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Oncology CME Programs for Primary Care

Visit www.fpon.ca – Continuing Medical Education to learn more about our:

- 8-week GPO Education Program (see page 4)
- GPO Case Study Day – virtual session to be held in November 2021
- No-charge accredited Oncology CME Webcasts held 8-9:00 a.m. (Pacific Time) the third Thursday of every month (except July, August and December). Our complimentary Webcasts provide opportunity to participate in topical, interactive oncology presentations from anywhere with Internet access. Anticipated topics for 2021/22 to include:
  - Follow-Up Care of Patients with Indolent Lymphoma
  - Breaking Bad News Skillfully
  - Beyond Angelina Jolie: Diagnosis and Management of Hereditary Breast and Ovarian Cancer Syndrome
  - Lung Cancer Guidelines and BC Cancer Screening Program
  - Return to Work for Cancer Survivors
  - Don't miss our May 20, 2021 Webcast: Exercise and Cancer Care: When, Why, What and How Often?
- Primary Care Learning Session Modules – a series of interactive online self-directed learning sessions developed in collaboration with UBC CPD, to help primary care providers better support their cancer patients

COVID-19 Immunization & Patients with Cancer – Spring 2021

By Dr. Kim Nguyen Chi,
Chief Medical Officer, BC Cancer

Heather Findlay,
Chief Operating Officer, BC Cancer

Vaccines for people who are clinically extremely vulnerable

People with certain cancers and those at higher risk from COVID-19 due to existing medical conditions are now able to register for their COVID-19 vaccination. In March, the Ministry of Health announced an accelerated vaccination timeline for the approximately 200,000 people in B.C. who are clinically extremely vulnerable (CEV). The full list of CEV populations and criteria along with information for people who are CEV can be found on the BC government website: www2.gov.bc.ca/gov/content/covid-19/vaccine/cev

Starting in late March, letters have been sent in a phased approach to people identified as CEV with information on how they can register for vaccines. BC Cancer recognizes that physicians and front-line staff may get questions from patients about whether they should get immunized. The BC Centre for Disease Control has provided clinical resources for healthcare providers to support these conversations. BC Cancer has also posted information on its website for patients about timing their vaccination around their treatment schedules and BCCDC has resources for patients in CEV populations on their website (see links below).

Health Care Professionals Resources:
www.bccdc.ca/health-info/diseases-conditions/covid-19/covid-19-vaccine/resources-for-health-professionals

Patient Resources:
www.bccancer.bc.ca/health-info/covid-19-and-cancer-information-for-patients

www.bccdc.ca/health-info/diseases-conditions/covid-19/covid-19-vaccine/vaccine-considerations

If people who believe they are in the CEV group have not received a letter by April 15, 2021, they can contact the provincial call centre to confirm if they are on the CEV list. If a patient in one of the named categories did not receive a letter, BC Cancer physicians or nurse practitioners may be called upon to fill out an attestation form. This form is being provided by Doctors of BC and distributed through the health authorities beginning April 16.

Thank you to all the Family Physicians and other Primary Healthcare Providers, for their efforts to keep us all healthy through these challenging times of the COVID-19 pandemic.

BEST PRACTICE CANCER CARE GEMS

Supporting cancer survivors return to work e-course for primary care providers

By Dr. Christine Maheu, RN Ph.D., Inf. - Ph.D. Associate Professor, Ingram School of Nursing, École des sciences infirmières Ingram, McGill University, Université McGill

Maureen Parkinson, MEd, CCRC Provincial Vocational and Rehabilitation Counsellor, BC Cancer

Current projections estimate that by 2023, more than 277,000 Canadians will develop cancer annually.[1] The latest 2020 World Health Organization report notes that more attention needs to be paid to the long-term health needs of cancer survivors and their reintegration into society and the workplace. While a majority of cancer survivors are expected to return to work (RTW), many will experience cancer-related impairments that will affect their work ability, with 26% likely going to report deterioration in physical work ability and 19% deterioration in mental work ability.[2] The end result is a two-fold unemployment risk observed in cancer survivors in comparison to people who do not have.[3,4]

As the majority of cancer survivors are in the prime of their working lives, reduced work ability or the inability to RTW in a timely manner imposes significant personal, social, and financial strain at the individual, familial, and societal levels[4]. Delays in RTW negatively impact overall health, quality of life, and re-employment.[5] A recent report estimates the overall productivity losses to the Canadian economy associated with cancer range from $75 to $317 million annually[6]. These findings provide a strong case for supports to help cancer survivors re-engage in life and work productivity, optimally targeted to the early phases of cancer recovery. Yet despite the importance of return to life and work interventions for cancer survivors, these supports are largely absent in survivorship care.

Family physicians and nurse practitioners (PCP) play a crucial and important role in supporting cancer survivors with return to work, yet their roles are not well defined. Most agree that they lack the knowledge and skills to advise on work-related topics,[7,8] including how to develop and support a return to work plan.[9] PCPs have expressed the need for additional training to better understand the impact of cancer treatment and symptoms on the patients' work ability.[10] Yet few educational training resources are available to assist PCPs to gain the skills required to support the return to work for cancer survivors.

To address this gap, supported by the Canadian Partnership Against Cancer, the Cancer and Work Team (Maureen Parkinson, BC Cancer Vocational Rehabilitation and Dr. Maheu, McGill University) has partnered with BC Cancer's Primary Care Program and the Family Practice Oncology Network (FPON), BC Cancer Psychosocial Oncology, Work Wellness Institute, University of British Columbia Division of Continuing Professional Development (UBC CPD) to collaboratively create a national e-course for PCPs in supporting cancer survivors with return to work.

Several steps guiding the development of this e-course include: an advisory group created to provide ongoing consultation to the course; a literature review conducted to identify existing resources; and a needs assessment with over 75 PCPs conducted across Canada to identify specifics needed to support cancer survivors with return to work. The foundation of the e-course is built on *iCanWork*: 11 steps to return to work for cancer survivors (Parkinson and Maheu, 2019) featured on the Cancer and Work website (www.cancerandwork.ca). The *iCanWork* approach was initially developed by BC Cancer, *Cancer and Returning to Work: A Practical Guide for Cancer Patients booklet*.

Maureen Parkinson and Dr. Christine Maheu

The **e-Course for PCP in supporting cancer survivors with return to work** will address psychological wellness, mental health challenges, and supporting underserved populations (rural/remote, and adolescent/young adults with cancer). By the end of the e-course, PCP will have increase knowledge and skills in supporting cancer survivors with return to work; increase skills to foster coordination and continuity of care after treatment to support return to work; and improve coordination of and referral to existing mental health and vocational resources for cancer survivors. The course will be accredited, bilingual and offered free. Dates for the release of this educational module are TBD.

Consultations to inform the content of the e-course are still ongoing. For those who would like to contribute to the content of the course, consider completing the survey available in both French and English: Needs survey e-course primary care providers in supporting cancer survivors with return to work.

If you are interested in being informed of when the course is launched please contact: info@cancerandwork.ca

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COVID-19 & cancer: one year in

By Dr. Kim Chi
Chief Medical Officer, BC Cancer

Cancer care does not stop for COVID-19. It's been more than one year since the World Health Organization declared COVID-19 a global pandemic and that statement remains as true now as it did then.

In the early days of the pandemic, BC Cancer initiated safety measures to reduce exposure, promote physical distancing and minimize the number of people within our centres. We quickly expanded digital health services and held approximately 70 per cent of appointments by phone or with secure video services. We mailed prescriptions to patients when possible, implemented an essential visitor policy, screened each person entering our centres and put in place a universal mask policy.

These adaptations required flexibility, accommodation and resilience on the part of patients, physicians and staff. As recent data shows, it was worth it. COVID-19 infection rates amongst BC Cancer patients have been approximately half that of the general population in B.C. In contrast, other jurisdictions have reported that cancer patients have a higher infection rate compared to the general population.

Throughout all of this, cancer care remained at the forefront. Cancer surgeries were identified as a priority and many occurred within appropriate timelines with mitigation strategies developed on a case-by-case basis. In some instances, we saw patients receiving surgical procedures earlier than what would have happened pre-pandemic, because surgical capacity increased when elective procedures were paused.

Many of the innovative approaches implemented during this period will likely have a lasting impact on patient care. Today approximately half our appointments continue to be offered digitally, with the exception of tests and treatments that have to be conducted in person, such as chemotherapy or radiation therapy. A remote patient monitoring program that was launched in partnership with the Provincial Health Services Authority's Office of Virtual Health enabled patients receiving care for head and neck or lung cancer to report their symptoms daily from the comfort and safety of their home. The at-home assessments are closely monitored by their care team who can intervene if there are any concerns; possibly before a patient knows to seek care.

While we take tremendous pride what we collectively accomplished during a challenging year, we are concerned that some cancers in British Columbians may be under diagnosed as a result of the pandemic. This could be due to a combination of issues, including decreased access to diagnostic services, the shift to virtual primary care with only limited in-person visits and apprehension by the public about accessing the health care system either for concerning symptoms, or for routine screening for non-symptomatic people.

Overall, cancer screening is rebounding. While the daily volume of screening mammography appointments BC Cancer provides is lower than pre-pandemic due to the increased cleaning protocols in between patients, screening mammography sites remain fully booked. In the case of colon cancer screening, in the month of December 2020, labs processed more Fecal Immunochemical Tests than they did in December 2019.

We initially saw an approximate 20 per cent decrease in new cancer diagnoses in the first part of the pandemic, however this has been increasing back to pre-COVID levels. We have not exceeded pre-COVID levels – meaning we may not be catching up with those missed diagnoses.

As a result, we are concerned that when these cancers are eventually diagnosed, they may be at a more advanced stage than if they had been caught earlier. Today, the BC Primary Care Program, as well as all of you who work in Family Practice, play a vital role in the work we must do to catch up on routine cancer screening and encourage all patients who may be concerned about their health to speak to their doctor immediately.

Contact: FPON@bccancer.bc.ca

Quesnel and the North: Reflections on patient-centred care, the cancer care network, and lifelong learning

By Dr. Sian Shuel, Medical Education Lead, Family Practice Oncology Network with Dr. Joseph Obanye and Dr. Peter Youssef

The Quesnel Team (left to right): Peter Youssef-GPO, Christy Wootten-RN, Cynthia Wheeler-RN, Candace Damen-RN, Jennifer Boesem-RN, Louann Lilley-RN, Shirley Smith-Clinic Clerk, Joseph Obanye -GPO

The city of Quesnel gained a second General Practitioner in Oncology (GPO) earlier this year. Although Dr. Peter Youssef has been a family physician and emergency physician in Quesnel for a couple of years, he recently added 'GPO' to the list of medical roles he is filling. Dr. Youssef joins Dr. Joseph Obanye, GPO, family physician, emergency room physician and co-lead chief of staff at the local hospital. In addition to the two physicians, the community oncology clinic in Quesnel includes five nursing and one clerical staff. Dr. Obanye is thankful for the help as the community oncology site is busy, running three 4-hour clinics a week, but hoping to expand those hours in the future to meet the demand.

When speaking of what they enjoy in their role as a GPO, it is evident both physicians prioritize patient-centred care.

Dr. Obanye: Cancer is scary to patients. When you have the initial cancer conversation with patients, you see their faces drain. Through my GPO training at BC Cancer, I know much is treatable, and I enjoy giving people this hope. Also, we have a bell that patients ring at the end of their treatment. I love hearing that bell.

Dr. Youssef: Patients are grateful for their care. It's a privilege to serve them in this critical time, and it pushes us to excel.... If the clinic in Quesnel wasn't here, patients could get some care via videoconference. However, those on systemic therapy would have to drive to Prince George for treatment. Travelling this distance in the winter is not easy, and during a storm, it is not possible.

The physicians each credit the regional and local teams for the success of cancer care in Quesnel and the surrounding area.

Dr. Obanye: My mentors in Prince George have been a wealth of knowledge and support. They are a direct phone call away, and I cannot overemphasize the support I receive from them. On the local level, teamwork is essential, and the nurses are at the heart of our success.

Dr. Youssef: During my training in Prince George, it was clear that everyone is putting the patient first. The message was 'don't hesitate to call,' and I have good support from the oncologists. When I reach out with a question or problem, they are so attentive. I often receive a response within minutes, and the oncologists appreciate the work we are doing in Quesnel. I feel this oncology network is maintaining a high quality of practice and teamwork. I also see the clinic in Quesnel as an excellent example of collaboration. We GPOs are supporting the nurses, and the nurses are supporting us.

Having completed GPO Education recently, Dr. Youssef notes that it has also helped him in his roles as a family physician and emergency physician. *Most family physicians in Quesnel practice emergency medicine too. I can now provide patients with more specific information and have a better understanding of cancer and cancer care. Patients, who have not seen a family physician in years, will present to the emergency room with advanced cancer, and it is helpful to have a deeper knowledge of what to order and who to contact.*

Dr. Youssef admits that while GPO Education was a great starting point and that he is grateful for the training, he notes a need to continue learning. To help support the

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Next GPO Education course begins September 27, 2021

The next GPO Education Introductory Module begins September 27, 2021. The GPO Education Program is intended for newly hired GPOs in BC/Yukon with a confirmed position at a BC Cancer or Health Authority Community Cancer Clinic. The aim is to facilitate the acquisition of the foundational oncology knowledge and clinical experience required to deliver systemic therapy and cover associated aspects of supportive care within their local community. It includes a two-week equivalent didactic Introductory Module held twice yearly, followed by 30 days of flexibly scheduled clinical rotation.

Due to the uncertainty of COVID restrictions over the rest of 2021, the Fall 2021 GPO Introductory Education Module will be provided virtually and split into two 2-week half-day sessions. Morning sessions will be held September 27 – October 8 and afternoon sessions October 18 – 29. Full details at www.fpon.ca

The path to elimination of cervical cancer

By Dr. Andrea Neilson, Gynecologic Oncology Fellow, University of British Columbia

Dr. Harry Brar, Gynecologic Oncologist, BC Cancer

Laurie Smith, Research Program Manager, HPV Related Diseases

Dr. Gina Ogilvie, Canada Research Chair, Global Control of HPV Related Cancer

Dr. Lily Proctor, Gynecologic Oncologist, BC Cancer

Dr. Andrea Neilson, Laurie Smith, Dr. Gina Ogilvie and Dr. Lily Proctor

Cervical cancer is an almost entirely preventable disease. In November 2020, the World Health Organization launched a Global Strategy to 'Accelerate the Elimination of Cervical Cancer'.[1] The Canadian Partnership Against Cancer (CPAC) has also initiated a Canadian 'Action Plan for the Elimination of Cervical Cancer in Canada 2020-2030' with three priorities: 1) Improve HPV immunization rates by ensuring that 90% of 17 year-olds are fully vaccinated with the HPV vaccine, 2) implement HPV primary screening with the goal of 90% of eligible individuals being up to date with screening and having been screened with an HPV test, and 3) improve follow-up of abnormal screening results with 90% of those with abnormal screens having clear follow up and management plans in a timely manner.[2] These priorities address and target the three pathways for prevention and elimination.

Primary prevention of cervical cancer occurs through HPV vaccination and is aimed at prevention of high-risk HPV infections, the causative agent of cervical cancer. A voluntary, school-based HPV immunization program has been ongoing since 2008 in BC and commenced with the 4-valent vaccine (protection against HPV 6, 11, 16, and 18) for girls in grade 6. The program transitioned to the 9-valent vaccine in September 2016 (additional coverage against high-risk HPV types 31, 33, 45, 52 and 58), which offers close to 90% protection against cervical cancer and its precursors.[3] Uptake rates are lower than targets listed in the Action Plan (66.9% of eligible grade 6 girls having completed their HPV vaccinations in 2017–2018); however, BC data shows that the vaccine has decreased age-centered incidence rates of high-risk precancerous lesions (CIN2/3) by over 60%.[4, 5]

Secondary prevention refers to the identification of diseases in their early stages, before the onset of clinical signs and symptoms. BC Cancer recommends screening for cervical cancer with a Pap test every three years for any person with a cervix between the ages of 25-69. Timing of recommended screening is not altered by HPV vaccination status.[6] BC data from 2018 show that only 60-70% of eligible women participated in the screening program. Cervical cancer screening with primary HPV testing has been studied extensively. A landmark BC trial showed that compared with cytology alone, HPV testing resulted in a significantly lower likelihood of CIN3+ at 48 months (2.3/1000 vs 5.5/1000).[7] The use of HPV primary screening in BC is still being investigated, including evaluating the feasibility of patient self-collected samples which has the potential to improve screening uptake in those who don't regularly attend.

Tertiary prevention occurs through the management of disease post-diagnosis. Cervical cancer screening retention rates in British Columbia in 2015 were less than 75%. To address this, BC has recently implemented a facilitated colposcopy referral system for abnormal cervical cytology. This includes automated referrals to colposcopy for patients with abnormal screens, as well as mailed patient notices and reminders. We are hopeful that this process will streamline patient care and improve screening effectiveness through increased participation.

Check out the BC Cancer website for more information on changes implemented to the cervical cancer screening program:

www.bccancer.bc.ca/about/news-stories/stories/cervix-screening-initiates-reminder-notices-to-patients-and-improves-access-to-cervical-cancer-screening-follow-up

CPAC has set out clear goals for Canadians: 90% vaccine uptake rate, 90% screening participation and retention rate, and 90% engagement in timely follow up and management of abnormal screening by 2030. The three methods of prevention are complementary strategies, working together to prevent and eliminate cervical cancer. Current vaccine and screening participation and retention rates in British Columbia are not sufficient. We need to continue to work together to successfully move towards the elimination of cervical cancer in our province.

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Quesnel and the North
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lifelong learning of GPOs in the rural, remote and regional centres, the Family Practice Oncology Network has recently decided to continue the spring intake of its GPO Education Introductory Module virtually and open it up to practicing GPOs as a refresher. The most recent intake saw eight practicing GPOs attending various sessions.

In addition to twice yearly GPO Education and yearly GPO Case Study Day, FPON's educational initiatives include the accredited almost monthly CME webcasts and yearly CME Day aimed at Primary Care Practitioners, with more offerings planned for the future.

Contact Dr. Sian Shuel at sian.shuel@bccancer.bc.ca

Ovarian cancer update 2021

By Dr. Aalok Kumar MD, MHSc, FRCPC
BC Cancer – Surrey

Ovarian cancer is the eighth leading cause of death in Canadian women and fifth leading cause of cancer death. The Canadian Cancer Society estimated that, in 2020, 3,100 women in Canada developed ovarian cancer, with 1,950 deaths due to this disease.

View the full webcast on this topic at www.fpon.ca – Continuing Medical Education.

Since the addition of paclitaxel to standard therapy in the early 1990s, there have been no major practice changing developments in ovarian cancer therapeutics until the recent introduction of poly-ADP-ribose-polymerase (PARP) inhibitors. Prior to PARP inhibitors, incremental gains in overall survival (OS) have only been achieved by altering the route and schedule of chemotherapy delivery (e.g. intraperitoneal chemo and dose-dense paclitaxel in the first-line setting).

Although commonly referred to as ovarian cancer, the origin of disease is thought to be the fallopian tubes or endometrium in majority of cases. There are a number of different histotypes that patients present with, including high grade serous (the most common), endometrioid, clear cell, mucinous and low grade serous. Each of these are characterized by specific molecular alterations, with a number of ongoing investigations exploring targeted treatment. In particular, patients diagnosed with high grade serous carcinoma are frequently found to have deficiencies in homologous recombination repair, which can either be due to an underlying germline mutation or a mutation associated with the tumor (i.e. somatic mutation). This has led to the development and use of PARP inhibitors as part of the treatment strategy for patients diagnosed with this histotype, depending on the stage of disease and response to prior therapy.

Dr. Aalok Kumar

Depending on the burden/bulk of disease at the time of diagnosis, patients will either be offered upfront surgery or delayed/interval debulking surgery after receiving chemotherapy. For patients who proceed with upfront surgery, they may be offered chemotherapy post-operatively depending on the stage of disease. This can either be given intravenously or through a combination of intraperitoneal chemotherapy (delivered directly into the peritoneum via an intraperitoneal catheter) and intravenous chemotherapy. This latter approach is dependent on the stage of disease and other disease related factors, with trials demonstrating significant improvement in

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The role of surgical intervention in risk reduction of ovarian cancer

By Dr. Janice S. Kwon, MD, MPH, FRCSC
Gynecologic Surgical Oncologist
Surgical Chair, Gynecology Tumour Group, BC Cancer

Dr. Janice S. Kwon

Ovarian cancer is the 8th most common cancer in women in BC, however one of the most lethal.[1] The majority of women with ovarian cancer are diagnosed at an advanced stage, and most of them will ultimately succumb to their disease. There is still no effective screening test for ovarian cancer,[2,3] therefore alternate strategies are needed to reduce the risk of ovarian cancer.

In 2010, the BC Ovarian Cancer Research team (OVCARE) launched an educational campaign, advising women and their health care providers to consider salpingectomy (surgical removal of fallopian tubes) at the time of hysterectomy for benign conditions (such as fibroids), or instead of tubal ligation for contraception, as an ovarian cancer prevention strategy. This practice became known as "opportunistic salpingectomy", because it would occur whenever there was an opportunity during another surgical procedure. This campaign was based on the evolving knowledge that the majority of high-grade serous ovarian cancers (HGSC), the most common type of ovarian cancer, actually arise in the fallopian tube, not the ovary.[4] Since 2010, there has been exponential uptake of opportunistic salpingectomy in BC, especially as a surgical sterilization procedure. In 2010, less than 1% of all surgical sterilizations were salpingectomy (the vast majority were tubal ligation), but by 2014, this proportion increased to 48%.[5] This proportion has almost certainly increased even further since then.

It will be difficult to prove in a prospective randomized controlled trial that opportunistic salpingectomy will decrease ovarian cancer risk and mortality. However, our group has modeled the costs and estimated benefits of this intervention. This has demonstrated that opportunistic salpingectomy is a cost-effective ovarian cancer prevention strategy in the general population, both at the time of hysterectomy for benign conditions, as well as surgical sterilization (instead of tubal ligation).[5]

Salpingectomy may be a potential risk-reducing strategy in women with an inherited predisposition to ovarian cancer, specifically those with pathogenic variants ("mutations") in *BRCA* genes. These women have an extremely high lifetime risk of developing ovarian cancer (up to 44% if *BRCA1*, and 17% if *BRCA2*).[6] The standard recommendation for these women is risk-reducing bilateral salpingo-oophorectomy (RRBSO) around age 35-40 for *BRCA1*, and 40-45 for *BRCA2*.[7] While

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Surgical intervention in risk reduction of ovarian cancer continued from page 6

RRBSO may prevent ovarian cancer, the major disadvantage is that these women become prematurely menopausal, and they are at risk of short-term adverse effects (vasomotor, psychological, and urogenital symptoms), as well as long-term health consequences including osteoporosis, early cognitive decline, and coronary heart disease.[8] Since the majority of BRCA-associated ovarian cancers are HGSC arising in the fallopian tube, the concept of salpingectomy alone at an early age to reduce ovarian cancer risk is very appealing, as these women do not become prematurely menopausal as a result of oophorectomy. Unfortunately, salpingectomy alone will not offer the same protection as RRBSO, for 2 reasons:

1. there are still some BRCA-associated cancers that arise primarily in the ovary, not the fallopian tube,[9,10] and
2. early RRBSO will reduce risk of ER+ BRCA2-associated breast cancers secondary to reduction of endogenous estrogen.

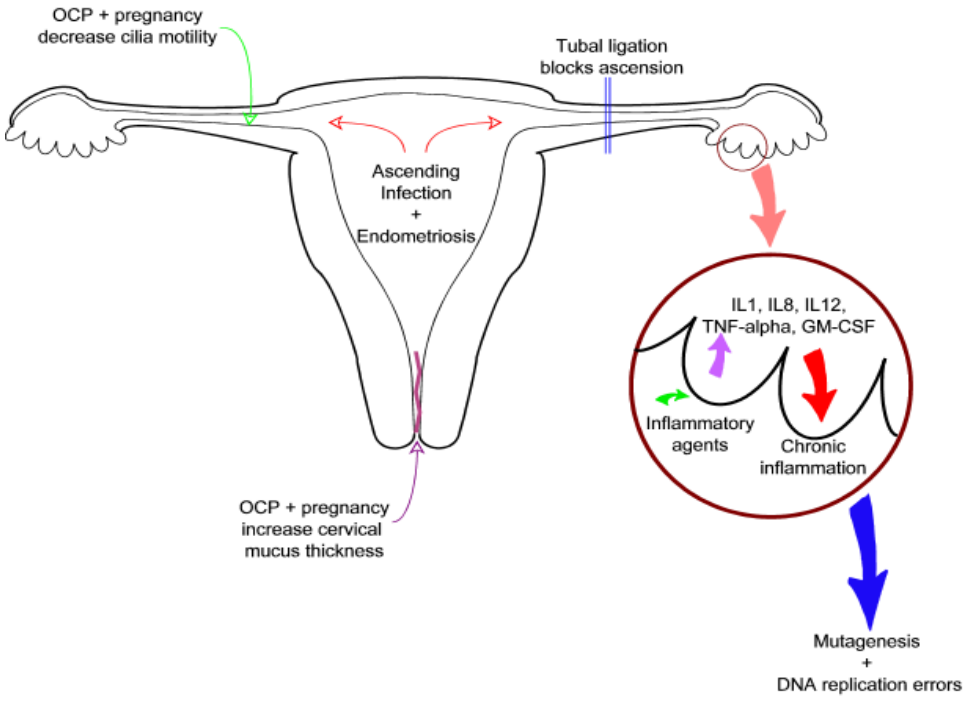
Therefore the proposed compromise has been a 2-stage surgical strategy, offering salpingectomy first at a young age, and then bilateral oophorectomy at a later age, in order to maximize quality of life and ovarian cancer risk reduction. There are 2 large prospective trials that are evaluating this 2-stage strategy in this patient population: (1) TUBA study (Early TUBectomy with delayed oophorectomy) in the Netherlands;[11] and (2) WISP study (Women choosIng Surgical Prevention) in the USA. Both trials have preliminary results indicating better quality of life and less decision regret in the salpingectomy cohort, compared to those undergoing standard RRBSO. It is still too early to determine if the incidence of ovarian and breast cancers will be same in both groups. The TUBA and WISP study teams have now combined efforts to evaluate these outcomes. Our group has also predicted that the 2-stage surgical strategy will be a cost-effective cancer prevention strategy for women with *BRCA* mutations.[12]

In summary, there are surgical intervention options to reduce ovarian cancer risk in 2 contexts:

1. general population; and
2. high-risk population (*BRCA* mutation carriers).

The majority of ovarian cancers are high-grade serous ovarian cancers, which arise in the fallopian tube. For the general population, opportunistic salpingectomy is recommended during pelvic surgery such as hysterectomy for benign conditions, or instead of tubal ligation. For high-risk women, salpingectomy at an early age may offer some risk reduction against ovarian cancer while avoiding premature menopause. However, because some BRCA-associated cancers arise primarily in the ovary, oophorectomy must be considered as a secondary procedure at a later age. The long-term benefit of salpingectomy as a surgical intervention against ovarian cancer has not yet been proven in a clinical trial, however, statistical modeling indicates that it will be cost-effective, and preliminary data indicates that it is associated with better quality of life. It is important to counsel these women that the standard of care still remains RRBSO. However, as we await the results of longer term studies, we remain cautiously optimistic that salpingectomy will prove to be an important surgical strategy to reduce the incidence, suffering, and mortality from ovarian cancer.

see References on page 13



Ovarian cancer update 2021 continued from page 6

overall survival utilizing this approach of treatment delivery.

For those patients diagnosed with more advanced disease/higher bulk of disease, many will undergo upfront chemotherapy delivered in an intravenous fashion in an attempt to reduce the burden of disease, followed by surgery followed by further chemotherapy. Assuming that a response has been demonstrated, upon completing chemotherapy, patients with certain disease characteristics may also be offered maintenance PARP inhibitor therapy, given in an oral format. This can be given for a duration of 2 or 3 years depending on the medication being used. A number of published trials have demonstrated that maintenance PARP inhibitor maintenance therapy is efficacious in preventing/delaying disease progression, primarily in patients who have a deficiency in the homologous recombination repair pathway (i.e. a BRCA mutation or a BRCA like alteration), with some trials demonstrating efficacy in patients who lack a specific mutation as well.

In the setting of disease recurrence, if patients are considered platinum sensitive, they may be retreated with a platinum based chemotherapeutic treatment followed by PARP inhibitor maintenance (assuming no prior PARP inhibitor therapy), while platinum resistant/refractory patients would be offered non platinum agents, at times in combination with bevacizumab which is a VEGF inhibitor. Platinum resistant/refractory disease is associated with a poor prognosis, with much work still remaining to be done to find novel therapeutic agents to improve outcomes.

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Breast health considerations during COVID-19

By Dr. Colin Mar, Medical Director, BC Cancer Breast Screening

As the provincial vaccination program continues to rapidly evolve, the COVID-19 pandemic continues to dominate both public and professional healthcare discussions. While the risk of viral transmission and implications of infection have forced us to reconsider and revise our medical practices, we must now accommodate attention to the many other health concerns. This includes breast cancer screening with mammography.

Dr. Colin Mar

Women in British Columbia are ***eligible for screening mammography beginning at age 40, provided they are asymptomatic and without breast implants or a personal history of breast cancer.*** Informed consent is key in the decision to screen, and includes consideration of potential benefits along with the limitations and downsides (Mar). Multiple online resources are available to assist patients in this decision (see "Important Things to Know" for details) in addition to advice from primary care providers.

Screening mammography is available provincially through the BC Cancer Breast Screening program and is accessed directly by patients. This is in distinction to ***diagnostic mammography available through diagnostic imaging facilities for a variety of clinical indications,*** and requiring a requisition from the provider. Typical clinical indications for a diagnostic mammogram include breast signs and/or symptoms. The latter include a palpable lump or thickening, and nipple changes including spontaneous discharge (clear or serosanguinous). These should be corroborated through patient history, clinical physical examination by primary care provider, and imaging requested once confirmed (P-T). Other indications for diagnostic mammography include evaluation of a positive screening mammogram, screening in the setting of breast implants or higher risk, and secondary screening for those with a history of breast cancer.

For those with a positive screening mammogram, correlation with history and physical exam is also recommended. This also provides an opportunity to mitigate any anxiety associated with the positive screen or pending evaluation, by conveying its relative frequency, but low probability of cancer. The average rate of abnormality at screening in BC is approximately 9%, while the positive predictive value of the abnormal screen is 4 – 7% (AR T13).

Both patients and providers must appreciate that screening mammography sensitivity represents an important limitation. Average reported sensitivity is approximately 90%, but sensitivity is lower both at younger age and with greater breast density (AR, Mar BCMJ). This understanding allows an informed decision to screen, and the key knowledge that a breast cancer may remain undetected following a negative screen. As such, breast symptoms and signs in this circumstance remain necessary to evaluate accordingly. For further detail regarding risks associated with breast density and how to discuss them with your patient, please see the BC Cancer Clinician Guide dedicated to this (see Important Things to Know for link).

It is also important that patients understand that with this favourable sensitivity, approximately 1,400 breast cancers are screen detected each year (AR). This extends to a morbidity and mortality benefit as the majority of these are of favourable prognosis. Amongst the many other health concerns, we encourage you to help keep breast cancer prevention and early detection through screening in mind, even during this pandemic. Patients may be reminded that BC Cancer

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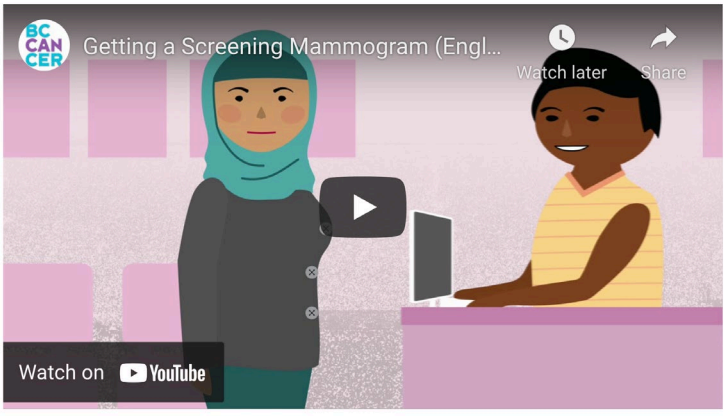
Get a Mammogram



Video available in Mandarin, Cantonese, Korean, Tagalog, and Punjabi.

Breast Health – Important Things to Know

Screening mammography is distinct from diagnostic mammography

- Screening is for asymptomatic population and includes consideration of benefits and limitations. Diagnostic mammography is appropriate for specific indications, often breast cancer signs and symptoms.

Be aware of signs and symptoms even with negative screening results

- Average reported sensitivity is approximately 90%, but is lower both at younger age and with greater breast density. Breast cancers may remain undetected following a negative screen.

Remind patients to keep preventative health top of mind, even during a pandemic

- BC Cancer Breast Screening has resumed with extended hours in some centres, with measures in place to protect both patients and staff.

BC Cancer Clinician Guide

http://www.bccancer.bc.ca/screening/Documents/Breast-Density-Discussion-Guide.pdf

Resources to support patient decision making

www.screeningbc.ca

http://decisionaid.screeningbc.ca

Adjuvant radiation for breast cancer patients: When less could be more

By Dr. Theodora Koulis. Radiation Oncologist, BC Cancer – Kelowna

Dr. Maryam Dosani, Radiation Oncologist, BC Cancer – Victoria

Dr. Hamid Raziee, Radiation Oncologist, BC Cancer – Surrey

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Dr. Theodora Koulis, Dr. Maryam Dosani, Dr. Hamid Raziee and Dr. Eric Tran

Background

Postoperative radiotherapy (RT) after breast-conserving surgery in early-stage breast cancer has shown to improve locoregional control,[1] and is the standard of care in the majority of patients. There has been an ongoing effort to shorten the course of adjuvant RT from the original standard of 50Gy in 25 fractions over 5 weeks. Canadian and UK trials established a 16- or 15-fraction schedule as the standard of care, and showed their non-inferiority to 25 fractions.[2,3] The more recent results of the FAST-Forward trial (UK FAST Trialists' Group) showed that the course could be further shortened to 26Gy in 5 fractions over one week without compromising outcomes.[4] This provides level-one evidence for a change in practice, potentially impacting a considerable number of patients with early-stage breast cancer.

Eligibility

The FAST-Forward trial included women with pT1-3, pN0-1, M0 invasive carcinoma of the breast following complete microscopic excision of the primary tumour by breast-conserving surgery with axillary sentinel node biopsy or dissection, and compared 40Gy in 15 fractions with 26Gy in 5 fractions. Although a wide range of patients were included in the trial (including ER negative and HER2 positive status) some patient-, disease-, and treatment-related characteristics were uncommon, and therefore the overall conclusions may be less applicable to these sub-groups. In BC, patients who meet the eligibility criteria of the trial and whose RT plans meet the dosimetric constraints used in the FAST-Forward trial can be considered for the 5-fraction course. Patients with DCIS and with very low risk invasive breast cancer were not included in the FAST-Forward trial because they had a very low likelihood of outcome events occurring. The results of the FAST-Forward trial could be extrapolated to include these patients. It is recommended that patients undergoing nodal RT and patients with breast reconstruction should not be treated with short-course at this time, unless participating in a clinical trial.[5]

Outcome

The Fast-Forward trial was published with a median follow-up of 6 years. The primary endpoint of the trial was ipsilateral breast or chest wall recurrence at 5 years. The trial showed the incidence of ipsilateral relapse to be 2.1% in patients treated with 40Gy in 15 fractions and 1.4% in patients treated with 26Gy in 5 fractions, with no significant difference between the groups, supporting the non-inferiority of the shorter fractionation. Other outcomes evaluated included regional relapse within the axilla, supraclavicular fossa or internal mammary chain, locoregional relapse, distant relapse, disease-free survival and overall survival. There was no significant difference between the groups. Overall 7% of patients enrolled in the trial died (3.7% from breast cancer).

Side effects

Standard acute breast RT side effects include fatigue and skin reaction consisting of erythema, pruritus, and occasionally desquamation. Acute side effects build through the course of RT and generally peak about 10 days post-RT before gradually resolving. When comparing the 5-fraction to the 15-fraction treatment, the intensity of the skin reaction was slightly less in the 5-fraction group and resolved about 2 weeks sooner. Peak skin reaction still occurred about 1-2 weeks after treatment completion.[6] Common late side effects of whole breast RT consist of skin hyperpigmentation, breast fibrosis, decreased cosmetic appearance of the breast and rarely lung fibrosis, chest wall discomfort, and ischemic cardiac disease. With median 5-year follow-up, no difference was seen in late effects to the breast or surrounding normal tissues between the 26Gy in 5 fractions and 40Gy in 15 fractions groups. About 30% of patients in both groups reported marked to moderate change to the appearance of their breast, and lymphedema occured in about 10% of patients.[4]

Conclusion

BC breast radiation oncologists have reviewed and discussed the results of the FAST-Forward trial. The consensus is that the 5 fraction course is a safe and effective alternative for breast adjuvant radiotherapy in patients who meet the eligibility criteria. This short-course adjuvant RT provides another treatment option for BC breast cancer patients, and may be particularly valuable for those travelling for treatment at one of the 6 provincial cancer centres.

see References on page 14

Breast health considerations during COVID-19 continued from page 8

Breast Screening has resumed several months ago now, in many centres with extended hours of service. While this facilitates access, patients will be reassured by additional adopted measures of infection control including physical distancing, appropriate PPE and enhanced disinfectant practices.

see References on page 14

Corridor Consult:
Myeloma, or not myeloma – that is the question!

By Dr. Kai Luecke, MD, FRCPC
Clinical Assistant Professor
Hematology/Oncology, BC Cancer – Surrey

Q What is Myeloma?

Dr. Kai Luecke

Myeloma is a hematological malignancy accounting for more than 17% of blood cancers. The median age of onset is 70 with a male predominance. It falls into the family of plasma-cell dyscrasias. This group includes precancerous MGUS (monoclonal gammopathy of undetermined significance) and smoldering myeloma, multiple myeloma, POEMS syndrome (polyneuropathy, organomegaly, endocrinopathy, M-protein, skin changes), AL amyloidosis, plasmacytoma, MGRS (monoclonal gammopathy of renal significance), etc. Given the multiple presentations of plasma-cell neoplasms, it is important to obtain the appropriate set of investigations in order to confirm the diagnosis and initiate therapy.

Q What characteristics influence treatment?

Treatment requiring multiple myeloma is characterized by the presence of paraproteinemia, an abnormal plasma cell population in the bone marrow and evidence of end-organ damage. End-organ damage is defined by the CRAB criteria: Hyper-Calcemia, Renal impairment, Anemia, and lytic Bone lesions. The patient presenting with unexplained renal impairment, anemia or new/worsening bony pains would trigger investigations regarding an underlying plasma-cell dyscrasia.

Q What should we think about for myeloma screening/testing?

To screen for myeloma, a set of laboratory tests should be obtained including CBC + differential, electrolytes, creatinine, calcium, albumin, serum protein electrophoresis (SPEP), urine protein electrophoresis (UPEP), serum free light chain assay (SFLCA) and imaging studies (x-ray skeletal survey). A bone marrow biopsy is a confirmatory test but also offers prognostic factors in the form of cytogenetics. The ordering physician should be aware of some pitfalls during the evaluation process:

- Anemia in the setting of myeloma is most often characterized by progressive normocytic anemia (sometimes macrocytic). Other reasons for anemia should be ruled out like chronic kidney disease, hemolysis, bleeding, iron and B12 deficits, liver disease, thyroid disease, drugs, etc. The peripheral smear usually reveals Rouleaux formation representing stacks of erythrocytes which is caused by changes of electrostatic charges on the red cells secondary to being coated with proteins. In rare cases, circulating plasma cells can be identified which are pathognomic for highly aggressive plasma-cell leukemia with very poor prognosis.
- SPEP is able to identify the presence of a monoclonal protein (M-protein) that is secreted by the malignant plasma cells in the vast majority of cases. Around 90% of myeloma patients will have a detectable M-protein on immunofixation. Often, a suppression of the uninvolved immunoglobulin levels is noted. The most common subtypes are IgG (52%), IgA (21%), light chain only (16%). IgM paraproteinemia is extremely rare (<0.5%) in multiple myeloma and should trigger investigations for other lymphoproliferative disorders (CLL/SLL, lymphoplasmacytic lymphoma, marginal zone lymphoma, etc).
- UPEP (24h collection) can identify free light chains excreted in the urine. The standard urinalysis is usually unremarkable and does not show excess proteinuria.

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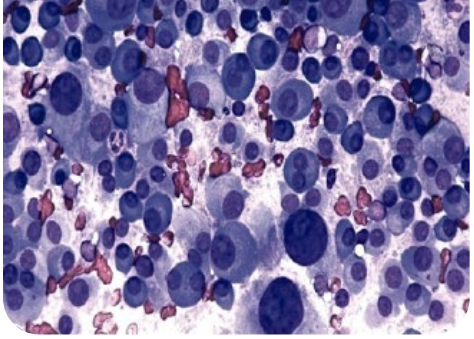
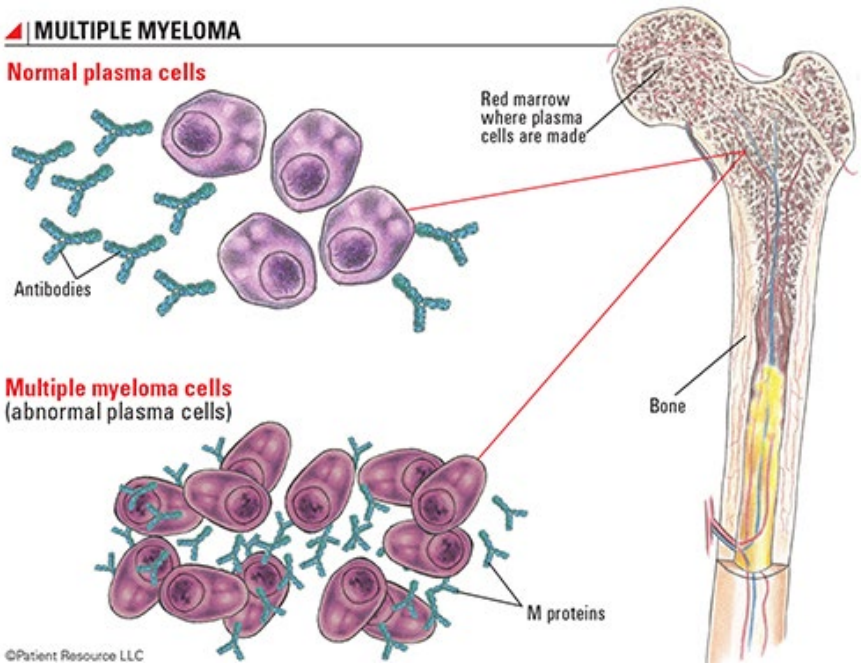


Myeloma cells almost completely replacing the bone marrow space (Kyle and Rajkumar, NEJM 2004, 351:1163)



The BC Cancer network of patient and family partners

Support patient- and family-centred care through the Network of Patient and Family Partners at BC Cancer!

Who are patient and family partners?

A patient or family partner is someone who has had experience with cancer care as a patient, caregiver, family member or supporter. Partners care about high-quality cancer care for all patients and families and share their experience to ensure high quality care for all.

What is a NETWORK of patient and family partners?

The Network is the structure through which all of the patient and family partners are connected. The network is currently comprised of 109 partners from across BC.

What do patient and family caregivers say about partnering with health professionals in care improvement?

Becoming a Patient Partner allowed me to regain a sense of purpose in my life. It became my new job. It allowed me to focus on something positive.

Being involved with BC Cancer as a Patient Partner has given me many opportunities over this past year to contribute in health care initiatives and have my voice, the voice of a patient, heard.

How do I request patient or family partners to inform my project through consultation or collaboration?

The Patient Experience Program shares engagement opportunities through a Network newsletter each month. There are some steps to requesting patient and family partners. Visit http://www.bccancer.bc.ca/getinvolved to learn more.

How can I refer patients or their loved ones to this network?

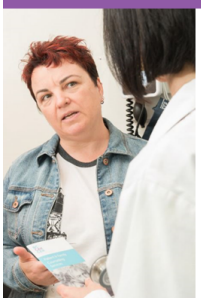
Patients and their families may contact us directly at http://www.bccancer.bc.ca/getinvolved. See recruitment ad below.

BC CANCER
Provincial Health Services Authority

PATIENT EXPERIENCE PROGRAM

Your Voice Matters

You are invited to join
the BC Cancer Network of Patient & Family Partners



- You are invited to join the BC Cancer Network of Patient & Family Partners
- Partners share their cancer experience in projects or in committees to improve services for all
- Learn more at www.bccancer.bc.ca/getinvolved

Contact Joyce Lee 604 877 6048 / toll-free 1 844 877 6016 / jlee2@bccancer.bc.ca

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Myeloma, or not myeloma
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- SFLCA measures kappa and lambda light immunoglobulin chains that are separated from the heavy chains in the serum. The test is reported as a concentration for both lambda and kappa free light chains as well as a ratio kappa/lambda. The concentration of free light chains is influenced by renal excretion and elevated levels of free light chains with a preserved ratio can be, therefore, seen in renal impairment. A skewed ratio of involved/uninvolved free light chains greater than 100 is considered diagnostic for treatment requiring myeloma.

The combination of SPEP, UPEP, and free light chain assay is able to detect a paraprotein in 97% of myeloma patients. Only 3% of patients are classified as having non-secretory disease.

Finally, imaging studies should be obtained. X-ray skeletal survey is readily available in most jurisdictions, although a low dose whole body CT scan, MRI or PET scan are able to detect even small lesions, <5mm. Bone scan and other nuclear medicine studies are not suitable as they have little sensitivity in the setting of myeloma.

Diagnostic Criteria

Bone marrow plasma cells	>10%
Hypercalcemia	>2.75 mmol/L
Renal impairment; creatinine	>177 µmol/L
Anemia	<100 g/L
Bone lesion on x-ray, CT, PET, MRI	>5 mm

Q What is the Prognosis for Myeloma?

With the availability of novel agents and different combination regimens, survival has significantly improved over the last ten years. Major prognostic factors remain cytogenetic studies, albumin, beta-2-microglobulin, LDH which determine the disease stage according to the R-ISS. This system separates three distinct patient populations with an estimated median overall survival that was not reached (stage I), 83 months (stage II), 43 months (stage III).

Q What is the treatment and monitoring for Myeloma?

Treatment in general consists of chemo-immunotherapy and sometimes radiation for symptom control. In general, young (age <70) and fit patients should be considered for intensive therapies including high dose chemotherapy and autologous stem cell transplantation for proven survival benefit. Other options include a combination of oral immunomodulatory drugs (IMID), steroids, parental proteasome inhibitors, antibodies, etc. The regimens are given as an outpatient with most of them being continued until disease progression or side effects are encountered.

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COVID and the shift to a virtual world

By Dr. Cathy Clelland, Medical Director, Primary Care, BC Cancer

People are generally social beings. Communication is at the heart of being social. It is the basis for relationship building, teaching and learning, and keeping our society moving forward. Communicating with family, friends, colleagues, and the system has dramatically changed over the past year. Looking back, it feels like in the blink of an eye we saw the system pivot from mostly in-person connections to virtual ones.

Dr. Cathy Clelland

The BC Cancer Primary Care Program (aka the Family Practice Oncology Network/ FPON) has been no exception to these changes. We have provided Webinars covering cancer-related topics to family doctors and other primary care providers regularly for over a decade now. Since the start of the COVID 19 pandemic, we have seen our registration numbers triple. With the inability to provide in-person education events, we offered our first ever Virtual Fall Conference "Skin Cancer: Interactive Scenarios and Practical Approaches for Primary Care" in November 2020. Our provision of the GPO Education Introductory Module had to shift from a 2-week in-person cohort to a virtual platform with the total time split over two 2-week half-day sessions with a short break between to mitigate "virtual learning fatigue". The feedback we have received has been positive, particularly as it allowed participants to stay in their home communities and continue to provide clinical services to their patients while balancing with their learning needs. We will incorporate the feedback in our planning for future educational offerings.

This shift to virtual has come with both good and not-so-good impacts. On the positive side, we have seen more care provided in outreach to people who would have dealt with many travel barriers, including time away from home and work. Meetings that would have required hours of driving, possibly overnight stays, and disruption of family and practice life now support a better balance and increased opportunities to participate across our vast province. On the downside, we know that without direct personal interactions, people's sense of "connection" to each other can result in strain on our mental health and sense of wellbeing. As health care providers, triaging virtual visits and knowing when to recommend that patients need to be seen in person can be challenging. Our clinical training and the use of our immediate diagnostic tools of listening, looking and, palpating cannot be dismissed as a valuable asset to the healthcare system.

As we look to the future, post-pandemic healthcare must evaluate the changes and develop a balanced plan for practice models. In the words of Don Berwick, "Fate will not create the new normal, choices will." As the season changes and new life springs up around us, we should all reflect on the last year's journey, look at our response and make choices that will improve our sense of community and support sustainability in both our personal and professional lives.

FPON also wants to move further into the digital world and is looking to develop a database of providers and stakeholders who would prefer to receive the Journal of Family Practice Oncology electronically. If you are interested, please send an email indicating your preferred contact information to our new inbox FPON@bccancer.bc.ca

I want to end with a shout out THANK YOU to everyone for your efforts to keep our province safe over this challenging time.

Myeloma, or not myeloma
continued from page 11

During therapy, the antimyeloma effectiveness gets monitored monthly by assessing for levels of paraproteinemia (SPEP, free light chain assay), normalization of anemia, calcium levels and renal function.

Relapsing disease is characterized by new end organ damage (CRAB features), increase in size of existing plasmacytomas by >50%, increase in paraproteinemia by >25% from lowest value. A serological relapse with slowly increasing paraprotein levels does not necessarily require an immediate change in therapy as many patients can remain clinically well. However, end organ damage should be avoided and a new line of therapy initiated to decrease morbidity and mortality.

Q When should we suspect myeloma?

- Bone pain with associated lytic lesion on plain film
- Increasing total protein or presence of a monoclonal protein
- Unexplained anemia
- Hypercalcemia
- Acute renal insufficiency with a bland urinalysis
- Screen with CBC, differential, electrolytes, Calcium, albumin, SPEP, UPEP, SFLCA, x-rays

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FOR MORE INFORMATION

To learn more about the Family Practice Oncology Network or become involved, please email FPON@bccancer.bc.ca or visit www.fpon.ca

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Supporting cancer survivors return to work continued from page 2

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