Podium Session 6: Oncology (Testis and Other) June 25, 2013, 1000-1100

POD-06.01

Longer Family Physician to Urologist Referral Delays and Its Impact on Survival Among Women Who Underwent Radical Cystectomy (RC) for Bladder Cancer in Quebec

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Introduction and Objectives: We reported in 2012 that women with bladder cancer (BC) have higher median delays between their 1st family physician (FP) visit and their 1st urologist visit (median of 56 days versus 23 days for men) (1). This longer delay may be caused by the fact that women presenting symptoms of BC are probably referred to a gynecologist before being referred to an urologist. This study was undertaken to determine if this indirect referral impacts survival of women after RC.

Methods: We analyzed the data from a cohort of women having undergone RC in Quebec during the period 2000-2009 and who had their 1st urologist visit after having visited a FP or emergency physician (EP) for BC symptoms. The cohort was obtained with the linkage of two administrative databases: the RAMQ and the ISQ database. To be included in the study patients must have undergone a RC in Quebec, and also have medical services data available for the two-year period before RC. Women were divided into 2 groups: those with direct referral (patients who had their 1st urologist visit immediately after having their 1st FP/EP visit) and women with indirect referral. The effect of FP/EP to urologist referral delay on survival was assessed by Cox proportional hazards models.

Results: Among the 308 women included in this study, 30% were seen by an urologist immediately after seeing a FP/EP (direct referral); 70% were seen more than once by a FP or a gynecologist before being referred to an urologist and 10% were seen by a gynecologist before being referred to an urologist. Women who were directly referred to an urologist after seeing a FP/EP had a 25% higher survival rate after RC (HR: 0.75, 95%CI: 0.5-1.08). Women who had a gynecologist visit before seeing an urologist had 60% more chance of mortality after RC (HR: 1.62, 95%CI: 1.03-2.57).

Conclusion: Our results indicate that delaying referral to an urologist is associated with a poorer survival among women requiring RC for BC.

POD-06.02

Low Dose CT Scans During Surveillance in Stage I Testicular Germ Cell Tumours

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Background and Objective: Surveillance for clinical stage I testicular germ cell tumours requires serial abdominopelvic CT scans. Recent suggestion is that cumulative X-ray exposure associated with multiple scans (~15 mSv/scan) may result in increased carcinogenic risk. We conducted a prospective study using low dose CT scans for surveillance.

Methods: A total of 246 patients with stage I testicular germ cell tumour (200 seminoma, 46 non-seminoma) on surveillance were enrolled into a phase II study between 2005 and 2011. All patients initially underwent standard dose (SDCT) abdominopelvic CT scan and low dose scan (40-60% dose reduction) on the same visit without intravenous contrast. Image quality was assessed to ensure adequacy of LDCT for surveillance. If relapse was suspected on LDCT, this was confirmed subsequently using SDCT. A radiologist compared nodal size in 3 dimensions between the 2 CT scans for each patient.

Results: One patient with poor image quality was excluded from the study. Median follow up was 26 months (range 1-80). Of 34 patients who relapsed, 32 had retroperitoneal adenopathy and 2 (nonseminoma) had elevated serum tumour markers alone. Of patients with nodal relapse, 32 pairs of CT images were evaluated for nodal size, 2 patients with multiple enlarged nodes had more than one node assessed. Median size of retroperitoneal nodal relapse was 22 and 21.5 mm (craniocaudal), 19 and 19.5 mm (left-right), 14 and 14 mm (anteroposterior) for LDCT and SDCT, respectively. The mean of the differences between LDCT and SDCT was -0.4 mm (95% CI -3.7, 2.9) craniocaudal, -0.4 mm (95% CI -4.1, 3.2) left-right, and 0.3 mm (95% CI -2.2, 2.5) anteroposterior.

Conclusions: Quality of LDCT images was adequate for retroperitoneal nodal surveillance with differences that were clinically acceptable. This may reduce cumulative radiation exposure and the technique could be routinely adopted in surveillance schedules for stage I germ cell tumour.

POD-06.03

Lymph Node Counts in Primary Retroperitoneal Dissection for Nonseminomatous Germ Cell Tumours

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Background: Studies have demonstrated the staging and prognostic value of total number of lymph nodes removed at surgery for prostate, bladder, breast, and colon cancer. However, there is limited data on the number of nodes removed in retroperitoneal lymph node dissection (RPLND) for metastatic germ cell tumour.

Methods: From 1983 to 2012, 159 patients underwent a primary open RPLND by a single experienced surgeon for clinical stage I/II nonseminomatous germ cell tumour (NSGCT). Node count was available for 105 (66%) patients. Factors associated with total node count, and nodes with viable cancer were assessed using linear regression. The association between node count and time to relapse were assessed using multivariate cox proportional hazards models including controlling for adjuvant chemotherapy.

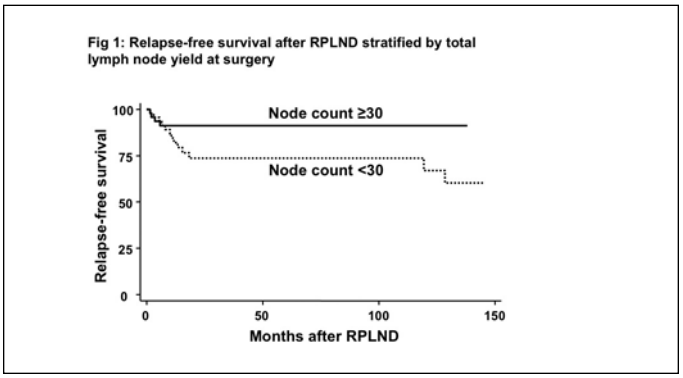

Fig. 1. POD-06.03.

Results: Mean total lymph node count was 30 (IQR 19-39). Age, side of cancer, BMI, clinical stage, pathologist and year of surgery were not associated with total lymph node count. Viable germ cell tumour was found in 67 patients (64%). Total node yield was not associated with finding viable cancer. In patients with positive nodes, increasing total node count was associated with a higher number of positive nodes identified (p=0.04). After RPLND, 17 (16%) received adjuvant chemotherapy. With a median of 59 months follow-up, 18 (17%) relapsed after primary RPLND. Total node count was inversely associated with time to relapse on uni- and multivariate analyses. As an example, patients with node yield above the mean for the cohort had a 70% reduction in the risk of relapse (HR 0.30, 95% CI 0.09-0.95, p=0.04) (Fig. 1).
Conclusion: Our data suggest that while there appears to be no clinical or pathological variables associated with node yield in the retroperitoneum, there may be a relationship between total node yield at RPLND and risk of relapse. Caution must be used before using nodal yield as a marker because of the low number of relapses observed in this cohort.

POD-06.04

Comparison of Clinical Stage I Nonseminomatous Germ Cell Tumours with Retroperitoneal Progression on Active Surveillance to Patients Initially Presenting as Stage II

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Background: We have previously shown the majority of patients with clinical stage (CS) I nonseminomatous germ cell tumour (NSGCT) progressing on active surveillance (AS) relapse in the retroperitoneum only. However, the therapeutic burden and outcomes of these patients relative to those initially presenting with retroperitoneal disease (CS II) is unclear.
Methods: At Princess Margaret from June 1981-Dec 2010, 74 patients who presented with CSI and were initially managed by AS, progressed in the retroperitoneum only. During this time, another 172 presented with CS IIa/b disease (total n=246). For both groups, primary retroperitoneal lymph node dissection (RPLND) was offered to those with N1/2 disease with normal or stable but minimally elevated markers. All patients treated with primary chemotherapy were IGCCCG good risk classification and were offered post-chemo (PC) RPLND if residual masses >1cm in short-axis diameter were present. Adjuvant chemo was offered to those with extensive viable disease at RPLND.
Results: Median follow-up was 7 yrs. Fig 1 is the COHORT diagram. When treatment burden for the two groups is standardized to groups of 100 patients, the group progressing on AS underwent 81 RPLNDs, 184 cycles of chemo and had 18 relapses at a median of 7.6 months after primary therapy. The group presenting at stage II underwent 71 RPLNDs, 222 cycles of chemo and had 16 relapses at a median of 8.8 months after primary therapy. Among the group progressing on AS, 1 death occurred and was not cancer related. Of those presenting with CS IIa/b, 9 deaths occurred with 4 attributable to cancer, 1 to treatment and 4 to other causes.
Conclusions: Our data support the safety of non-risk-adapted active surveillance of CSI NSGCTs in that the majority of AS progression occurs in the retroperitoneum and that these cases can be salvaged with similar treatment burden and outcomes to patients initially presenting with stage II disease.

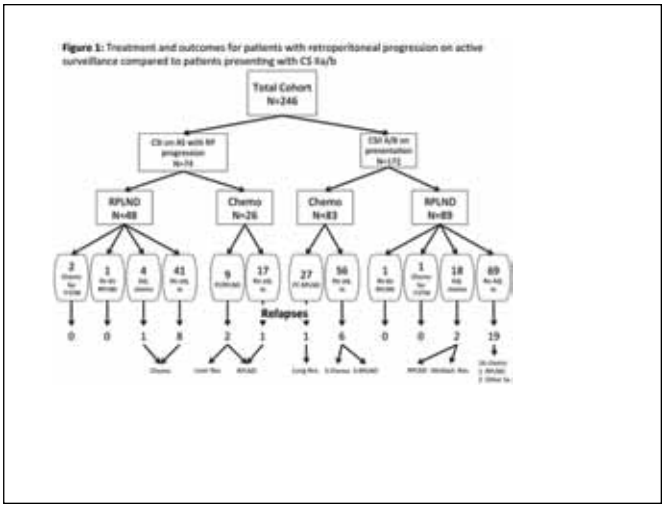

Fig. 1. POD-06.04.

POD-06.05

Radium-223 Dichloride Improves Overall Survival in Patients with Castration-resistant Prostate Cancer and Bone Metastases: Updated Results From the ALSYMPCA Phase III Randomized Trial

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Introduction and Objectives: >90 % of patients with metastatic castrate-resistant prostate cancer (CRPC) have bone metastases (mets). Bone mets are a significant cause of death and decreased quality of life in CRPC. Radium-223 dichloride (Ra-223), an alpha-emitting radioisotope, is a calcium mimetic that targets bone mets with high-energy alpha-particle of very short range (<100 µm). We present updated results of a Phase III Trial in CRPC on behalf of the ALSYMPCA Study Group.
Methods: Eligible patients had confirmed symptomatic CRPC with ≥2 bone mets, no known visceral mets, and were post-docetaxel, unsuitable for docetaxel, or had declined docetaxel. Patients receiving Best Standard of Care were randomized (2:1) to receive 6 injections of Ra-223 (50 kBq/kg IV) q4wk or placebo, and stratified by prior docetaxel use, baseline alkaline phosphatase level, and current bisphosphonate use. The primary endpoint was overall survival (OS); secondary endpoints included skeletal-related events (SREs) and safety.
Results: The updated analysis is based on 528 events from all 921 patients (Ra-223, n=614; placebo, n=307) randomized to the trial. Ra-223 significantly prolonged OS (median: 14.9 vs. 11.3 months; HR=0.695; 95% CI, 0.581-0.832; p=0.0001). The survival benefit was seen independent of prior docetaxel or current bisphosphonate use. Ra-223 significantly delayed time to first SRE (median: 15.6 vs.9.8 months; HR = 0.66; 95% CI, 0.52-0.83; p=0.0004). Grade 3 or 4 adverse events (AEs) were similar between Ra-223 and placebo groups. Ra-223 was well-tolerated including hematological AEs.
Conclusions: In CRPC patients with bone mets, Ra-223 significantly prolonged OS and delayed time to first SRE with a highly favourable safety profile. Ra-223 may provide a new standard of care for CRPC with bone mets.

POD-06.06

Survivorship Care in Canadian Genitourinary Oncology: Towards a Multidisciplinary Perspective

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Purpose: There are many gaps in our knowledge regarding GU cancer survivorship care. In order to improve care delivery to this patient population, we need to clearly define the current state of physician perceptions of survivorship care. The primary purpose of this study is to identify gaps in GU cancer survivorship care in Canada.
Material and Methods: A web-based questionnaire was developed and e-mailed to physicians treating GU cancers in Canada including Urologists, Radiation Oncologists, and Medical Oncologists. Twenty seven multiple choice and Likert scale questions were developed to answer questions in 5 domain areas: demographic data, current post-cancer treatment care

practice, perspectives on barriers to survivorship care, accessibility to survivorship resources, and perspectives about advocacy groups.
Results: There were 306 responses from all Canadian regions and 260 were eligible for the study; 125 from Urologists, 90 from Radiation Oncologists and 45 from Medical Oncologists. A total of 82% of physicians involve primary care practitioners (PCP) at some point in the management of survivors (either discharge survivors to PCP at some point or share the care indefinitely). Most of the physicians provide a written follow up plan to general practitioners. However, only 25% provided lifestyle recommendations and 53% included persistent and late effects of therapy. Importantly, among barriers surveyed, lack of time or resources to support patients through this phase of cancer experience was most commonly reported. From the survivorship support programs, cancer rehabilitation programs were the most difficult to access and this was most commonly reported in British Columbia. Urologists compared to the other subspecialties, thought that psychosocial support, pain management and genetic counseling are difficult to access and physicians in community hospitals have the most difficulties. The most utilized advocacy group is for prostate cancer,[51% (n=126)] but physicians in Quebec are the least likely to refer to this group. Urologists are most likely to utilize this group. The most underutilized advocacy groups is for testis cancer, 16% (n=40).
Conclusion: To our knowledge this is the first study to address the challenges of GU cancer survivorship care in Canada. The barriers to and accessibility of survivorship care identified in this survey may be used to plan better care for this group of patients. Underutilization of the advocacy groups may stimulate the advocacy groups and institutions to address the causes and find solutions.