37e Congrés Annuel : Programme général Association des Urologues du Québec

Vendredi, le 9 novembre 2012

7 h 00 - 15 h 00 **Inscription**
Salon Verchères

8 h 00 - 10 h 16 **Sessions scientifiques**
Salon Frontenac

10 h 16 - 11 h 16 **Pause santé / Visite des exposants**
Salle de Bal

11 h 16 - 12 h 00 **Sessions scientifiques**
Salon Frontenac

12 h 00 - 13 h 30 **Déjeuner**
Salle de Bal

13 h 30 - 15 h 13 **Sessions scientifiques**
Salon Frontenac

15 h 13 - 16 h 15 **Pause santé / Visite des exposants**
Salle de Bal

16 h 15 - 17 h 10 **Sessions scientifiques**
Salon Frontenac

17 h 15 - 18 h 15 **AUQ rencontre : cocktail avec les exposants**
Salle de Bal

18 h 30 - 22 h 30 **Soirée spectacle**
Éspace 400e Bell

Samedi, le 10 novembre 2012

7 h 00 - 8 h 15 **Petit déjeuner - causerie**
Salon Jacques-Cartier

6 h 45 - 10 h 00 **Petit déjeuner**
Salon Jacques-Cartier

8 h 30 - 10 h 40 **Sessions scientifiques**
Salon Frontenac

10 h 40 - 11 h 15 **Pause santé / Visite des exposants**
Salle de Bal

11 h 15 - 12 h 00 **Sessions scientifiques**
Salon Frontenac

12 h 00 - 13 h 15 **Déjeuner-Conférence**
Salon Jacques-Cartier

13 h 15 - 14 h 40 **Sessions scientifiques**
Salon Frontenac

14 h 45 - 17 h 00 **Assemblee générale**
Association des Urologues du Québec
Salon Frontenac

17 h 00 - 17 h 30 **Assemblée générale**
Fondation de l'Association des Urologues du Québec
Salon Frontenac

17 h 30 - 18 h 30 **Periode libre**

18 h 30 - 19 h 30 **Cocktail**
Remise des prix aux résidents et fellows à 19 h
Foyer Salle de Bal

19 h 30 - 00 h 00 **Banquet du Président**
Salle de Bal

Dimanche, le 11 novembre 2012

7 h 00 - 9 h 00 **Petit déjeuner**
Salon Bellevue

8 h 40 - 12 h 30 **Sessions scientifiques**
Salon Frontenac

12 h 30 **Clôture du congrès**

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Sessions scientifiques I et II vendredi (a.m.), le 9 novembre 2012

Les sessions scientifiques suivantes ont été rendues possibles grace à la contribution non restrictive de nos partenaires :

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Session scientifique 1

Concours des résidents et fellows

Objectifs éducatifs : À la fin de cette session, le participant connaîtra les nouveaux développements en recherche clinique et fondamentale. Il pourra apprécier les travaux de recherche des résidents et fellows en urologie.
Modérateurs : Elie Antebi et Yves Caumartin

8 h 00 - 8 h 10
Mot de bienvenue

Steven P. Lapointe

8 h 10 - 8 h 19
Impact of Body Mass Index (BMI) on outcomes of patients with upper and lower urinary tract cancers treated by radical surgery: Results from a Canadian multicentre collaboration

Bassel G. Bachir;[*] Armen G. Aprikian;[*] Jonathan I. Izawa;[†] Joseph L. Chin;[†] Yves Fradet;[‡] Adrian Fairey;[±] Eric Estey;[±] Niels Jacobsen;[±] Ricardo Rendon;[¥] Ilias Cagiannos;[§] Louis Lacombe;[‡] Simon Tanguay;[*] Jean-Baptiste Lattouf;[**] Anil Kapoor;[††] Edward Matsumoto;[††] Fred Saad;[**] David Bell;[¥] Peter C. Black;[‡‡] Alan I. So;[‡‡] Darrel Drachenberg;[±±] Wassim Kassouf[*]
*McGill University Health Centre, [†]University of Western Ontario, [‡]Laval University, [±]University of Alberta, [¥]Dalhousie University, [§]University of Ottawa, [**]University of Montreal, [††]McMaster University, [‡‡]University of British Columbia, [±±]University of Manitoba

Introduction: To evaluate the effect of body mass index (BMI) on outcomes after radical cystectomy (RC) and radical nephroureterectomy with bladder cuff excision (RNU) in a contemporary group of patients from a Canadian multicenter collaboration.
Methods: Data was collected from eight participating Canadian centres on patients who had undergone RC or RNU from 1998 to 2008. Patients without BMI data were excluded from analysis. Various clinico-pathologic parameters among the three subsets of patients (BMI <25 kg/m^2, 25-30 kg/m^2, >30 kg/m^2) were analyzed. Kaplan-Meier method was used to determine any difference in overall (OS), disease-specific (DSS), and recurrence-free survival (RFS) across the three distinctive weight classes. Multivariate analyses models were also constructed to assess the impact of BMI on survival.
Results: Data on BMI were available on 847 patients who had undergone RC as well as 664 patients who had undergone RNU. There was no difference in histology, pathologic stage, grade and margin status among the three subsets of patients undergoing either type of surgery. However, RC patients with lower BMIs (<25 kg/m^2) were significantly older, had more nodal metastasis and trended towards higher pathological stage while RNU patients with lower BMIs (<25 kg/m^2) were significantly older and received less adjuvant chemotherapy compared to those with BMI >30 kg/m^2. After adjusting for different variables on multivariate analysis, BMI was not an independent prognostic factor for OS and DSS in both surgical groups. Although BMI >30 kg/m^2 was not associated with worse RFS in the RC group, it was associated with worse RFS in the RNU group.
Conclusion: Increased BMI does not seem to influence survival in patients undergoing RC. BMI >30 kg/m^2 is associated with worse RFS in patients undergoing RNU.

8 h 19 - 8 h 28
A prospective study using a new bulking agent for the treatment of pediatric vesicoureteral reflux: Bulkamid

Jonathan Cloutier; Anne-Sophie Blais; Katherine Moore; Stéphane Bolduc
CHUL (CHUQ), Université Laval

Introduction: Vesicoureteral reflux (VUR) is a prevalent disease in the pediatric population and the use of endoscopic treatment has become the first line of therapy, especially for low grade reflux. Commercially available products offer short term good success rate but their price are becoming an issue. Our objective was to evaluate the success of endoscopic treatment for VUR in children using (hydrogel cross-linked synthetic polymer bulking agent) (Bulkamid®), which is actually approved for periurethral injection. It has been documented to maintain its volume a long time after the injection.
Methods: We performed a single center, single surgeon prospective off-label study using Bulkamid®; an hydrogel agent consisting of 97,5% water and 2.5% cross-linked synthetic polymer presented in a 1.0 ml syringe, to treat VUR. All patients underwent endoscopic subureteral double HIT technique injection. Every patient had a 3-month postoperative ultrasound and voiding cystourethrogram (VCUG) to confirm the absence of *de novo* hydronephrosis and correction of VUR (grade 0). If recurrent pyelonephritis was documented after a negative postoperative VCUG, the test was repeated.
Results: A total of 36 patients underwent Bulkamid® injection between March 2011 and January 2012. Median age at surgery was 43 months (range 10 mo to 21 yo). Eight males and 28 females were included for a total of 62 refluxing ureters. Bilateral reflux was identified in 23 patients (64%). Nine patients had duplex systems and 2 of them had reflux in both renal moieties. Reflux grade was I in 10, II in 18, III in 17, IV in 13 and V in 4 ureters. Mean volume injected was 1.07 ml. Success rate for grade 1 to 3 was 78% and overall, it was 69.4%.
Conclusion: Our short-term data demonstrated an interesting success rate principally for low grade reflux with the off-label use of this newly approved product. It was easily injected and the technique did not require any modification. Another interesting aspect of this product is his lower cost compared to other available bulking agents.

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8 h 28 - 8 h 37

Chronic diseases, prostate cancer aggressiveness and mortality after radical prostatectomy

Vincent Fradet; Marc-André Allard; Yves Fradet; Louis Lacombe; André Caron; Hélène Hovingto
Centre Hospitalier Universitaire de Québec (CHUQ), Université Laval

Introduction: Early but growing clinical, epidemiological and experimental studies are linking cancer in general to various chronic medical conditions. However, little is known about the association of chronic diseases with prostate cancer, and even less about their interactive effects on the mortality after radical prostatectomy. Our objective was thus to determine the impact of both chronic diseases and disease aggressiveness on mortality from prostate cancer versus other causes after radical prostatectomy.

Methods: We conducted a retrospective study where we included all patients in whom we had comorbidity information at time of radical prostatectomy. From the comorbidity data, we calculated the age-adjusted Charlson score. Clinical follow-up was according to standard guidelines but left to the clinicians's discretion. Also, we matched our institutional database to the one of l'Institut de la Statistique du Québec in June 2011 to identify mortality. The cause of mortality was determined from chart review and death certificates. We examined the associations between the Charlson score and the disease aggressiveness parameters at time of radical prostatectomy. Also, we conducted univariate and multivariate survival analysis assessing time to death from prostate cancer (DOD) versus from other causes (DOOC).

Results: The mean patient age was of 62.9 ± 6.3. The mean follow-up was of 8.8 ± 4.4 years. Pathologic tumour Gleason grade was of 8 or more in 19% and of 7 in 41%, while stage was of T4 in 2% and of T3 in 38%. Patients with greater comorbidities presented with more aggressive prostate cancers at prostatectomy, both in terms of tumour grade (Mantel-Haensel chi-square p=0.0006) and stage (p=0.0015). At multivariate Cox regression, we observed an increased risk of DOD with increasing tumour stage (p=0.0001) and grade (p<0.0001) but not with increasing age-adjusted Charlson score (p=0.9). In contrast, we observed an increased risk of DOOC with increasing Charlson score (p<0.0001) but not with stage (p=0.9). There was a 32% increase in the risk of DOOC in patients with Gleason 7 disease (multivariate p=0.045), which was not significant in those with Gleason 8 (p=0.39) likely because of the strong risk of DOD.

Conclusion: The Charlson score is a valid stratification tool of the risk of mortality from other causes even in patients undergoing radical prostatectomy. However, it is not associated with the risk of prostate cancer specific mortality. On the other hand, disease aggressiveness is positively associated with both risks of mortality from prostate cancer and other causes. This suggests that there may be a common link between chronic diseases and prostate cancer disease aggressiveness. More research to decipher the common causes, whether genetic or else, linking chronic diseases to prostate cancer aggressiveness are needed.

8 h 37 - 8 h 46

Clavien Classification in Urology: Is There Concordance among Post-graduate Trainees and Attending Urologists?

Sero Andonian; Armen Aprikian; Saad Aldousari; Tarik Benidir; Murilo Luz; Mohamed Elkoushy
Department of Surgery, Division of Urology, McGill Univesity Health Centre

Introduction: Clavien classification was originally derived as an objective method of classifying complications in open surgery. However, its applicability to urology has not been studied. Therefore, the aim of the present study was to assess the agreement rate among urologists applying this classification to actual cases and to compare Clavien scores given by attending urologists to scores given by postgraduate trainees.

Methods: Twenty cases from surgical complications over a period of one year covering a tertiary care center were selected to compile the survey. The case scenarios were chosen to include both minor and major complications. After a briefing and explanation session concerning the classification, the survey was administered to 16 attending urologists and 16 urology postgraduate trainees. Concordance rates were recorded for each case separately and as a pool of cases. Weighted kappa statistics were calculated to assess the interrater agreement.

Results: Twenty cases were evaluated among 32 participants. The mean concordance rate was 81 % (50- 100%, 95%CL: 7.67). Three of the 20 scenarios (15%) had concordance rate of 100% while 7 (35%) had concordance rates below 80%. In two cases, the scores given by postgraduate trainees were significantly different from that given by attending urologists (p≤0.03). In one case, postgraduate trainees gave a significantly lower score (grade I and II by 75% and 25%, respectively) than attending urologists (grade I, II, and III in 25, 50, and 25%, respectively) (p=0.01). In the other case, 94% of postgraduate trainees had graded the complication either IIIb (94%) or higher while the attending urologists graded it as IIIb (75%) or lower (p=0.03). There was no significant difference between both groups in terms of overall scoring of complications (p=0.12) where Kappa statistics revealed a good agreement level between both groups (k=0.753, p<0.001).

Conclusions: There was good overall concordance among post-graduate trainees and attending urologists in application of Clavien Classification in urology cases.

8 h 46 - 8 h 55

Impact de l'indice de prolifération tumorale mesuré avec Ki-67 sur la progression du cancer de la prostate et la mortalité après prostatectomie radicale

Patrice Desmeules; Hélène Hovington; André Caron; Louis Lacombe; Yves Fradet; Bernard Têtu; Vincent Fradet
L'Hôtel-Dieu de Québec, Centre Hospitalier Universitaire de Québec (CHUQ), Université Laval

Introduction et objectifs : Le comportement clinique du cancer de la prostate est hautement variable et ne peut être prédit de façon satisfaisante simplement par des critères cliniques et histopathologiques. L'émergence de nouveaux marqueurs pronostiques est souhaitable pour identifier les candidats à une thérapie plus agressive. Cette étude vise à définir l'impact de l'indice de prolifération tumorale, tel que mesuré par la détection du marqueur nucléaire Ki-67, sur la récidive et surtout sur la mortalité par cancer après prostatectomie radicale.

Matériels et méthodes : Le devis d'étude fut de cohorte rétrospective. Les 251 sujets inclus avaient un suivi clinique complet et ont été sélectionnés au hasard à partir de notre banque de données de prostatectomie radicale pour créer une micropuce tissulaire. Les tissus tumoraux ont été échantillonnés sur 6 sites par spécimen de prostatectomie radicale pour créer cette micropuce d'une manière standardisée. L'immunohistochimie a été effectuée avec un anticorps dirigé contre Ki-67 (DAKO). Un décompte manuel exhaustif des noyaux cellulaires tumoraux positifs a été fait pour chaque site échantillonné. La moyenne des 6 sites tumoraux par patient a été calculée. Des analyses de survie univariées et multivariées (covariables : âge, grade de Gleason et stade) ont été réalisées.

Résultats : L'âge médian des patients était de 64.0 (Q1=59.2—Q3=67.8) ans. Le suivi médian après prostatectomie était de 11.0 ans (Q1=8.9—Q3=12.3). En analyse Kaplan-Meier, un indice de prolifération tumorale élevé (5% et plus versus moins de 5% de cellules Ki-67-positives) est associé à un taux augmenté de récidive biochimique (logrank p=0.0012) et de mortalité par cancer (p<0.0001) après prostatectomie radicale. Toutefois, l'indice de prolifération tumorale n'est pas associé au taux de mortalité par autres causes que le cancer (p=0.24). Les modèles multivariés de régression de Cox révèlent qu'un indice de prolifération élevé est associé avec une augmentation par un facteur 8 du risque de mortalité par cancer (RR=7,99; IC=2,18-29,26; p=0.0017).

Conclusions : L'indice de prolifération tumorale, du moins tel que mesuré par l'expression nucléaire de Ki-67, est un facteur pronostique indépendant important. Le risque de mortalité par cancer est beaucoup plus élevé chez les patients ayant un indice de prolifération élevé. Ceci représente une nouvelle trouvaille et suggère que cet indice pourrait être ajouté comme biomarqueur pronostique aux autres facteurs clinico-pathologiques utilisés de manière routinière. Comme le Ki-67 est fréquemment utilisé dans les laboratoires de pathologie, la faisabilité de cette approche est réaliste.

8 h 55 - 9 h 04

Active surveillance for Prostate Cancer Compared with Immediate Treatment: A United States - Canadian economic comparison

Alice Dragomir; Fabio Cury; Armen Aprikian
McGill University Health Centre

Introduction: Active surveillance is an accepted management strategy for patients with low-risk prostate cancer. The costs associated with active surveillance strategy compared with immediate active treatment were recently evaluated in the US healthcare system (Keegan et al, Cancer, 2011). The corresponding estimates in the Canadian healthcare context are unknown. The main objective of this study was to evaluate the costs associated with active surveillance (AS) and treatment in the context of Quebec's public healthcare system. The secondary objective was to identify factors potentially explaining differences between the US and Canadian systems.

Methods: A Markov model with Monte-Carlo microsimulations was adapted from Keegan et al (Cancer, 2011) for the Canadian context in order to simulate the cost of prostate cancer treatment over a 5-year period for patients initially on AS. The patients on AS were assumed to receive delayed treatment at a rate of 7% per year. Active treatment included radical prostatectomy (RP), image-modulated radiotherapy (IMRT), brachytherapy, androgen deprivation therapy (ADT), and IMRT plus ADT. The probability of receiving each treatment was assumed to be 0.4 for RP, 0.25 for IMRT, 0.1 for IMRT plus ADT, 0.15 for brachytherapy and 0.1 for ADT. All assumptions were derived from Keegan et al (Cancer, 2011) in order to allow direct comparison. Il costs were assigned in Canadian dollars ($) and reflect Quebec's public healthcare system. Accordingly, the costs of medical procedures related to treatments and medical visit costs were based on RAMQ's lists: ''Manuel des Médecins Spécialistes, 2012'' and ''Manuel des médecins spécialistes services de laboratoire, 2012''. Moreover, the costs of medications were obtained from the 2012 RAMQ's list of medications approved for public reimbursement. For all other costs published sources were used. The cost of AS and treatment were categorized into initial cost and follow-up cost over the 5-year period. The treatment course of 10,000 incident subjects initially on AS was simulated over a 5-year period by applying the Markov model.

Results: With AS, the average cost of prostate cancer management over the 5-year period was estimated at $5 312 (95%CI: $5 245 to $5 387) per patient. The weighted mean cost corresponding to the immediate treatment strategy was estimated at $9 349 per patient. Over the 5-year period, these result in a relative reduction of the mean cost of approximately 43.2%. In addition, 30% of patients on AS will have received a delayed treatment and have incurred higher costs estimated at $10 009 per patient. Among these patients, the minimum individual cost was $7 882 and the maximum individual cost was $24 920, respectively.

Conclusion: Despite the fact that clinical data, clinical practice guidelines and the management of prostate cancer are quite similar over the North-American continent, the US and Canadian evaluation of costs shows differences, which are principally attributed to medical costs. These figures translate into a difference in relative reduction of cost of prostate cancer management obtained with AS of approximately 36% in US when compared to 43.2% in Canada. Accordingly, the cost savings per patient, related to AS could be more important in Canada than those estimated in US. However, this cost estimate comparisons must be validated in Canadian-derived assumptions as well as a comprehensive economic audit of Canadian practice cost evaluation. Our Markov model will be furthermore adapted to address these elements.

9 h 04 - 9 h 13

Définir un « trifecta » pour les petites masses rénales en post-opératoire de néphrectomie partielle par laparoscopie

Yves Fradet; Vincent Fradet; Annie Imbeault; Louis Lacombe; Yves Caumartin; Jean-François Audet; Thierry Dujardin; Annie-Claude Blouin; Frédéric Pouliot
Centre Hospitalier Universitaire de Québec (Hôtel-Dieu-de-Québec, Hôpital Saint-François d'Assise)

Introduction et objectifs : Décider du traitement d'une petite masse rénale (PMR) est devenu de plus en plus complexe avec le développement de techniques chirurgicales minimalement invasives, la reconnaissance de l'importance de la fonction rénale et du risque bien établi de décès par cancer du rein. Bien que plusieurs auteurs aient étudié séparément les issues de morbidité, d'oncologie et de fonction rénale après la néphrectomie partielle par laparoscopie (NPL), le pourcentage de patients atteignant une combinaison idéale des trois issues (trifecta) demeure inconnu. L'objectif de l'étude était donc principalement de préciser ce pourcentage en utilisant différentes définitions possibles de trifecta. L'objectif secondaire était de mesurer l'impact des facteurs périopératoires liés au patient, à la tumeur et à la chirurgie sur la probabilité d'atteindre le trifecta.

Matériels et méthodes : Entre 2003 et 2008, 318 patients ont subi une NPL pour une PMR dans le Centre Hospitalier Universitaire de Québec (CHUQ). 179 patients rencontraient nos critères d'inclusion, c'est-à-dire une masse unique, une pathologie maligne et un taux de filtration glomérulaire (TFG) pré-opératoire ≥60 ml/min. Après une collecte de données rétrospective, nous avons généré plusieurs définitions possibles de trifecta en combinant les critères de morbidité, d'oncologie et de fonction rénale.

Résultats : Les patients avaient respectivement une moyenne d'âge, de score ASA, d'indice de masse corporelle (IMC), de diamètre de tumeur (mm) et de TFG pré-opératoire (ml/min) de 59, 2, 28, 25 et 83. Le suivi moyen était de 44 mois. En choisissant la définition suivante comme le meilleur trifecta: absence de récidive, TFG ≥60 au plus long suivi et absence de complication ≥IIIb selon la classification de Clavien-Dindo, 77.7% des patients réussissaient à l'atteindre, avec respectivement 96.1%, 96.7% et 83.2% des patients qui répondaient indépendamment aux critères choisis de morbidité, d'oncologie et de fonction rénale. En analyse univariée, les patients qui atteignaient le trifecta étaient plus jeune, avaient un IMC plus petit, un meilleur score ASA et une plus petite tumeur ($p<0.05$). En utilisant d'autres définitions, entre 20.7 et 98.3% des patients atteignaient le trifecta.

Conclusions : Après la NPL, la fonction rénale à long terme était le critère le plus fréquemment responsable d'un échec à l'obtention du trifecta. Ces résultats démontrent que la NPL est une intervention chirurgicale rarement morbide et que la néphrectomie radicale par laparoscopie (NRL) ne devrait pas être justifiée si basée sur les issues de morbidité et d'oncologie. Enfin, notre travail sert de base à l'utilisation d'un trifecta pour comparer le succès de la NPL à d'autres approches chirurgicales.

9 h 13 - 9 h 22

Échecs physiques de l'électrode lors de la stimulation des nerfs sacrés

Maude Carmel; Andrew Lenis; Bradley Gill; Courtenay Moore; Sandip Vasavada; Raymond Rackley
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Introduction et objectifs : La stimulation des nerfs sacrés (SNS) est un traitement reconnu pour les dysfonctions urinaires et intestinales réfractaires. L'amélioration de la technique chirurgicale et de programmation ont réduits de façon considérable les complications et le taux de révision de l'appareil. Plusieurs études ont évalué quelques variables associées à l'échec de SNS à long terme tel que le taux de migration de l'électrode et les paramètres de stimulation initiaux, mais aucune étude n'a étudié les facteurs intrinsèques à l'électrode lors d'échecs. Cette étude a pour but de décrire les anormalités de l'électrode de SNS lors d'échecs thérapeutiques à long terme.

Matériels et méthodes : Ceci est une étude rétrospective de tous les patients ayant subis l'implantation de SNS à la Cleveland Clinic de Janvier

2003 à Décembre 2011. Une révision de leurs dossiers a été effectuée pour identifier les patients qui avaient des impédances anormales lors de l'interrogation de l'appareil durant les visites de suivi et les patients ayant subis une révision chirurgicale ou une explantation de leur appareil.
Résultats : SNS a été implanté chez 623 patients entre janvier 2003 et décembre 2011. L'âge moyen des patients était de 50.7 ans et l'indice de masse corporel moyen était de 28.5 kg/m2. Le suivi moyen était de 4.1 ans. L'indication de SNS était urgence/fréquence mictionnelle et incontinence urinaire d'urgence chez 79.4% des patients and rétention urinaire non obstructive chez 17.4% des patients. En tout, 87 cas d'impédances anormales ont été identifiées chez 73 patients (11.7%). Les fractures d'électrodes (impédance >4000 Ohms) représentaient 64.3% (56/87) des anormalités, 33.3% (29/87) étaient des courts circuits (impédances <50 Ohms) et 2.2% (2/87) étaient des anormalités mixtes. Des révisions ou explantations ont été nécessaires dans 63.2% des cas, tous après une tentative infructueuse de reprogrammation de l'appareil. Tous les cas de courts circuits et 52.7% des fractures d'électrodes touchaient plus qu'une seule électrode. L'électrode 3 représentait 33% des fractures, alors que les électrodes 0, 1 et 2 comptaient toutes pour 22% des échecs. Les fractures d'électrodes ont été notées 28 [11-41.7] mois après l'implantation, tandis que les court circuits ont été notés 5 [2-12.5] mois après l'implantation.
Conclusions : Des anormalités d'impédances surviennent chez 11.7% des patients après l'implantation permanente de SNS. La majorité nécessite une révision chirurgicale. Les fractures d'électrodes représentent 63% des anormalités. L'électrode 3 (plus proximale) semble avoir un taux de fracture plus élevé. L'optimisation de la réponse des autres électrodes durant l'implantation de même que la programmation autour de l'électrode 3 pourrait minimiser le besoin de révision chirurgicale.

9 h 22 - 9 h 31
The management of post-transplant lymphoceles: Evolution toward a less invasive approach

Marie-Pier Deschênes Rompré; Yoro Diallo; Sacha Deserres; Louis Lacombe; Réal Noël; Jean-Guy Lachance; Isabelle Côté; Isabelle Houde; Yves Caumartin
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Introduction: Lymphocele is a common complication following kidney transplantation and may have devastating consequences on the graft function. In our experience, lymphocele management has dramatically evolved overtime toward a less invasive approach. The purpose of this study is to review efficacy and complications associated with their treatment.
Methods: Between January 1990 and December 2010, 962 kidney transplantations have been performed in our institution. The transplantations were conducted by multiple surgeons using a single technique. On 961 recipients, 152 (15.8%) developed a lymphocele postoperatively. Characteristics of recipients and donors, peri-transplant details, long-term function and survivals were retrospectively collected. Descriptive analysis of patients who developed a post-transplant lymphocele has been performed to assess efficacy and complications of different management options.
Results: From the 152 patients presenting a post-transplant lymphocele, 119 (78%) required an active treatment. Aspiration was the most frequently used (52%) but was associated with a low success rate (15%). Indwelling drainage improved the success rates up to 34% but was associated with higher risk for infectious complications (14%). At first, internal marsupialization of the lymphocele was the operation of choice for refractory lymphoceles and was necessary for 44% of our symptomatic patients with a 50% success rate and a 17% complication incidence. Later, sclerotherapy with proviodine was used in 35% of our cohort with a high success rate of 97% and a complication rate of 5%.
Conclusion: In our experience, post-transplant lymphocele management has evolved favourably toward a minimally invasive approach with proviodine sclerotherapy. This treatment strategy has been associated with a high success rate and low incidence of complications. Consequently, it is the authors' opinion that this treatment option should be favored early in the treatment of symptomatic lymphoceles post renal transplantation.

9 h 31 - 9 h 40
The use of dorsally placed buccal mucosal grafts in the reconstruction of complex bulbar urethral strictures

Talal Al-Qaoud; Faysal Yafi; Anastassia Abatzoglou; Alex Brzezinski
McGill University

Introduction: Our goal was to present our experience with repairing long-segment urethral strictures with single-stage urethroplasty using a dorsal onlay buccal mucosal graft.
Matériels et méthodes : Restrospective data was collected on patients who underwent dorsal onlay buccal mucosal graft urethroplasty for long-segment urethral strictures between 2009 and 2012. Collected variables included etiology of the stricture, previous procedures, age, location and length of stricture, length of flap, failure and need for additional interventions.
Results: Twelve patients had underwent dorsal onlay mucosal graft urethroplasty between 2009 and 2012, with a median age of 37 years (range 17-48). All strictures were bulbar in location with a mean length of 3.5 cm (median 3.5 cm), and the mean length of the grafts was 4.2 cm (median 4 cm). At a mean follow-up of 7.8 months (median 2.5 months), there were no failures observed, with none of the patients requiring any endoscopic or surgical interventions.
Conclusion: Short-term results for dorsal onlay buccal mucosa graft urethroplasty appear very promising in long-segment bulbar urethral strictures. However, longer follow-up is required to further magnify the success of the approach and its validation.

9 h 40 - 9 h 49
Systematic review of the effectiveness of bowel preparation and antibiotic prophylaxis in preparation of adults with invasive bladder cancer undergoin

Marc Rhainds; Martin Coulombe; Yves Fradet; Louis Lacombe; Vincet Fradet; Martin Lagacé; Martin Bussières
Centre Hospitalier Universitaire de Québec-Campbelton regional Hospital, New-Brunswick

Introduction: Although no consensus exist among experts, bowel preparation (BP) and antibiotic prophylaxis (ABP) are commonly used as perioperative interventions in radical cystectomy (RC). The objective of this work is to assess the effectiveness of perioperative BP and ABP in adults undergoing RC.
Methods: A search was performed in Pubmed, Embase, the Cochrane Library, and grey literature to identify systematic reviews (SR), randomized controlled trials (RCTs) and observational studies (OS). Selection, quality assessment, and data extraction from articles were performed by two independent reviewers. Primary outcomes were surgical sites infections and anastomotic leaks. Synthesis review was shared with bladder cancer experts.
Results: 358 studies were retrieved for efficacy assessment. One RCT and three OS on BP as well as one SR and one OS on ABP were included after quality assessment. Studies showed that BP prior to RC with urinary diversion does not demonstrate any significant advantage in perioperative outcomes (e.g., surgical site infection, anastomotic leakage). A lack of well-designed studies investigating the need for ABP in urologic interventions was observed. No clear interpretation can be done regarding the best ABP regimen (multidose, unidose, no dose) to prevent postoperative complications in patients undergoing RC. Two studies on BP and none for ABP were included among 176 citations retrieved on adverse events (AE). BP appears to be well tolerated in most patients and minor AE were reported.
Conclusion: Although BP appears to be safe and well-tolerated, according to available evidence, BP for urinary diversion in reconstructive urologic surgery might not be a requisite. No firm conclusion can be drawn for the ABP regimen in RC preparation. Most studies on BP and ABP in RC had several limitations such as retrospective design, few patients in each groups and endpoints not well-defined. Because of the paucity and the low quality of the available studies, further researches are required to support evidence-based clinical pathway in RC. Literature from other major abdominal surgeries, such as colorectal surgery, should also be reviewed to identify knowledge that could be transferred to RC.

9 h 49 - 9 h 58

Prévention du cancer de la prostate : Effets de l`huile de krill et de l`huile de poisson sur l'inflammation

Xavier Moreel; Bertrand Neveu; Gabrielle Villeneuve; Yves Fradet; Pierre Julien; Vincent Fradet
Centre Hospitalier de l'Université Laval-Québec

Introduction et objectifs : L'inflammation est un facteur de risque important du développement et de la progression du cancer de la prostate. Nous avons développé un modèle de culture primaire de cellules prostatiques, grâce auquel nous avons montré que l'inflammation prostatique est très variable entre les individus et qu'un haut niveau d'inflammation est associé aux cancers agressifs de la prostate. Avec ces travaux, nous voulons étudier l'incorporation des acides gras issus de l'huile de poisson et de l'huile de krill dans les cellules épithéliales prostatiques en culture et leurs effets sur l'inflammation prostatique.

Matériels et méthodes : Toutes les expériences ont été réalisées en triplicats. Les cellules épithéliales proviennent de biopsies prostatiques prélevées chez un patient opéré par prostatectomie radicale pour un cancer de la prostate localisé à la glande avec un score de Gleason de 7. Les biopsies sont prélevées dans la zone normale périphérique de la prostate et sont mises en culture dans un milieu sélectif. L'ajout d'huile de poisson, d'huile de krill ou de milieu contrôle se fait à 90% de confluence pendant 24 heures. L'inflammation prostatique est dosée par la sécrétion d'Il-8 dans le milieu de culture et est normalisée par l'ADN total. Après récolte, les cellules sont lavées 4 fois dans de l'HBBS, puis les lipides membranaires sont extraits par la méthode de Folch. Le profil des acides gras est obtenu par chromatographie en phase gazeuse.

Résultats : L'ajout d'huile de poisson ou d'huile de krill augmente les niveaux membranaires d'oméga-3 (13 fois, $p<0.0001$ et 12 fois, $p=0.003$) et d'oméga-6 (1,5 et 1.2 fois, $p>0.08$) dans les cellules en culture. Les acides gras issus de l'huile de krill (phospholipides) sont incorporés plus rapidement que ceux de l'huile de poisson (triglycérides). Toutefois, l'ajout d'huile de poisson ou d'huile de krill a un effet pro-inflammatoire chez ce patient avec niveau inflammatoire bas.

Conclusions : L'intégration des acides gras issus de l'huile de krill se fait plus rapidement que ceux issus de l'huile de poisson. Chez un patient avec un niveau inflammatoire prostatique bas, les deux huiles ont un effet pro-inflammatoire. La prévention du cancer de la prostate par supplémentation en huile de poisson ou en huile de krill ne doit pas être proposée à chaque patient.

9 h 58 - 10 h 07

Preoperative delays prior to radical cystectomy in patients with bladder cancer: a population-based study

Fabiano Santos; Armen Aprikian; Eduado Franco
McGill University - Division of Cancer Epidemiology and Montreal General Hospital

Introduction: Bladder cancer (BC) is the second most common urological cancer and the sixth most common diagnosed malignancy in Canada. Muscle-invasive BC is often treated by radical cystectomy (RC). Preoperative delays are a major concern with respect to outcomes in BC patients. We reported in 2006 that preoperative delays prior to RC for BC were high and that there was a detrimental effect on mortality. This study was undertaken to determine if preoperative delays have been changing in more recent years in Quebec. Therefore, the objectives of this study are (1) to characterize and measure the impact of the different components of delay experienced by BC patients before RC in Quebec; (2) to analyze temporal trends in delay during a 10 year period; (3) to identify predictors of longer delays and (4) to determine the impact of the various components of delay on survival.

Methods: We conducted a retrospective cohort study using data from patients who underwent a RC for BC from 2000 to 2009. The cohort was obtained with the linkage of two administrative databases: the *Régie de l'assurance maladie du Québec* (RAMQ), and the *Fichier des évenements démographiques* de *l'Institut de la statistique du Québec* (ISQ). The RAMQ database provides prospectively collected data on medical services dispensed to all Quebec residents. The ISQ provides demographic data on all births and deaths in Quebec. 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. We determined several components of delay for each patient. Descriptive statistics were used to summarize the characteristics of the study population. The relationship between each delay variable and its potential predictors were analyzed trough the Kruskall–Wallis test.

Results: 2988 patients met inclusion criteria and were included in this study (75% were males, 65% were older than 60 years of age). Prior to RC, 82% of patients underwent cystoscopy, and 75% had transurethral resection of bladder tumor (TURBT). Mean delay from cystoscopy to RC and from TURBT to RC were 80 days (95% CI: 77-81) and 60 days (95% CI: 58-61), respectively (Medians: 64 days and 50 days, respectively). Furthermore, median cystoscopy to RC delay increased from 2000 to 2009 (60 to 76 days, $p<0.001$). Patients who had three or more TURBTs had significant longer delays, when compared to patients with 2 or 1 TURBT (median: 60 days, $p<0.001$). Median TURBT to RC delay also progressively increased from 2000 to 2009 from 40 to 63 days ($p<0.001$).

Conclusion: Since our last report, preoperative delays have been progressively increasing over time. Previous results from our team showed that a delay of more than 12 weeks is associated with worse long-term overall survival following surgery for BC. Results on predictors of longer delays and its impact on survival will be presented at the time of the conference.

10 h 07 - 10 h 16

From podium to press: The 10-year publication rate of abstracts presented at the annual meetings of the Quebec Urological Association

Talal Al-Qaoud; Faysal Yafi; Armen G Aprikian
McGill University

Introduction: Our aim was to determine the rate of peer-reviewed publications stemming from abstracts presented at the annual meetings of the Quebec Urological Association (QUA).

Methods: All abstracts presented at the annual meetings of the QUA between 2000 and 2010 were obtained from the QUA archives and were searched using the PubMed database. To maximize the search yield, both author names and titles were used to aid in retrieving published abstracts. Analyzed variables included number of publications, year of publication, submitting institution and impact factor of the publishing journal according to the 2010 Thomson Reuters report. Analysis of variance was used to detect significance in trends.

Results: At a median follow-up of 6 years (range 1-11), 248 of 446 (55%) abstracts were published. When stratifying by institution, the publication rates were 66% (95/144), 49% (82/167), 36% (25/69), and 71% (10/14) for Quebec universities, and 69% (36/52) for non-Quebec universities ($p<0.001$). The mean impact factors (IF, Total IF/Total published) of publishing journals per institution were 3.18, 4.54, 3.24, and 2.87 for Quebec universities, and 4.86 for non-Quebec universities ($p=0.04$).

Conclusion: The conversion rate from QUA presentation to publication was considerably higher than previously reported in similar reports from the American Urological Association (1998-2000, 37.8%) and British Association of Urological Surgeons (2001-2002, ≈40%). Whether this is a reflection of quality of presentations, size bias or stricter abstract inclusion criteria is debatable. Furthermore, there was significant variability between the different institutions within the province of Quebec.

Session scientifique II

Objectifs éducatifs : À la fin de cette session, les participants seront en mesure de :

1. Connaître les mecanismes d'action, contre indications et effets secondaires de l'oxygénotherapie hyperbare systemique (OTHS).
2. Discuter de certaines indications de l'OTHS.
3. Visualiser l'organisation physique d'un complexe de médecine hyperbare.

11 h 16 - 11 h 45
Indications de traitement en oxygénothérapie hyperbare
Conférencier : Mario Côté Service médecine hyperbare, CSSS Alphonse-Desjardins
Modérateur : Paul Ouellette

Sessions scientifiques III, IV, V, VI
Vendredi (p.m.), le 9 novembre 2012

Les sessions scientifiques suivantes ont été rendues possibles grace à la contribution non restrictive de nos partenaires :

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Session scientifique III

Objectifs éducatifs : Les participants apprendront le rôle de la mesure de la testosterone sérique dans le suivi du traitement de dérivation androgénique. Une mise à jour sur la suppression intermittent androgénique de même que la théorie de l`échappée androgénique seront révises et ainsi mieux compris par l'auditoire.

Session scientifique IV
Concours des résidents et fellows

Objectifs éducatifs : À la fin de cette session, le participant connaîtra les nouveaux développements en recherche clinique et fondamentale. Il pourra apprecier les travaux de recherche des résidents et fellows en urologie.
Modérateurs : Michel Carmel et Jean-Baptiste Lattouf

13 h 40 - 13 h 49
Long-Term Use of Solifenacin in Pediatric Patients with Overactive Bladder: Extension of a Prospective Open-Label Study

Geneviève Nadeau; Annette Schroder; Katherine Moore; Lucie Genois; Ève Pellerin; Stéphane Bolduc
Division d'Urologie, Centre Hospitalier Universitaire de Québec (CHUQ), Université Laval

Introduction: Pediatric urologists frequently encounter children presenting symptoms of bladder overactivity. Optimal anticholinergic pediatric dosage is not well known. Historically, oxybutinin has been effective in treating overactive bladder but is poorly tolerated. Tolterodine has been shown to be as effective as oxybutinin with fewer side effects (S/E). Newer agents, such as solifenacin, could be an alternative but their use in children as not been widely utilized. Therefore, the objective was to evaluate the effect of Solifenacin to treat urinary incontinence in children with overactive/neurogenic bladder that were refractory to oxybutinin or tolterodine treatment.
Methods: Paediatric patients presenting refractory overactive bladders with incontinence were offered to enter a prospective off-label protocol using adjusted-dose regimens of solifenacin (1.25 to 10 mg). Inclusion criteria were: absence of correctable neurological anomalies (MRI), failure of symptoms improvement under intensive behavioural and medical (oxybutinin or tolterodine) therapies and/or significant S/E with other agents. The follow-up consisted of voiding diaries, post-void residuals, urine cultures, ultrasound and UDS. Families were questioned for continence, S/E, compliance, change in behaviour and quality of life. The primary end-point was efficacy toward continence and the secondary end-points were tolerability and safety.
Results: A total of 237 patients (112 girls, 125 boys) were enrolled. Fifty-two patients with neurogenic bladder (NDO) (24 on CIC) and 185 with overactive bladder (OAB) completed a minimum of 6-months follow-up. Mean age at initiation was 9.1 and 9.7 years and they were on solifenacin for a mean of 17 and 32 months for OAB and NDO respectively. Urodynamic capacity for OAB patients improved from 125±51 ml to 305±96 ml and uninhibited contractions decreased from 72±24 to 10±12 cmH2O. For NDO patients, urodynamic capacity improved from 151±80 ml to 325±164 ml and uninhibited contractions decreased from 64±27 to 19±17 cmH2O. Continence improved every OAB patients (47 dry, 50 significantly and 88 moderately improved) and for NDO patients (17, 17, 18). Patients reported mild or moderate side effects in 15% of cases and 3 withdrew from the protocol due to S/E. Seven patients developed significant post-void residuals (>20%). Blood tests and EKG remained normal.
Conclusion: In the presence of overactive bladder refractory to oxybutinin or tolterodine, solifenacin is an effective alternative to improve symptoms in children. Tolerability was acceptable and the adjusted-dose regimen appeared safe.

13 h 49 - 13 h 58
Comparison entre l'échographie et la scintigraphie à l'acide dimercaptosuccinique dans l'évaluation des cicatrices renales

Maryse Marceau-Grimard; Christian Cote; Stephane Bolduc; Marcel Dumont; Katherine Moore
CHUQ-CHUL

Introduction et objectifs : L'objectif de cette étude est de rapporter les résultats et les coûts de la prostatectomie ouverte comparé à la prostatectomie robot-assistée dans un centre hospitalier de soins tertiaires.
Matériels et méthodes : Une analyse rétrospective a été faite des 200 derniers patients opérés par un chirurgien expérimenté avec la voie ouverte (MG) et des 200 derniers patients opérés par un chirurgien expérimenté avec la voie robot-assistée (LG), et ce, en date du 1r octobre 2011.
Résultats : Les 2 groupes avaient des caractéristiques démographiques similaires, incluant l'âge moyen (64,7 vs. 64,2), l'indice de masse corporelle (27,2 vs. 27,2), et le taux de chirurgie abdominale antérieure (31% vs. 27%). Le groupe ouvert comportait plus de cancers à haut risque comparé au groupe robot (32,5% vs. 8,5%). La durée opératoire était moindre pour les chirurgies ouvertes, avec un temps opératoire peau-à-peau moyen de 114,2 mins contre 233,6 mins. Le groupe ouvert a présenté des pertes sanguines moyennes plus élevées (402,8 ml vs. 287,5 ml). Le taux de transfusion sanguine a été comparable, soit 1,5% (3/200) pour le groupe ouvert et 3,5% (7/200) pour le groupe robot. Pour les 100 derniers cas, la durée d'hospitalisation moyenne était de 1,78 jours pour la chirugie ouverte et 1,76 jours pour la chirurgie robot-assistée. Le groupe ouvert avait plus de cancers de haut grade dans la pathologie chirurgicale, avec un score de Gleason 8 ou plus dans 23,5% des cas comparé à 3,5% dans le groupe robot. Le taux de marges chirurgicales positives était comparable à 31% pour la chirurgie ouverte et 24,6% pour la chirurgie robot-assistée. Le taux était aussi comparable après stratification entre les stades pT2 et pT3. Les

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résultats postopératoires préliminaires ont révélé un taux d'incontinence urinaire à l'effort à 12 mois comparable à 3,9% pour la voie ouverte et 5,8% pour la voie robot-assistée. Le taux de survie sans récidive biochimique à 12 mois était aussi comparable à 95,7% et 94,3% respectivement. Le coût supplémentaire pour la prostatectomie robot-assistée a été calculé à 5629$ par cas.
Conclusions : Dans cette étude, la prostatectomie par voie ouverte a présenté un temps opératoire plus court et un coût plus faible comparé à la chirurgie robot-assistée. Le taux de transfusion sanguine, la durée d'hospitalisation et le taux de marges chirurgicales positives étaient comparables.

14 h 07 - 14 h 16
Cost-effectiveness analysis of sacral neuromodulation in refractory overactive bladder: A Canadian perspective

Hamid Sadri;[1] Jacques Corcos;[2] Neil E. Dwyer;[3] Gary J. Gray;[4] Magali Robert;[5] Jerzy B. Gajewski;[6] Magdy M. Hassouna;[7] Le Mai Tu;[8] Sophie Ramsay[8]
[1]Medtronic of Canada; [2]Jewish General Hospital; [3]Moncton Hospital; [4]Royal Alexandra Hospital; [5]Foothills Hospital; [6]Queen Elizabeth II Hospital; [7]Toronto Western Hospital; [8]Centre hospitalier universitaire de Sherbrooke

Introduction: A substantial number of refractory overactive bladder patients fail conservative treatment with optimized medical therapy (OMT) and may benefit from minimally invasive procedures, including sacral neuromodulation (SNM) or onabotulinumtoxin-A (BoNT-A) injection. Currently, the safety, efficacy and effectiveness are conventional hurdles for patient access. With the evolving treatment options actually available, the efficiency evaluation of a treatment modality which is considered in the health economic analysis should be implemented with the affordability issue through budget impact analysis. The goal of this study was to estimate the cost-effectiveness of SNM vs. OMT and BoNT-A.
Methods: An economic Markov model with Monte Carlo simulation was used to assess the incremental cost-effectiveness ratio (ICER) of SNM vs. BoNT-A and OMT. The model calculated the ICER in deterministic (base-case) and probabilistic (sensitivity) analysis from a Canadian provincial payer's perspective over a 10-year time horizon with 9-month Markov cycles. The willingness-to-pay or acceptability curve for ICER calculation was assumed at $50,000. Clinical data, healthcare resource utilization and utility scores were acquired from recent publications and an expert

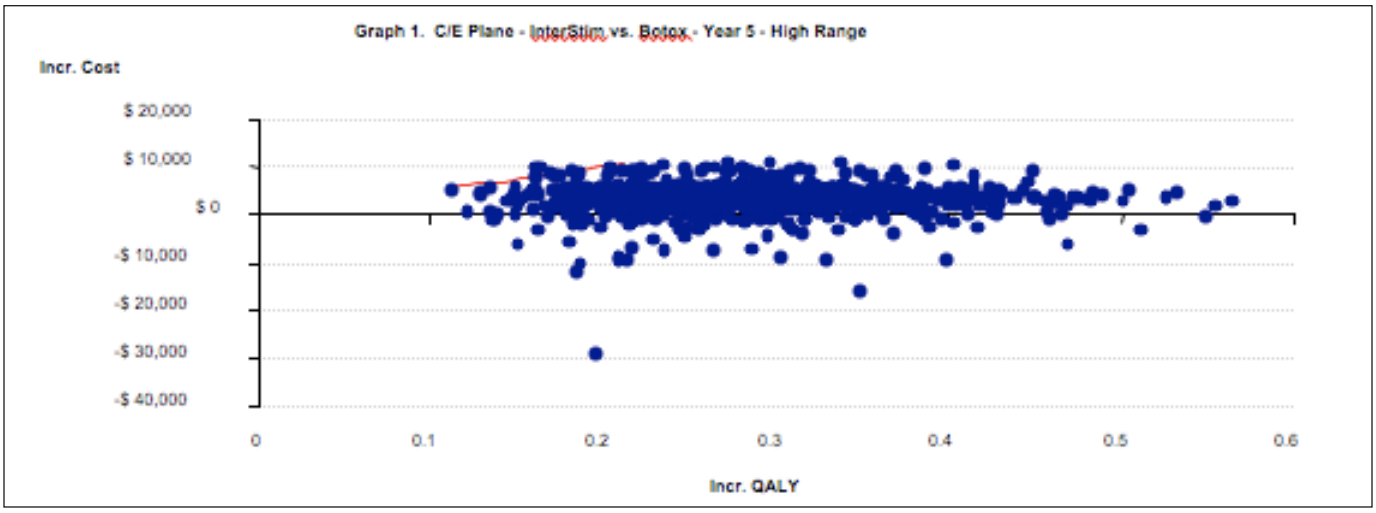

Fig. 1.

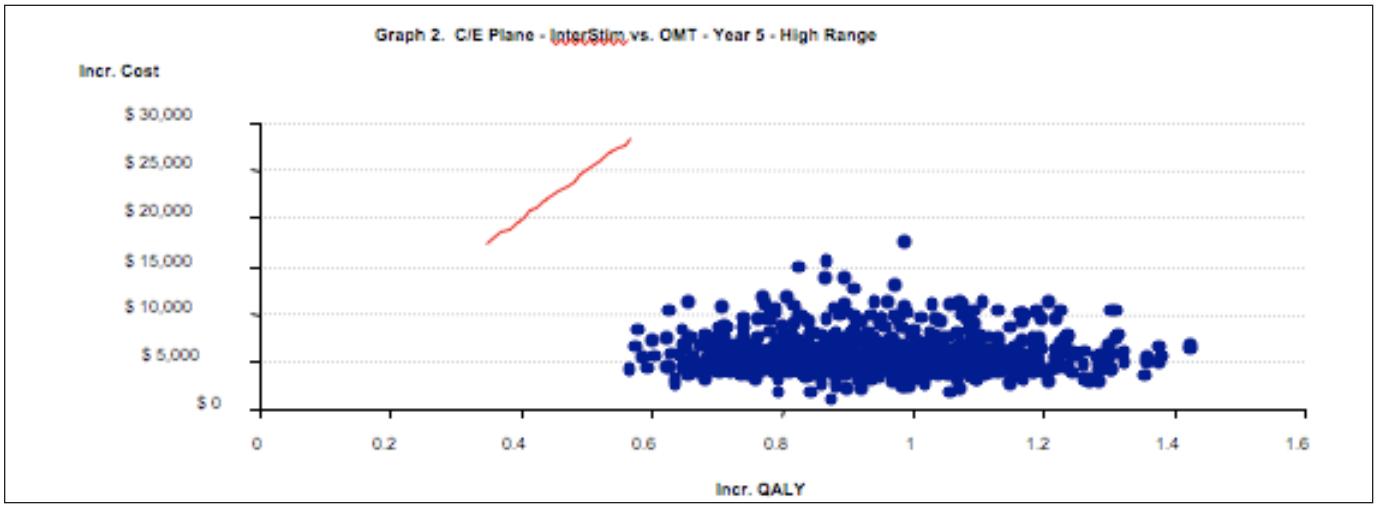

Fig. 2.

Table 1 Deterministic Analysis

INTERSTIM vs. BoNT-A

	Incr. Cost			Incr. QALY			C/QALY		
	Mean	Low Range	High Range	Mean	Low Range	High Range	Mean	Low Range	High Range
1 year	$7,237	$7,574	$6,709	0.05	0.05	0.05	$144,067	$150,769	$133,558
2 years	$4,318	$4,884	$3,591	0.09	0.09	0.09	$44,837	$50,708	$37,288
4 years	-$651	$277	-$1,691	0.19	0.19	0.19	Interstim Dominant	$1,436	Interstim Dominant
5 years	-$2,775	-$1,701	-$3,941	0.24	0.24	0.24	Interstim Dominant	Interstim Dominant	Interstim Dominant
10 years	-$9,402	-$7,698	-$11,129	0.51	0.51	0.51	Interstim Dominant	Interstim Dominant	Interstim Dominant

INTERSTIM vs. OMT

	Incr. Cost			Incr. QALY			C/QALY		
	Mean	Low Range	High Range	Mean	Low Range	High Range	Mean	Low Range	High Range
1 year	$8,878	$8,812	$9,008	0.19	0.19	0.19	$45,999	$45,655	$46,672
2 years	$5,888	$5,847	$6,029	0.38	0.38	0.38	$15,130	$15,024	$15,491
4 years	$348	$335	$523	0.76	0.76	0.76	$455	$438	$684
5 years	-$2,233	-$2,236	-$2,039	0.94	0.94	0.94	Interstim Dominant	Interstim Dominant	Interstim Dominant
10 years	-$11,447	-$11,347	-$11,246	1.76	1.76	1.76	Interstim Dominant	Interstim Dominant	Interstim Dominant

Fig. 3.

Table 2 Probabilistic Analysis
(Willingness-To-Pay = $50,000)

INTERSTIM vs. BoNT-A

	% < C/E threshold		
	Mean	Low Range	High Range
1 year	0.50%	0.10%	0.40%
2 years	26.70%	21.60%	48.60%
4 years	94.40%	95.60%	93.90%
5 years	93.20%	94.60%	89.40%
10 years	85.80%	88.60%	77.70%

INTERSTIM vs. OMT

	% < C/E threshold		
	Mean	Low Range	High Range
1 year	17.90%	22.00%	9.40%
2 years	99.90%	99.80%	100.00%
4 years	99.60%	99.60%	100.00%
5 years	99.60%	99.60%	100.00%
10 years	64.70%	61.40%	78.00%

Fig. 4.

panel of 7 Canadian surgeons. Cost data (2011-Dollars) were derived from provincial health insurance policy, drug benefit formulary, and hospital data. All cost and outcomes were discounted at 3% rate.
Results: The annual incremental cost of SNM vs. BoNT-A was $7,237 in year-1 and -$9,402 in year-10 (Fig. 1), and between $8,878 to -$11,447 vs. OMT (Fig. 2). In the base-case deterministic analysis, the ICER for SNM vs. BoNT-A and OMT were within the acceptable range ($44,837 and $15,130, respectively) at the second year of treatment, with SNM being dominant in the consequent years (Fig. 3). Furthermore, the probability of ICER obtained from the base-case deterministic analysis of being below the acceptability curve was >94.4% for SNM vs. BoNT-A at year 4 and >99.9% for SNM vs. OMT at year 2 (Fig. 4). Finally, graphs 1 and 2 show the cost-effectiveness of SNM when compared to BoNT-A and OMT modalities at year-5.
Conclusions: SNM is a cost-effective treatment option for the management of patients with refractory overactive bladder when compared to either BoNT-A or OMT. From a Canadian payers' perspective, SNM should be considered as first line treatment option in patients with refractory overactive bladder.

14 h 16 - 14 h 25
Optimal outcome after permanent seed prostate brachytherapy: The TRIFECTA analysis

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Introduction: The purpose of this study was to assess in a combined analysis (*Trifecta*) the optimal outcome for patients treated with exclusive permanent seed PB, as defined by the likelihood of achieving disease control and preserve normal urinary and sexual functions.
Methods: 384 patients with localized prostate cancer were treated with PB at our institution between 2005 and 2010. Excluding patients without erectile dysfunction (ED) not responding to medication (grade 3 from the Common Terminology Criteria for Adverse Events version 3.0, CTCAE v 3.0) and with a minimal follow-up of one year, a total of 233 patients were considered for the analysis. All patients were implanted with ^{125}I using an intraoperative, inverse planned PB technique at a dose of 144 Gy. Biochemical control (BC), genito-urinary (GU) and sexual toxicity rates were assessed. Patients with concurrent BC, no GU toxicity and preserved sexual potency at 1, 2, 3, and 4 years were classified in the *Trifecta* group. BC was defined as prostate-specific antigen (PSA) level lower than the preceding PSA and as a PSA ≤0.5 ng/ml for years 1 and 2 and for years 3 and 4, respectively. Absence of GU toxicity was defined as an International Prostate Symptom Score (IPSS) of no more than three points higher than baseline score at 1 year and as the complete absence of GU toxicity (CTCAE v 3.0 grade 0) on years 2 to 4. Patients with Grade 0 to 2 ED (2=medication necessary) were deemed as sexually potent. Multivariate analysis was performed to predict for *Trifecta* at 1, 2 and 3 years in 111 patients with complete data set on each point in time from years 1-3
Results: *Trifecta* endpoints were achieved in 70% (n=163), 47.4% (n=83), 48.1% (n=50) and 54.5% (n=30) of the patients on years 1 to 4 after PB, respectively. The BC rates were 100%, 76.2%, 64.6% and 75.4% at 1, 2, 3 and 4 years, respectively. The corresponding potency rates were 93,6%, 90%, 93,7% and 95,2%, while the rates of Grade 0 GU toxicity were 74.2%, 61%, 73.3% and 74.6%. In the multivariate analysis, prostate D90 (p=0.047) and V100 (p=0.021) on year 1, and age at year 2 (p=0.038) and 3 (*p*=0.032) were significant predictors of *Trifecta*.
Conclusion: The *Trifecta* endpoints were achieved approximately in 50% of the patients in the time range varying from years 2 to 4 after PB. The most common reason excluding patients from the *Trifecta* group remained urinary toxicity. Although our criteria for Trifecta were very strict, results of this series were comparable with previous prostatectomy studies.

14 h 25 - 14 h 34
Le stade de la tumeur sur la re-résection trans-urethral prédit la rechute et la progression du carcinome urothéthial superficiel de haut risque

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Centre de recherche du Centre hospitalier de l'Université de Montréal (CRCHUM)

Introduction et objectifs : Actuellement, la prise en charge des patients avec un carcinome urothélial superficiel de haut risque est en débat afin de déterminer les avantages d'une procédure conservative, avec préservation de la vessie, plutôt qu'une cystectomie précoce. De nombreux efforts sont mis en place pour déterminer des facteurs pronostiques cliniques et biologiques utiles pour guider ce débat. Notre objectif était d'évaluer les variables cliniques, en termes d'indicateur de progression et récurrence, chez les patients avec carcinome urothélial superficiel de haut risque, qui suivent une résection trans-urétrale de re-staging (re-RTU).
Patients et méthodes : Les données cliniques de 348 patients avec carcinome urothélial superficiel, traités au centre hospitalier de l'Université de Montréal (division d'urologie) entre 2004 et 2012, ont été révisées. De ceux-ci 59 patients avec tumeur superficiel de haut risque, ayant subi un re-RTU et n'ayant pas été réévalués à un stade de la maladie avec envahissement du muscle, ont été inclus dans l'étude.
Résultats : Sur les re-RTU, 30 patients n'avaient pas de maladie résiduelle (pTo) alors que 29 en avaient. Des 30 patients avec pTo, 13 (43,3%) ont

eu une rechute de la maladie (temps médian de 13,3 mois) et 2 (6,6%) ont montré une progression de la maladie (temps médian 23 mois). Des 29 patients avec tumeur résiduelle sur la re-RTU, 23 (79.3%) ont eu une rechute (temps médian 5.4 mois) et 9 (31%) ont progressé (temps médian 11 mois). En analyses multivariées, le stade de la tumeur sur la re-RTU et le régiment de BCG (induction vs maintenance) étaient des facteurs indépendants de rechute (p=0.001 HR: 1.85, p<0.001 HR: 0.09, respectivement), alors que pour la progression, le stade de la re-RTU était le seul facteur pronostique indépendant (p=0.019 HR: 1.89).
Conclusions : La présence de pTo sur re-RTU est associée à un meilleur intervalle de progression et de rechute de la maladie. Les patients avec une persistance du cancer superficiel sur re-RTU nécessitent un proche suivi et pourraient être considéré dans certains cas pour une cystectomie précoce.

14 h 34 - 14 h 43
Relationship between stone type, stone culture and urine culture in patients undergoing percutaneous nephrolithotomy
Naeem Bhojani; James E. Lingeman; James C. Williams
Indiana University School of Medicine
Introduction: One of the most significant complications of percutaneous nephrolithotomy (PCNL) is sepsis. In order to avoid this complication, pre-operative urine cultures are used to adequately treat patients before performing PCNL. Moreover, patients who are known to harbor struvite stones are exceedingly scrutinized when preparing for PCNL. However, it has been shown that non-struvite stone formers may harbor equally lethal bacteria. As well, peri-operative stone cultures can harbor different bacteria than pre-operative urine cultures. The objective of this study is to demonstrate the relationship between stone type, stone culture and urine culture in order to unable one to adequately treat and/or prevent sepsis post-PCNL.
Methods: We performed a retrospective data analysis of percutaneous nephrolithotomy patients treated at one institution between 1999 and 2009. Inclusion criteria for this study comprised patients who had results for both stone and urine cultures as well as stone mineral content.
Results: The overall agreement between urine and stone culture occurred in 361 cases (72.7%) and the rate of discordance was similar in both the struvite and non-struvite stone forming groups (26.2% and 27.4% respectively) (Table 1). A positive stone culture in the presence of sterile urine occurred in 10.5% of patients overall and this occurred most frequently in non-struvite stone formers (n=47, 10.8%). Of patients presenting with both a positive urine and stone culture (n=151), 67 or 44.4% (13.5% overall) were found to have different infectious organisms between the urine and the stone cultures. Therefore, 24% of patients will present with a positive stone culture in the presence of sterile urine (10.5%) or a different organism cultured from stone than from urine (13.5%).
Conclusion: The simplification of the infection stone being synonymous with struvite stone may have negative consequences in the clinical treatment and management of stone disease. As well, the utilization of urine cultures alone will often lead to misidentification of the actual infectious organism present in the kidney. Therefore, it is our belief that both the urine culture, as well as the stone culture, are useful in identifying and managing infectious risk associated with PCNL.

Session scientifique V

Objectifs éducatifs : À la fin de cette session, les participants seront en mesure de :
1. Comprendre les différentes étapes de la neuromodulation des racines sacrées.
2. Connaître l'évaluation et les indications cliniques de cette modalité de traitement.
3. Avoir une connaissance sur les données cliniques récentes de la neuromodulation sacrée afin d'améliorer la prise en charge éfficace de ces différentes dysfonctions mictionnelles complexes..

15 h 30 - 16 h 00
La neuromodulation sacrée: Où en sommes-nous ?
Conférenciere : Le Mai Tu
Modérateur : Martine Jolivet

Session scientifique VI
Objectifs éducatifs : À la fin de cette session, les participants connaîtront mieux les nouveautés dans la vessie hyperactive, les nouvelles lignes directrices de diagnostic, d'investigations et de traitements. Ils pourront ainsi prendre en charge les patients atteints de cette entite en sachant bien utiliser les astuces et les stratagèmes des derniers algorithmes disponibles.

16 h 15-17 h 00
Quoi de neuf au niveau de la vessie hyperactive
Conférencier : Francois Haab
Hopital Tenon Paris, France
Modérateur : Martine Jolivet

Table 1. Culture results of percutaneous nephrolithotomy patients grouped by stone mineral content

Stone mineral Content	Both negative (%)	Only positive urine culture (%)	Only positive stone culture (%)	Both urine and stone culture positive (%)	Total (%)
Struvite	9 (14.8)	11 (18.0)	5 (8.2)	36 (59.0)	61 (100)
Other	201(46.2)	72 (16.6)	47 (10.8)	115 (26.4)	435 (100)
Total	210 (42.3)	83 (16.7)	52 (10.5)	151 (30.4)	496 (100)

Sessions scientifiques VII, VIII, IX, X, XI
Samedi (a.m.), le 10 novembre 2012

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Session scientifique VII

Objectifs éducatifs : À la fin de cette session, le participant connaîtra les nouveaux développements en recherche clinique et fondamentale. Il pourra apprécier les travaux de recherche des résidents et fellows en urologie.

7 h 00 - 8 h 00
Déjeuner causerie
Salon Jacques-Cartier
Prise en charge de cas complexes du cancer de la prostate
Conférenciers : Wassim Kassouf, Fred Saad, Eric Vigneault
Modérateur : Michel Carmel

Session scientifique VIII

Objectifs éducatifs : À la fin de cette session, le participant connaîtra les nouveaux développements en recherche clinique et fondamentale. Il pourra apprécier les travaux de recherche des résidents et fellows en urologie.
Modérateurs : Jean-Luc Descotes et Steven P. Lapointe

8 h 30 - 8 h 39
Comparative study for the carbonic anhydrase-IX, vascular endothelial growth factor and platelet derived growth factor receptor-alpha immunohitochemicale
Mohamed Bishr; Cécile Le Page; Philippe O. Gannon; Véronique Barrès; Roula Albadine; Fred Saad; Jean-Baptiste Lattouf
Centre de recherche du Centre hospitalier de l'Université de Montréal (CRCHUM) and Institut du cancer de Montréal, Centre hospitalier de l'Université de Montréal (CHUM)
Introduction: Approximately 60% of sporadic clear cell renal cell carcinoma (ccRCC) cases harbor a mutated VHL gene. VHL gene is involved in the regulation of the hypoxia induced factor1-α (HIF1–α). Dysregulation of this pathway results in high expression of carbonic anhydrase-IX (CA-IX), vascular endothelial growth factor (VEGF) and platelet derived growth factor receptor (PDGFR-α) among other target proteins. Our objectives were to compare the patterns of immunohistochemical (IHC) expression of CA-IX, VEGF and PDGFR-α in RCC and evaluate their relation to the different clinicopathological variables.
Methods: Clinical data was obtained from 50 patients with RCC who underwent either radical or partial nephrectomy in the Centre hospitalier de l'Université de Montréal (CHUM). A tissue microarray containing 150 cores (1 normal and 2 cancerous cores per patient) was constructed. The specificity of the antibodies used in this study was validated by Western blot. A pathologist scored the distribution and the intensity of the IHC staining for each biomarker.
Results: IHC staining for VEGF and PDGFR-α was cytoplasmic and membranous for CA-IX. We noted a statistically significant difference in the IHC expression of CA-IX, VEGF and PDGFR-α between normal kidney tissue and RCC ($p<0.001$), while between ccRCC and papillary RCC, only CA-IX and PDGFR-α showed significant difference ($p<0.001$). In the ccRCC group, an inverse correlation was observed between the percentage of cells showing positive CA-IX staining and the intensity of VEGF staining ($p=0.014$). Statistically significant correlations were observed between CA-IX expression and the Fuhrman nuclear grade, tumor size and surgical margins ($p=0.049$, $p=0.001$, $p=0.033$ respectively) and between VEGF and Fuhrman nuclear grade, T stage and stage group ($p=0.025$, $p=0.012$, $p=0.006$ respectively).
Conclusion: In ccRCC, the IHC expression of CA-IX and VEGF are more correlated to the clinicopathological variables than PDGFR-α. Combining these biomarkers together could improve their correlation with clinical parameters and their potential prognostic ability.

8 h 39 - 8 h 48
Holmium laser enucleation of the prostate (HoLEP) for glands larger than 200 grams
Naeem Bhojani; Jessica A. Mandeville; James E. Lingeman
Indiana University School of Medicine
Introduction: Holmium laser technology allows for enucleation of very large prostate glands with outcomes equivalent to or superior to those of open simple prostatectomy. Here we describe our experience with HoLEP for glands ≥200 grams.
Methods: Between January 1999 and February 2011, 58 patients with glands ≥200 grams underwent HoLEP at our institution. All procedures were performed by one surgeon (JEL). Residents and/or fellows assisted in all cases.
Results: Mean patient age was 72.6 years. Mean pre-operative patient characteristics include transrectal ultrasound (TRUS) volume of 218 grams, AUA symptom score (AUASS) of 18.9, Qmax of 7.5 ml/sec, post-void residual (PVR) of 237.6 cc and PSA of 19.9 ng/mL. Twenty-nine percent (17/58) of patients required catheterization (intermittent catheterization or indwelling catheter) pre-operatively. Mean enucleation and morcellation times were 86.7 min (range 30-211 min) and 49.3 min (range 23-133 min) respectively. Mean enucleation and morcellation efficiency were 2.8 g/min and 6.3 g/min. Mean weight of tissue resected was 213.4 grams (range 111.1 – 532.2 grams). Two patients (3.4%) required perineal urethrostomy in order to complete the procedure. Eight patients (13.8%) had concomitant procedures (bladder neck incision (2), cystolithopaxy (5), bladder biopsy (1)). One patient (1.7%) required cystotomy for tissue retrieval. One patient required same-day take back for clot evacuation and one patient required take back 48 hours post-operatively to complete morcellation. Mean pre- and post-

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operative hemoglobin were 14.1 g/dL and 11.5 g/dL, respectively. Two patients (3.4%) required transfusion (mean 4 units). Mean catheterization time was 19.9 hours (range 8-96 hours) and all patients voided spontaneously after catheter removal. Mean AUASS at 12 months was 3.86 and mean PVR at 12 months was 34.9 cc. Mean PSA at 6 months was 0.85 ng/ml (mean reduction 87.4%). To date, one patient (1.7%) has developed a urethral stricture and 0 patients have required secondary procedures.
Conclusion: HoLEP can be safely performed in patients with glands ≥200 grams. In experienced hands, results equivalent to or superior to open simple prostatectomy can be expected.

8 h 48 - 8 h 57
Effect of needle size on cancer detection, pain, bleeding and infection in TRUS-guided prostate biopsies: A prospective trial

Orchid Djahangirian; Michael McCormack; Alain Duclos; Mathieu Latour; Daniel Liberman; Luc Valiquette; Kevin Zorn
University of Montreal Health Centre

Introduction: Transrectal ultrasound (TRUS)-guided prostate biopsies using 18G calibre needles are widely used; most often 12-core tissue samples of the peripheral zone are obtained. Although the diagnostic yield of prostate biopsies is fair, there is still a potential for false negative results, which necessitates repeat biopsies. In an effort to improve the accuracy of prostate biopsies, different sampling schemes have been developed. One strategy has been to increase the number of core biopsies performed on each patient. Another strategy has been to improve the reliability of prostate biopsies using larger calibre needles, thereby increasing the amount of tissue obtained for each core biopsy.
Methods: After approval by our institutional review board, we prospectively compared two biopsy needle sizes (18G vs. 16G) in relation to prostate cancer diagnosis, pain, bleeding and infection rates on 105 patients. Each patient underwent 6 TRUS-guided prostate biopsies with the standard 18G needle and 6 other biopsies with the experimental 16G needle. To evaluate possible complications related to the use of a larger 16G needle in the experimental group, we compared pain, bleeding and infection rates with a control group of 100 patients who underwent 12 biopsies with a single 18G needle (18G group). Pain, bleeding assessment and infection events were evaluated using patient questionnaires and telephone interviews.
Results: TRUS-guided prostate biopsies using 16G calibre needles did not increase cancer detection or non-malignant pathology rate, including prostatic intraepithelial neoplasia (PIN) and atypical small acinar proliferation (ASAP). Pain, bleeding and infectious complications were similar in both groups. Infection was defined as temperature above 38°C occurring within 48 hours after the procedure. We identified 4 patients with post-biopsy fever in the experimental (16/18G) group and 4 other patients in the (18G) control group. The post-biopsy infection rate is higher than reported just a few years ago and indicates that quinolone resistant Escherichia coli seems to be more prevalent in our urban setting than previously suspected. Limitations to our study include small group numbers.
Conclusion: Larger 16G needles appear to be safe for TRUS-guided prostate biopsies. Further study in a larger, multi-institutional, prospective, randomized manner with 16G needles is warranted to assess the theoretical benefit of larger core biopsies in prostate cancer detection.

8 h 57 - 9 h 06
Long-term results of a prospective open-label study: Double anticholinergic therapy for refractory hyperreflexic bladder in children

Genevieve Nadeau; Annette Schroder; Katherine Moore; Lucie Genois; Eve Pellerin; Stephane Bolduc
Division de l'Urologie, Centre Hospitalier Universitaire de Québec (CHUQ), Université Laval

Introduction: When facing hyperreflexic bladder, refractory to conventional medical approach, the therapeutic invasive alternatives are to proceed with augmentation cystoplasty or more recently, botulinum toxin detrusor injections. Therefore, we aimed at optimising medical therapy in a select group of children who failed a single agent anticholinergic therapy, by simultaneously using two anticholinergic medications (oxybutinin 10-30 mg and/or tolterodine 4 mg and/or solifenacin 5-10 mg); thus evaluating: efficacy, tolerability and safety of this approach.
Methods: Paediatric patients presenting refractory hyperreflexic bladders with incontinence were offered to enter a prospective open-label protocol using adjusted-dose regimens. Inclusion criteria were: intensive medical and behavioural therapies have failed to improve symptoms, absence of correctable neurological anomalies (MRI) and initially on optimal dose of one well-tolerated extended release anticholinergic medicine with clinical and urodynamic (UDS) partial responses. The follow-up consisted of voiding diaries and post-void residuals every 3 months, ultrasound and UDS every 6 to 12 months and yearly VCUG. Families were regularly asked for compliance, side effects, change in behaviour at home and school, continence status and overall quality of life. Blood samples and EKG were also obtained to detect potential toxicity. The primary endpoint was efficacy toward continence; the secondary end-points were tolerability and safety. Medication used was oxybutinin 10-30 mg and/or tolterodine 4 mg and/or solifenacin 5-10 mg.
Results: Fifty-five patients (21 girls, 34 boys) were enrolled. Thirty patients with overactive bladder (OAB) and 25 with neurogenic bladder (NDO) were followed for a minimum of 6 months. Mean age at initiation was 10±3 and 13±3 years and they were on double medication for a mean of 27 and 45 months for OAB and NDO respectively. Urodynamic capacity for OAB patients improved from 118±38 ml to 317±103 ml and uninhibited contractions decreased from 86±16 to 21±22 cmH2O. For NDO patients, urodynamic capacity improved from 209±103 ml to 419±172 ml and uninhibited contractions decreased from 64±26 to 22±18 cmH2O. Continence improved every OAB patients (13 dry, 8 significantly and 9 moderately improved) and every NDO patients (10, 7, 8). Of the NDO patients, 1 underwent bladder augmentation and 8 botulinum toxin detrusor injections. Twenty-eight reported no side effects, 18 mild and 9 moderate. Of the 34 patients voiding, 8 developed post-void residuals (>20 ml). Blood tests and EKG remained normal.
Conclusion: In the presence of refractory overactive bladder in children, a double anticholinergic therapy is an efficient and serious alternative to surgical treatment. Patients and family were very satisfied with this non-surgical and innovative approach.

9 h 06 - 9 h 15
Tolerability of rigid cystoscopy botulinum neurotoxin A injections in the lower urinary tract

Oussama El Yazami Adli; Romain Caremel; Waly Mahfouz; Oleg Loutochin; Jacques Corco
Jewish General Hospital, McGill University

Introduction: BONT-A injection in the lower urinary tract is a recommended therapeutic approach for patients with detrusor overactivity refractory to current antimuscarinic agents. It is also under evaluation for intractable overactive bladder and detrusor-extrernal sphincter dyssynergia as an alternative to more invasive options. This procedure can be performed either using a rigid or a flexible cystoscope. We aim to evaluate the tolerance of rigid cystoscopy injections in the bladder and the external urethral sphincter using a validated pain score.
Methods: This is a prospective study conducted between February 2011 and May 2012. For each injection, the patient's informations were recorded and a protocol of local anesthesia was applied when pertinent. Tolerability was assessed using a visual analogic scale (VAS).
Results: 64 injections were performed in women and 42 in men. The injections were performed in patients with neurogenic detrusor overactivity, overactive bladder and detrusor-external sphincter dyssynergia (62%, 30% and 8% of the patients respectively). In 22 injections (20.7%), the patients had no bladder sensation and therefore received no local anesthesia. The other patients received intravesical lidocaine 2% instillation before injection in the detrusor and intraurethral lidocaine 2% jelly before external urethral sphincter injection. The mean pain score in females was 2.29 (range 0-10) and 3 in men (range 0-8). 68.8% of the patients had a pain score of 2 or less and 5.6% had a pain score of more than 6. No patient requested sedation before any subsequent injections.
Conclusion: BONT-A injection using a rigid cystoscope and local anesthesia is safe and well tolerated in both men and women to perform in an office setting.

9 h 15 - 9 h 24
Evaluation of the safety of botulinum toxin-A injection in the bladder and the external urethral sphincter
Oussama El Yazami Adli; Romain Caremel; Waly Mahfouz; Oleg Loutochin; Jacques Corcos
Jewish General Hospital, McGill University, Montreal, Quebec
Introduction: Botulinum neurotoxin A (BONT-A) injection in the bladder or the external urethral sphincter (EUS) is a recognized approach for the treatment of intractable lower urinary tract symptoms related to detrusor overactivity (DO) or destrusor external sphincter dyssynergia (DESD). Few prospective studies specifically addressed the safety of these procedures.
Methods: Patients undergoing BONT-A injection in the bladder or the EUS were investigated in a prospective manner between February 2011 and May 2012. After each injection, evaluation was performed at 2 weeks and 2 months using phone and mailed questionnaires. Recorded parameters were the presence of pain, hematuria, urinary tract infection, voiding difficulties and systemic effects believed to be related to BONT-A injection.
Results: 106 injections were performed in 45 women (mean age 62.3 years) and 18 men (mean age 53.6 years). Neurogenic detrusor overactivity was the main indication for BONT-A injection (62%). 76 questionnaires have been adequately filled. The most common reported adverse effects were mild hematuria (18.6%) the day of the procedure, urinary tract infection (6.5%) and voiding dificulties (6.5%). No patient reported urinary retention. Transient fatigue or benign muscle weakness was reported in 6.5% and no serious systemic effect was recorded.
Conclusion: In patients with refractory DO or DESD who do not want or are unfit for invasive reconstructive surgery, BONT-A injections induce an acceptable morbidity.

9 h 24 - 9 h 33
Post-nephrectomy fever: Should we care?
Melanie Morris; Tomy Brousseau; Diego Barriers; Anne-Marie Houle; Julie-Franc Guimond
CHUS-Sainte-Justine
Introduction: Although nephrectomies and partial nephrectomies in children are procedures with a low rate of complications, one of the possible sequelae includes post-operative fever. Febrile episodes post nephrectomy can induce septic workups with moderately invasive investigations. They tend to cause concern in both the medical team and the family. We sought to determine if there is a difference in the rate of febrile episodes in the post-operative interval in nephrectomy versus hemi nephrectomy and if it is necessary to investigate all febrile episodes in the post-operative period.
Method: A retrospective review was performed of patients undergoing nephrectomy for benign renal disease between 2000 and 2012. Patients with malignant disease were excluded. Demographic data was assessed and outcomes evaluated included maximal temperatures in the first and second post-operative day (POD), and post-operative complications. Fever was defined as a maximal temperature of greater than 38 degrees.
Results: A total of 64 patients underwent total nephrectomy and 30 patients underwent partial nephrectomy for benign pathologies at our institution in the 10-year period. The median age at surgery was 21.4 (0.3-209.1) months and 45 (70%) were male and 19 (0%) were female. In the group of total nephrectomy, 16% (10) and 27% (17) had a febrile episode in the first and second POD respectively. In the heminephrectomy group 17% (5) and 50% (15) had a fever in POD 1 and 2 respectively. Furthermore when we divided the total nephrectomy group between open and retroperitoneoscopic groups we noted that 2% and 4% of the open group had fever post operatively in day 1 and 2 respectively versus the minimally invasive group, which had 14% and 22% febrile episodes respectively. There were no serious sequelae from any procedure or major infections demonstrated by investigations.
Conclusion: Interestingly both groups had a larger number of febrile episodes on the second post-operative day, and in the partial nephrectomy group the fraction was much greater. In addition the minimally invasive group had more febrile episodes than the open group for total nephrectomy. However, considering there were no serious complications resulting from these febrile episodes, one can conclude that observation may suffice. It is notable that a much larger group of patients undergoing a heminephrectomy have a post-operative fever on the second post-operative day. It can be postulated that the resected margin may release inflammatory markers that would lead to fever. Further, larger trials could further delineate this.

Session scientifique IX

Objectifs éducatifs : Comprendre le rationnel du traitement focal du cancer de prostate dans les dimensions suivantes :
1. histoire naturelle du cancer de prostate et notion de tumeur index;
2. place du traitement focal entre surveillance active et traitements actuels du cancer localisé;
3. conditions indispensables à la réalisation d'un traitement focal : sélection de patient, determination d'une cible à traiter;
4. différentes options de thérapies focales;
5. experiences cliniques actuelles, etudes en cours et à venir;
6. questions soulevées par le traitement focal du cancer de prostate : suivi, re-traitements.

9 h 33 - 9 h 50
Futur du traitement focal du cancer de la prostate
Conférencier : Franck Bladou
Urologue
Modérateur : Frederic Pouliot

Session scientifique X
Objectifs éducatifs :
1. Décrire les différents types de curiethérapie disponibles pour le traitement des cancers de la prostate.
2. Discutez des indications et des contre indications de la curiethérapie prostatique.
3. Discutez les avantages et le controle tumoral rélie à l'utilisation de la curiethérapie prostatique.
4. Décrire les toxicités reliées à la curiethérapie prostatique et les principes généraux de prise en charge.

10 h 00 - 10 h 30
Mise à jour sur la curiethérapie de la prostate
Conférencier : Eric Vigneault
Radio-oncologue, HUQ Pavillon Hopital Hotel-Dieu
Modérateur : Wassim Kassouf

Session scientifique XI

Objectifs éducatifs : À la fin de cette session, les participants verront les avancées dans l'approche des symptomes urinaires bas après la prostatectomie radicale. Ils pourront mieux comprendre la maniere d'investiguer ces problèmes qui affectent la qualité de vie des patients et mieux connaitre les traitements possibles.

11 h 15 - 11 h 45
Prise en charge de l'incontinence urinaire post-prostatectomie
Conférencier : Francois Haab
Hopital Tenon, Paris, France
Modérateur : Jacques Corcos

Sessions scientifiques XII, XIII, XIV
Samedi (p.m.), le 10 novembre 2012

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Session scientifique XII

Objectifs éducatifs : À la fin de cette conférence, l'auditoire apprendra les défis que représente une vie active complète pour homme remarquable souffrant d'un handicap physique.

12 h 00 - 13 h 00
Lunch conférence
Salon Jacques-Cartier
Conférencier : M. Dean Bergeron
Directeur Marketing et promotion de la santé, La Capitale assurances et gestion du patrimoine Inc.
Modérateur : Stéphane Bolduc

Session scientifique XIII

Objectifs éducatifs : À la fin de cette session, les participants decouvriront les importants développements dans les chirurgies endourologiques. Ils possèderont mieux les aspects techniques et les implications cliniques, de même que les limites de ces approches.

13 h 15 - 13 h 50
Quoi de neuf en endourologie
Conférencier : Olivier Traxer
Hopital Tenon, Paris, France
Modérateur : Luc Valiquette

Session scientifique XIV

Objectifs éducatifs : À la fin de cette session, les participants comprendront davantage les diverses hypothèses étiologiques actuelles sur l'infertilité chez l'homme. Une mise a jour sur les nouvelles démarches diagnostiques et thérapeutiques seront revisées.

14 h 00 - 14 h 30
L'épididyme et l'étiologie de l'infertilité : L'homme vasovasostomisé comme modèle
Conférencier : Robert Sullivan
Centre de recherche du CHUQ
Modérateur : Francois Benard

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Sessions scientifiques XV, XVI, XVII, XVIII, XIX
Dimanche (a.m.), 11 novembre 2012

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Session scientifique XV

Objectifs éducatifs : À la fin de cette session les participants apprendront le nouvel algorithme canadien de la prise en charge des symptomes urinaires bas de remplissage chez l'homme.

8 h 40 - 9 h 00
Revue des lignes directrice de l'hyperactivité vésicale chez l'homme - CUA/AUC
Conférencier : Bruno Laroche
Modérateur : Le Mai Tu

9 h 10 - 9 h 45
Programme d'auto-formation des compétences transverseles en ligne
Conférencier : Fred Saad
Modérateur : François Benard

Session scientifique XVI

Objectifs éducatifs :
À la fin de cette session, le participant pourra :
- Proposer l'investigation de base pour confirmer le diagnostic.
- Établir un plan de traitement efficace avec la famille.
- Identifier les situations spécifiques nécessitant une réference en urologie-pédiatrique.

10 h 00 - 10 h 30
Dysfonction d'élimination
Conférenciers : Stéphane Bolduc
Modérateur : Diego Barrieras

Session scientifique XVII

Objectifs éducatifs : À la fin de cette session, le participant connaîtra les nouveaux développements en recherche clinique et fondamentale.
Modérateur : Frédéric Pouliot

10 h 40 - 10 h 49
Effect of denosumab on prolonging bone-metastasis free survival in men with non-metastatic castrate-resistant prostae cancer presenting with aggressive prostate-specific antigen kinetics
Fred Saad;[1] Matthew R. Smith;[2] Neal Shore;[3] Stephane Oudard;[4] Kurt Miller;[5] Bertrand Tombal;[6] Paul Sieber;[7] Karim Fizazi;[8] Peter Van Veldhuizen;[9] Ronaldo Damiao;[10] Gavin Marx;[11] Juan Morote;[12] Amy Feng;[13] Roger Dansey;[13] Carsten Goessl[13]
[1]University of Montreal Hospital Centre, CRCHUM, Montreal, QC; [2]Massachusetts General Hospital Cancer Center, Boston, MA; [3]Carolina Urological Research Center, Myrtle Beach, SC; [4]Georges Pompidou Hospital, Paris, France; [5]Charite Berlin, Berlin, Germany; [6]Université Catholique de Louvain Cliniques Universitaires Saint Luc, Bruxelles, Belgium; [7]Urological Associates of Lancaster, Lancaster, PA; [8]Institut Gustave Roussy, University of Paris Sud, Villejuif, France; [9]Kansas City VA Medical Center, Kansas City, MO; [10]Hospital Universitario Pedro Ernesto, Rio de Janeiro, Brazil; [11]Sydney Haematology and Oncology Clinic, Wahroonga NSW, Australia; [12]Hospital Vall d'Hebron, Barcelona, Spain; [13]Amgen Inc., Thousand Oaks, CA
Introduction: Denosumab, an anti-RANK-ligand monoclonal antibody, has been shown to prolong bone-metastasis free survival (BMFS) by a median 4.2 months and with a 15% risk reduction vs. placebo in men with non-metastatic castrate-resistant prostate cancer (CRPC) and baseline prostate-specific antigen (PSA) value ≥8.0 ng/ml and/or PSA doubling time (DT) ≤10.0 months. The objective of this analysis was to determine the efficacy of denosumab in men at greatest risk for bone metastases. BMFS was evalu-

Table 1.

Population	Sample size	BMFS median (months)	BMFS treatment difference (months)	HR	95% CI	*p* value
All patients	D: 716 P: 716	D: 29.5 P: 25.2	4.2	0.85	0.73 - 0.98	0.028
PSADT <6 months	D: 419 P: 427	D: 25.9 P: 18.7	7.2	0.77	0.64 - 0.93	0.0064

BMFS: bone-metastasis free survival; PSADT: prostate-specific antigen doubling time HR: hazard ratio; CI: confidence interval; D: denosumab; P: placebo.

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ated in a subset of men with PSADT ≤6 months (previous report in Smith MR, et al: J Clin Oncol. 23:2918-2925, 2005).
Methods: 1432 men with non-metastatic CRPC (baseline [median] PSA: 12.3 ng/mL, PSADT: 5.1 months, ADT duration: 47.1 months) were randomized 1:1 to receive monthly subcutaneous denosumab 120 mg or placebo. The first patient enrolled February 2006; primary analysis cut-off was July 2010, when >660 men had developed bone metastasis or died. The primary endpoint was BMFS (time to first bone metastasis or death from any cause). BMFS results are presented for men with baseline PSADT ≤6 months.
Results: Median BMFS in the placebo group of men with PSADT≤6 months was 6.5 months shorter than for the placebo group in the full population (18.7 months vs. 25.2 months), indicating that these men are at particularly high risk. In this group of men with PSADT <6 months, denosumab prolonged BMFS by a median of 7.2 months and with a 23% reduction in risk compared with placebo (Table 1).
Conclusions: Patients with shortened PSADT are at higher risk of developing bone metastasis and denosumab is markedly effective at prolonging BMFS in this subset of patients.

10 h 49 - 10 h 58
MDV3100, an androgen receptor signalling inhibitor (ARSI), improves overall survival in prostate cancer patients post-docetaxel: Results from the phase 3 AFFIRM study

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Introduction: MDV3100, a novel ARSI, competitively inhibits binding of androgens to the androgen receptor (AR), inhibits AR nuclear translocation, and inhibits AR-DNA binding (Tran et al, Science.2009; 324:787). MDV3100 was developed based on activity in prostate cancer cell model systems with overexpressed AR and was active in a Phase 1-2 trial of prostate cancer patients with progressive castration resistant disease (CRPC) (Scher et al, Lancet.2010; 375:1437). The AFFIRM trial evaluated if MDV3100 could prolong overall survival in CRPC patients post docetaxel.
Methods: In this randomized, double-blind, placebo-controlled, multinational Phase 3 study (NCT00974311), patients who had ≤2 docetaxel-based regimens were randomized 2:1 to MDV3100 160 mg/d or placebo. Corticosteroids were allowed but not required. Patients were stratified by baseline ECOG performance status and mean brief pain inventory score. The primary endpoint was overall survival (OS). Secondary efficacy endpoints included radiographic progression-free survival, time to first skeletal-related event, and time to PSA progression.
Results: 1,199 patients were randomized between Sept 2009 and Nov 2010. Based on a planned interim analysis at 520 death events, the Independent Data Monitoring Committee recommended halting the study and placebo patients offered MDV3100 due to a significant OS benefit. Patients on MDV3100 had a median OS of 18.4, an increase of 4.8 months compared to placebo (13.6 months), p<0.0001, hazard ratio 0.631. Results for the secondary endpoints and safety will also be presented.
Conclusion: MDV3100 significantly improved OS in men with post-docetaxel CRPC reducing the risk of death by 37% compared to placebo.

10 h 58 - 11 h 07
Results of Phase 3 study of abiraterone acetate (AA) in chemotherapy-naïve patients (PTS) with metastatic castration-resistant prostate cancer (MCRPC): Interim analysis (IA) of COU-AA-302

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Introduction: AA blocks androgen biosynthesis and improves overall survival (OS) in mCRPC pts post-docetaxel. COU-AA-302 compared clinical benefit of AA + prednisone (P) vs. placebo (PL) + P in chemotherapy-naïve asymptomatic or mildly symptomatic mCRPC patients.
Methods: Pts (n=1088) were randomized 1:1 to AA (1000 mg) + P (5 mg BID) or PL + P at 151 centres in 12 countries. Radiographic progression-free survival (rPFS) and OS were primary endpoints. Median times were estimated using K-M method (LR statistic used for inference). Lan-DeMets α-spending function was used (OS).
Results: OS, rPFS and secondary endpoints (Table 1) favored AA, as concluded by Independent Data Monitoring Committee, who unanimously recommended unblinding study, crossing pts to AA from PL at 43% of total events. Median follow up is 22.2 mos. Grade 3/4 AEs (AA + P vs. PL + P): hypertension 3.9% vs. 3.0%; hypokalemia 2.4% vs. 1.9%; ALT↑ 5.4% vs. 0.7%; AST↑ 3.0% vs. 0.9%.
Conclusions: AA + P resulted in clinically and statistically significant effects on rPFS and all secondary endpoints, and strong trend for increased OS at IA. Median OS in PL arm is longest (27.2 mos) seen in any phase

Table 1.

	AA + P (median, mos)	PL + P (median, mos)	HR (95% CI)	*p* value
rPFS*	NR	8.3	0.43 (0.35, 0.52)	<0.0001
OS†	NR	27.2	0.75 (0.61, 0.93)	0.0097
Time to opiate use (cancer-related pain)	NR	23.7	0.69 (0.57, 0.83)	0.0001
Time to chemotherapy initiation	25.2	16.8	0.58 (0.49, 0.69)	<0.0001
Time to ECOG-PS deterioration	12.3	10.9	0.82 (0.71, 0.94)	0.0053
Time to PSA progression	11.1	5.6	0.49 (0.42, 0.57)	<0.0001

rPFS: Radiographic progression-free survival; OS: overall survival; AA: abiraterone acetate; P: prednisone; PL: placebo; HR: hazard ratio; CI: confidence interval; NR: not reached; ECOG-PS: Eastern Cooperative Oncology Group performance status; PSA: prostate-specific antigen. *rPFS analysis: clinical cut off date (CCO) 12/20/2010. Other analyses: CCO 12/20/2011; †Pre-specified alpha level 0.0008.

3 mCRPC study, although median OS in AA arm has not been reached. Present results confirmed acceptable safety/tolerability profile of AA.

Session scientifique XVIII

Objectifs éducatifs : À la fin de cette session, les participants seront en mesure de :

1. Reconnaître l'importance de la maladie métastatique cérébrale et spinale sur le pronostic vital des patients.
2. Énumerer les différentes options thérapeutiques offertes aux patients atteints de maladie métastatique cérébrale et spinale.
3. Reconnaître l'importance des traitements sur le pronostic fonctionnel des patients atteints de maladie métastatique cérébrale et spinale.

11 h 07 - 11 h 37
Métastases et neuro-chirurgie
Conférenciere : Geneviève Lapointe
Neurochirurgien, Hôpital de l'Enfant-Jésus
Modérateur : Fred Saad

Session scientifique XIX

Objectifs éducatifs : À la fin de cette session, le participant aura l'occasion verifié les connaissances acquises lors du congrès, en répondant à des questions à choix multiples sur des sujets précis en urologie tout en comparant ses réponses à celles de ses collègues.

11 h 47 - 12 h 30
Avez-vous retenu l'éssentiel du congrès ?
Conférenciers : Thierry Lebeau
Marie-Paule Jammal
Frédéric Pouliot

12 h 30
Clôture de la réunion