancercare.mb.ca

Inquiry & Reception

MACCHARLES UNIT (HSC) 204-787-2197 ST. BONIFACE UNIT 204-237-2559

PHARMACY: 204-787-1902

MANITOBA PROSTATE CENTRE, CCMB

204-787-4461 FAX: 204-786-0637

COMMUNITY CANCER PROGRAMS NETWORK (CCPN) OFFICE, CCMB 204-787-5159

PATIENT AND FAMILY SUPPORT SERVICES, CCMB

Psychosocial Oncology, Dietitians, Speech Language Pathology, Guardian Angel Caring Room, Patient Programs, Navigator Newsletter 204-787-2109

BREAST CANCER CENTRE OF HOPE

204-788-8080 TOLL FREE: 1-888-660-4866 691 Wolseley St. Winnipeg, MB R3C 1C3

WRHA BREAST HEALTH CENTRE

204-235-3906 TOLL FREE: 1-888-501-5219

WESTERN MANITOBA CANCER CENTRE

204-578-2222 FAX: 204-578-4991 300 McTavish Ave. East Brandon, Manitoba R7A 2B3

PAIN & SYMPTOM MANAGEMENT

204-235-2033 ask for pain & symptom physician on call M-F, 0830-1630

PALLIATIVE CARE CLINICAL NURSE SPECIALIST

204-235-3363

OTHER NUMBERS:

CANCERCARE MANITOBA FOUNDATION

DONATIONS & INQUIRIES 204-787-4143 TOLL FREE: 1-877-407-2223 FAX: 204-786-0627

CANADIAN CANCER SOCIETY

VOLUNTEER DRIVERS 204-787-4121 TOLL FREE: 1-888-532-6982

CANCER INFORMATION SERVICE TOLL FREE: 1-888-939-3333

CANADIAN VIRTUAL HOSPICE virtualhospice.ca

UPCOMING EDUCATION EVENTS

www.cancercare.mb.ca/cpd

> FRIDAY JUNE 19, 2015: 1:15 - 4:00pm Cases in Cancer: Multiple Myeloma

Small group discussion; case-based studies of topics targeted to primary care providers, led by CCMB specialists and facilitated by UPCON medical leads. Lunch at 12:45pm and learning notes distributed/posted after the session. MBTelehealth links are available.

Fee: \$50 / Free for UPCON Network Clinicians

Email Registration until June 15th: lynne.savage@cancercare.mb.ca

SAVE THE DATES!

> FRIDAY JANUARY 29, 2016 CancerDay for Primary Care

> FRIDAY JUNE 17, 2016 Blood Day

Full day of topics targeted to primary care. MBTelehealth and online links will be available for remote attendance. Exhibition hall with information from various CCMB departments and oncology/hematology-related partners.

> JOIN OUR MONTHLY E-BULLETIN - UPwords!

http://eepurl.com/Chy01

email updates from CCMB on cancer, blood disorders and the health system in Manitoba

ANNOUNCEMENTS



Dr. Matthew Seftel has returned to CancerCare Manitoba and has been appointed to the position of Head, Section of Hematology/ Oncology at CancerCare Manitoba. Dr. Seftel will also be providing outpatient services in the Bone Marrow Transplant clinic.



& Hematology and will be providing outpatient services in the Thoracic, Breast and GI Disease Site Groups and participating in the Medical Oncology Consult Service at HSC and the WRHA Palliative Care Service.

Dr. James Paul has joined the Department of Medical Oncology



Dr. Amera Rasool joined the Community Cancer Program in The Pas in February of this year as a Family Physician in Oncology. Dr. Rasool joins the CCP team with Dr. Michael Pinder and Dr. Marie Noel at the Pas Health Complex. Dr. Rasool also has a primary care practice out of The Pas Clinic.



Dr. Sandra Wiebe has joined the Community Cancer Program in Neepawa in March of this year as a Family Physician in Oncology. Dr. Wiebe joins the CCP team with Dr. Richard Poettcker at the Neepawa Health Centre. Dr. Wiebe also has a primary care practice out of the Beautiful Plains Community Medical Clinic.