The COA heads to our Nation’s Capital in June. Learn more about our upcoming Annual Meeting in a special feature on page 29

L’ACO sera dans la capitale nationale en juin prochain. Pour plus de détails sur la Réunion annuelle à venir, consultez notre numéro spécial, à la page 29.

Transferts en santé – Début d’une ère d’austérité et d’autonomie..... 11

Second Wind - yes, there is life after the OR....................... 15

Does Hip Resurfacing Still Have a Role? A point/counterpoint debate ...................... 18
Synvisc and Synvisc One (hylan G-F 20) have a unique cross-linked formulation to closely mimic healthy, young synovial fluid.

**Important Treatment Considerations**

Synvisc®/Synvisc-One® (hylan G-F 20) is for intra-articular injection to treat pain associated with osteoarthritis of the knee. Synvisc®/Synvisc-One® contains small amounts of avian protein and should not be used in patients with related hypersensitivities. Adverse events involving the injected knee after intra-articular injections of Synvisc®/Synvisc-One® may include: transient pain and/or swelling and/or effusion. The post marketing experience has identified the following systemic events to occur rarely with Synvisc®/Synvisc-One® administration: rash, lightheadedness, nausea, headache, dizziness, chills, muscle cramps, pain, respiratory difficulties, flushing and facial swelling. If venous or lymphatic stasis is present, Synvisc®/Synvisc-One® should not be injected into the knee. Synvisc®/Synvisc-One® should not be used in infected or inflamed knees or in patients having skin diseases or infections in the area of the injection site.

**References**


**Proven Long-Lasting Pain Relief**

**Proven to Improve Physical Function**

**Proven Safety**

**Potential cartilage preservation**

**Proven Outcomes**
“I have no pain. I’m able to do the things I normally could. I can keep being Shaq. It feels great.”

Shaquille O’Neal
recipient of GRAFTJACKET® Regenerative Tissue Matrix for Achilles tendon reinforcement

These results are specific to this individual only. Individual results and activity levels after surgery vary and depend on many factors including age, weight, and prior activity level. Refer to the package insert for instructions for use and risk information.

Choose Strong.™ Shaq Strong. Choose GRAFTJACKET® Matrix for augmenting Achilles repairs

Choose Strong.™

GRAFTJACKET®
Regenerative Tissue Matrix for Achilles tendon reinforcement
- Strong graft
- Strong biology
- Strong clinical history

For more information, visit www.ChooseStrong-GraftJacket.com
RESTORATION ADM
ANATOMIC DUAL MOBILITY

The Bearing Solution Designed to Address:
- Wear
- Dislocation
- Groin Pain
- ROM
- Metal Hypersensitivity

X3™ The Power of Technology

Stability • Mobility • Longevity

A surgeon must always rely on his or her own professional clinical judgment when deciding whether to use a particular product when treating a particular patient. Stryker does not dispense medical advice and recommends that surgeons be trained in the use of any particular product before using it in surgery. The information presented is intended to describe the benefits of Stryker product offerings. A surgeon must always refer to the package insert, product label and/or instructions for use before using any Stryker product. Products may not be available in all markets because product availability is subject to the regulatory and/or medical practices in individual markets. Please contact your Stryker representative if you have questions about the availability of Stryker products in your area. Stryker Corporation or its divisions or other corporate affiliated entities own, use or have applied for the following trademarks or service marks: AJO, Mobile bearing Hip, Stryker, X3. All other trademarks are trademarks of their respective owners or holders.
Fragility Fractures – Make Their First Break their Last

Emil Schemitsch, M.D., FRCS
President, Canadian Orthopaedic Association

One hip fracture predicts a high risk of a second hip fracture. As orthopaedic surgeons, we have an obligation to help decrease the growing burden of fractures in the elderly. A multifaceted approach is required including efforts directed at falls prevention. Moreover, without appropriate diagnosis and treatment, patients who have sustained a fragility fracture remain at substantial risk for recurrent, debilitating and life-threatening fractures.

Recent Canadian data indicates that over 80% of fracture patients are never offered screening and/or treatment for multifactorial elevated fracture risk to reduce the risk of subsequent fractures – this is the Osteoporosis Care Gap1,2.

Fracture risk is determined principally by age, gender, low bone density and prevalent low trauma fracture (as well as other factors such as corticosteroid use).

In November 2011, I had the opportunity to attend the FOCUS Inaugural Forum hosted by Osteoporosis Canada (OC). The purpose of the Forum was to identify appropriate province-specific post fracture care models and encourage collaboration among key health care professionals and advocates, including orthopaedic surgeons from across the country to promote post fracture care. By the end of the Forum, each provincial group had identified a province-specific Fracture Liaison Service model, such as a program currently operating in Ontario, and a plan to start advocating for these services with their governments.

The missing piece is that most Canadian provinces do not offer a coordinated strategy that links fracture patients with the services that already exist. What this involves in most cases is an individual whose sole responsibility is to flag fracture patients for subsequent fractures – this is the Osteoporosis Care Gap1,2.

Links fracture patients with the services that already exist. What this involves in most cases is an individual whose sole responsibility is to flag fracture patients for subsequent fractures – this is the Osteoporosis Care Gap1,2.

Legal deposition:
National Library of Canada ISSN 0832-0128
As orthopaedic surgeons, we can collaborate with Osteoporosis Canada to close the post fracture care gap, by ensuring that the fracture patients we see, specifically those patients over the age of 50 with fractures of the humerus, wrist, pelvis and hip, have an appropriate Fracture Risk Assessment. Please consider that all of these patients should have a BMD test done and should be considered for treatment. If we are not comfortable initiating therapy, we should refer them to the family physician or specialty clinic with a specific request to address the need for osteoporosis treatment. By prompting appropriate management of the underlying osteoporosis in these currently undiagnosed patients, we will help reduce the risk of repeat fractures.

In closing, I would like to mention a number of other items of importance. A very successful Mid-Winter Meeting of the COA was held in January. Important town hall meetings devoted to the Canadian Joint Replacement Registry and the issue of unemployed orthopaedic graduates were held. With respect to this latter issue, our COPEF and National Standards committees were both charged to make this issue their priority. The COA Board has also made the decision to review the Association’s Strategic Plan. The first step in this process was a membership survey that was conducted last Fall. A COA Planning Retreat will also be held on Friday, May 11 and Saturday, May 12 in Toronto. The purpose of the retreat is to develop a draft Strategic Plan with appropriate recommendations for full consideration by the COA membership. This plan is expected to address issues of current concern by the membership such as the role the COA must play in advocacy and lobbying, relationships with provincial associations, and staff and financial resources.

Finally, let me once again invite you to attend our 2012 Annual Meeting in Ottawa. It promises to be a truly outstanding educational and social experience with a broad selection of choices that should satisfy the needs of all those attending. It will be a great opportunity to interact with other members, colleagues and friends. I look forward to seeing you in Ottawa next June!
Une première fracture de la hanche est souvent synonyme de risques élevés de fractures subséquentes. En tant qu’orthopédistes, nous avons l’obligation de contribuer à la réduction du fardeau croissant dû aux fractures chez les aînés. Une approche à volets multiples est donc nécessaire, y compris des efforts axés sur la prévention des chutes. En outre, sans le diagnostic et le traitement adéquats, les patients qui ont subi une fracture de fragilisation demeurent relativement à risque de subir des fractures récurrentes, débilitantes et constituant un danger de mort.

De nouvelles données canadiennes montrent que, dans plus de 80 % des cas de fractures, aucun dépistage des risques multifactoriels de fractures ni traitement de ceux-ci n’est offert aux patients afin de réduire les risques de fractures subséquentes, ce qu’on appelle l’écart thérapeutique dans les soins postfracture1, 2.

Les risques de fractures sont établis principalement en fonction de l’âge, du sexe, de la faiblesse de la densité osseuse et de la prévalence des fractures à faible impact (de même que d’autres facteurs, tels que la consommation de corticostéroïdes).

En novembre 2011, j’ai eu l’occasion d’assister au premier forum FOCUS (Fractures = Osteoporosis Care for Us) d’Ostéoporose Canada (OC), qui visait à cerner les modèles de soins postfracture adéquats pour chaque province et favoriser la collaboration entre les professionnels et les intervenants en santé clés, ce qui comprend la promotion des soins postfracture par les orthopédistes de partout au pays. À la fin du forum, chaque groupe provincial avait cerné un modèle de service de liaison en cas de fracture qui lui est propre, dont le programme actuellement employé en Ontario, et un plan pour lancer les efforts de promotion de ces services auprès des gouvernements.

Reste que, malgré tout, la majorité des provinces n’ont pas de stratégie coordonnée qui fait le pont entre les patients ayant subi une fracture et les services existants. Dans la plupart des cas, cela nécessite une personne ayant pour seule responsabilité d’aiguiller les patients ayant subi une fracture vers l’intervention appropriée. On a constaté que ce type de services peut améliorer jusqu’à 80 % les soins en cas de fracture. De tels programmes réduisent en outre l’incidence de fractures subséquentes, y compris de fractures de la hanche coûteuses3, 4.

Fractures de fragilisation – Veillez à ce que la première fracture soit la dernière

Emil H. Schemitsch, MD, FRCSC
Président de l’Association Canadienne d’Orthopédie

References

En tant qu’orthopédistes, nous pouvons collaborer avec Ostéoporose Canada pour éliminer l’écart thérapeutique dans les soins postfracture en veillant à l’évaluation adéquate des risques de fractures pour les patients que nous traitons pour une fracture, surtout ceux qui ont plus de 50 ans et dont l’humérus, le poignet, le bassin ou la hanche est touché. Nous vous prions donc d’envisager un examen d’ostéodensitométrie de même qu’un traitement pour tous ces patients. Si vous êtes hésitant à lancer un traitement, vous devriez aiguiller les patients vers leur médecin de famille ou une clinique spécialisée en faisant la demande explicite d’un traitement contre l’ostéoporose. En assurant une gestion adéquate de l’ostéoporose chez les patients qui n’ont pas encore été diagnostiqués, nous contribuons à la réduction des risques de fractures subséquentes.

Enfin, j’aimerais souligner quelques points importants. La Réunion d’hiver de l’ACO, en janvier, a été très fructueuse. Nous avons tenu des consultations importantes sur le Registre canadien des remplacements articulaires (RCRA) et la question des jeunes orthopédistes sans emploi. En ce qui a trait à cette question, on a demandé aux Comité sur l’exercice orthopédique, l’économie et la satisfaction professionnelle (CEOESP) et Comité sur les normes nationales d’en faire une priorité. Le conseil d’administration a aussi décidé de revoir le plan stratégique de l’ACO. Un sondage auprès des membres, mené l’automne dernier, constituait la première étape du processus. L’ACO tiendra aussi une retraite de planification les vendredi et samedi 11 et 12 mai, à Toronto. Le but de cette retraite est d’élaborer une ébauche de plan stratégique et les recommandations appropriées, qui seront ensuite soumises aux membres pour fins d’étude. Le plan devrait remédier aux préoccupations actuelles des membres, tels que le rôle que l’ACO doit jouer dans la défense des intérêts et le lobbying, ses relations avec les associations provinciales, ainsi que ses ressources humaines et financières.

Sur ce, permettez-moi de vous inviter une fois de plus à la Réunion annuelle 2012, à Ottawa. L’expérience proposée promet d’être exceptionnelle, tant pour la formation que les activités sociales au programme. Il devrait en effet y en avoir pour tous les goûts et besoins. C’est aussi une excellente occasion d’interagir avec d’autres membres, collègues et amis. Au plaisir de vous voir à Ottawa en juin!

Références


GE Healthcare

Introducing Brilliant.

The right image at the right dose.

GE Healthcare Surgery is proud to introduce Brilliant, a program designed to help clinicians get the right image at the right dose from their mobile C-arm.

Visit the App store on your iPad to download your complimentary copy of the OEC iGuide App.

www.gehealthcare.com/oecbenefits
1-877-716-3399

Be Brilliant. Only from OEC.
Online COA Annual Meeting Registration

Online registration for the upcoming Annual Meeting in Ottawa is open until May 23. Social event, ICL and workshop tickets can be purchased when you register online. A reminder that no tickets for the Blast to the Past social event taking place on Saturday night will be available for purchase at the meeting. Register today and book your tickets! Follow the links on the COA homepage or go to www.coaannualmeeting.ca.

Inscription en ligne à la Réunion annuelle de l’ACO


Pay Your COA Membership Dues

Log in to the homepage and click on the Annual Dues option in the Members Area menu on the right side. You will be able to view any existing invoices and submit your payment information through our secure online payment system. Is your membership in good standing? Our 2012-2013 dues statements were sent out in March via email or fax – did you receive yours? Make sure your dues payments are up to date. Contact Cynthia Veina: cynthia@canorth.org if you need assistance paying your dues online.

Payez votre cotisation à l’ACO en ligne

Ouvrez une session à partir de la page d’accueil, puis cliquez sur « Cotisation annuelle », dans le menu « Section des membres », à droite. Vous pourrez alors consulter toute facture existante et nous faire parvenir les renseignements nécessaires par l’intermédiaire de notre système sécurisé de paiement en ligne. Etes-vous membre en bonne et due forme? On a envoyé les avis de cotisation de l’exercice 2012-2013 par courriel ou par télécopieur en mars dernier; avez-vous reçu le vôtre? Assurez-vous que votre compte est bien en règle. Si vous avez besoin d’aide pour payer votre cotisation en ligne, veuillez communiquer avec Cynthia Veina, à cynthia@canorth.org.

New web site for the Canadian Orthopaedic Foot & Ankle Society (COFAS)

COFAS has recently launched a brand new web site: www.canadafoot.com. Resources for physicians as well as residents and fellows, patient information and a ‘find a physician’ feature, a listing of CME events, a history of the society, committee listings and much more can all be found on this new site. Visit www.canadafoot.com or click on the COFAS link in the Societies menu in the right margin of the COA homepage.

Nouveau site Web pour la Société Orthopédique Canadienne pour le Pied et la Cheville (SOCPC)

La SOCPC vient de lancer son tout nouveau site Web, à www.canadafoot.com (en anglais seulement). Vous y trouverez des ressources pour les médecins, de même que pour les résidents et boursiers, des renseignements pour les patients, une fonction « Find A Physician » (trouver un médecin), une liste d’activités d’éducation médicale continue (ÉMC), un bref historique de la SOCPC, la composition des comités et beaucoup plus encore! Consultez www.canadafoot.com ou cliquez sur le lien « COFAS », dans l’encadré « Sociétés », dans la marge de droite de la page d’accueil du site Web de l’ACO.

Poll / Sondage

Has the wait time from primary-care referral to first appointment (T1) changed since the 2004 Health Accord?

Le temps d’attente de l’aiguillage du patient par le fournisseur de soins primaires à la consultation avec le spécialiste (période T1) a-t-il changé depuis l’Accord de 2004 des premiers ministres sur le renouvellement des soins de santé?

Here is what YOU said / Voici VOS résultats :

47.4% Longer / Il est plus long
28.9% Same / Aucun changement
18.4% Don’t Know / Je ne sais pas
5.3% Shorter / Il est plus court

Visit our home page to participate in our current poll. Consultez notre page d’accueil pour participer au sondage en cours.
The Federal Funding Formula
a new era of austerity and self-reliance

Doug Thomson
CEO, Canadian Orthopaedic Association

Finance Minister Jim Flaherty’s surprise mid-December announcement about the funding formula for federal health transfers had health ministries across the country madly crunching numbers to figure out the implications. Regardless of the tally, a number of things are abundantly clear. The provinces really have no choice but to accept what amounts to a take-it-or-leave-it offer of less generous new funding; any future discussions with Ottawa on health care will be about measuring outcomes and patient satisfaction against dollars spent; and the fragmentation of Canada’s health care system will continue into the next decade.

Flaherty’s offer is this: The federal government will continue the 6% annual increase in the Canada Health Transfer (CHT) until the 2016-17 fiscal year. After that, until at least 2024, increases in the CHT will be tied to nominal gross domestic product (GDP plus inflation) but not allowed to dip below 3%. Health transfers will remain at about 20% of total health care costs, but they will be distributed differently.

Now, given all the public hand-wringing, one might be tempted to think any drop below 6% is a really big deal. Well, to some maybe, but in the grander scheme of things it’s not. True, we are talking about tens of millions of dollars, but in the context of health care costs in the hundreds of billions of dollars. Also, bear in mind that the 6% annual increment applies only to the federal portion of health care funding. Quebec Premier Jean Charest, as well as some of the other premiers, noted at their January meeting of the Council of the Federation that the 6% annual increase amounted to about a 1% raise on total health care spending. While such generosity is certainly not to be spurned, there was never any chance that 6% of 20% would keep pace with soaring health care costs, not if the other 80% of provincial expenses weren’t included in the equation.

According to CIHI, between 1998 and 2008, Canada’s total annual health care spending grew by an average of 7.4%; whereas during that same 10-year period, Canada’s average annual inflation rate was 2.2%. And while in 2011, for the first time in 15 years, the increase in health care spending slowed down to a relatively low 4%, inflation was at an even more modest 2.9%. Total spending on health care in Canada is expected to grow by more than $7 billion in 2011 to reach a forecast $200-5 billion – 11.6% of GDP. This amounts to roughly $5800 per Canadian, about $150 more per person than in 2010. Thus, despite all the efforts during recent years to contain health care costs, they continue to outpace inflation – although it’s encouraging to see just a one-percent gap between – inflation and health care costs.

If annual increases are going to be pegged to nominal GDP, which likely means less new money to deliver health care, then the provinces can at least count on the actual health transfers – the 20% federal contribution. Well, not exactly like before. As a result of an amendment made in 2007 to the regulatory framework, starting in April 2014, federal health transfers will be cash only and on an equal per capita basis. This change does away with the concept of transferring tax points, which made up a significant portion of the health transfers, as well as “associated equalization” payments that compensated for the disparate value of tax points in different jurisdictions.

As one might expect, the calculus to determine the relative value of tax points and who gets what is more than a little complex. Suffice it to say, the new regulatory framework coming into effect in 2014 simplifies things for the federal government, and most provinces will likely experience a shortfall in revenues – some more acutely than others. In the conclusion of a February 2011 paper to Parliament about the impact changes to the Canada Health Transfer will have on provincial allocations, James Gauthier of the Parliamentary Information and Research Service noted “…negotiations among federal and provincial governments on how best to transition the CHT to an equal-per-capita cash allocation have yet to commence in earnest. It is currently unknown what arrangements might be made among federal and provincial governments, if any, to mitigate the effects of this transition on funding for health care to the provinces through the CHT.”

So, in many parts of the country, the delivery of orthopaedics seems headed for a new era of austerity, as provincial governments seek to restrain increases in health care costs to inflation. In my view, any medical specialty that does not have an action plan to offset these changed circumstances will find itself at a real disadvantage when vying for the attention and consideration of provincial health ministries, hospital executives and other decision-makers.

In some respects, the COA is reasonably well prepared for the challenges ahead. We have a committee structure that represents the regional interests of the provincial associations, and societies that represent a number of the subspecialties. Our President’s recent initiative to better coordinate activities between the Committee on Orthopaedic Practice Economics and Fulfillment and the National Standards Committee to investigate several key questions and gather basic data about the profession is a positive step. Our ongoing efforts to increase surgeon participation in the CJRR are about to bear fruit, providing us with more robust data on hip and knee arthroplasty. As a member of the Wait Times Alliance, we have access to the CMA’s resources and political clout. And through Bone and Joint Canada, the COA has at its disposal a process for creating models of care that can be tailored to regional realities and specific subspecialties.

That’s just as well, since orthopaedics is facing an array of issues, great and small. Here’s a short list: few full-time jobs for graduating orthopaedic surgeons; wait times for all types of orthopaedic procedures; strained relations with primary-care physicians; waste and inefficiencies throughout the continuum
of orthopaedic care; the risks to health and career from infection by blood-borne pathogens; the prevalence of intimate partner violence seen in fracture clinics; the unexpected shortfall in CaRMS applications for orthopaedic openings. And there are bound to be more issues surfacing as health care restructuring to contain costs even more begins in earnest.

I believe one of the first things we must agree on is what the profession can do for itself to demonstrate its house is in order and that we are ready to be innovative.

By way of illustration, the models of care process can foster innovation and problem-solving, as it works out the kinks throughout the continuum of orthopaedic care. Virtually all these changes tend to be outside the OR. Often the solutions involve minor bits of reorganization and communications that in of themselves have little impact, but when they are integrated with many other bits of reorganization and communications their value increases exponentially. Ultimately, the resulting efficiencies can shorten a patient’s length of stay in hospital, reduce costs and create the lasting benefit of a multi-disciplinary clinical network where there was none. This process could be something that the profession undertakes on its own initiative – perhaps academic centres and their affiliated teaching hospitals could set the example – as a type of due diligence for orthopaedics in a time of austerity. At the very least, it would signal that orthopaedics understands the new paradigm, is willing to work within it and has developed tools to do so.

Some issues are likely to be much tougher to resolve. To help unemployed graduates launch their careers during these hard times, there is growing agreement that the COA’s current position on call reduction after age 55 should be revisited. Should those surgeons who no longer wish to perform emergency call duties consider retiring from the OR as well? If a young surgeon is covering most of another surgeon’s call duties, should they share OR time? Since orthopaedic departments are unlikely to expand any time soon, such a shift in position might create some openings for the all-important next generation of orthopaedic surgeons. By the same token, there need to be opportunities for surgeons aged sixty-plus to transition from the OR to some other clinical or administrative role in treating musculoskeletal disease. A self-regulating profession ought to look after its own.

We’ll have an opportunity to take stock of this and much else when the COA’s Board of Directors and committee members gather this May in Toronto for a strategic retreat. In all likelihood, we won’t emerge with answers to everything, but my sincere hope is that we will find consensus on how to proceed on a number of issues. Once we have a sense of direction, and hopefully a sense of common purpose as well, we can open the discussion further at this June’s meeting in Ottawa. If we could agree on a platform – a spectrum of national public positions and statements on issues we deem a priority – the COA could then try to assert some semblance of national standards in Canada’s ten provincial health care silos. Certainly, such a platform would give us reason to go knocking on the doors of decision-makers across Canada.

Transferts en santé –
Début d’une ère d’austérité et d’autonomie

Doug Thomson
Directeur, Association Canadienne d’Orthopédie

L’annonce faite à la mi-décembre par le ministre des Finances Jim Flaherty sur le calcul des contributions applicable au Transfert canadien en matière de santé (TCS) a surpris les ministres de la Santé de partout au pays, qui se sont aussitôt mis à en calculer frénétiquement toutes les répercussions. Mais, au-delà des chiffres, un certain nombre de choses sont on ne peut plus claires. Les provinces n’ont d’autre choix que d’accepter les sommes qu’on veut bien leur verser. C’est à prendre ou à laisser, et ce, même si le financement est moins généreux que par le passé. Toute discussion ultérieure sur les soins de santé avec le gouvernement fédéral portera sur l’évaluation des résultats et la satisfaction des patients par rapport aux fonds investis, ce qui signifie que la fragmentation du système de santé canadien va se poursuivre au cours de la prochaine décennie.

Voici ce que propose le ministre : le gouvernement fédéral va maintenir la hausse annuelle de 6 % applicable au TCS jusqu’à l’exercice 2016-2017. Ensuite, et jusqu’en 2024 au moins, les augmentations applicables au TCS dépendront du produit intérieur brut (PIB) nominal, soit le PIB plus l’inflation, mais avec une valeur plancher de 3 %. Les transferts en santé demeureront donc à environ 20 % des coûts totaux en santé, mais ils seront répartis autrement.

Maintenant, compte tenu du tollé public soulevé par cette décision, on pourrait croire que toute augmentation inférieure à 6 % est un problème majeur. Certes, cela peut être vrai pour certains, mais pas si on aborde la question dans son ensemble. Il est vrai que l’on parle de dizaines de millions de dollars, mais les coûts en santé se chiffrent en centaines de milliards de dollars. Aussi, il ne faut pas oublier que l’augmentation annuelle de 6 % ne s’applique qu’à la part du fédéral dans le financement des soins de santé. Le premier ministre Jean Charest et certains de ses homologues ont souligné à la réunion de janvier du Conseil de la fédération que l’augmentation annuelle de 6 % en question représente seulement une hausse de 1 % environ par rapport à l’ensemble des dépenses en santé. Bien qu’une telle générosité ne doive pas être rejetée du revers de la main, il était inconcevable qu’une augmentation de 6 % des 20 % permette de soutenir la montée en flèche des coûts des soins de santé, surtout pas si on exclut de l’équation les 80 % restants assumés par les provinces.
Selon l’Institut canadien d’information sur la santé (ICIS), les dépenses annuelles en santé au Canada ont, de 1998 à 2008, connu une croissance moyenne de 7,4 %, alors que le taux d’inflation annuelle moyen pour la même période au pays était de 2,2 %. Et, même si, pour la première fois en 15 ans, la hausse des dépenses en santé a été relativement basse en 2011, à 4 %, l’inflation s’est avérée encore plus modeste, à 2,9 %. On s’attend en outre à ce que les dépenses totales en santé au Canada augmentent de plus de 7 milliards de dollars en 2011, pour atteindre 200,5 milliards de dollars, soit 11,6 % du PIB. On parle grosso modo de 5 800 $ par habitant, soit environ 150 $ de plus qu’en 2010. Ainsi, malgré tous les efforts déployés ces dernières années pour contenir les coûts en santé, ceux-ci continuent de croître au-delà de l’inflation. Il est toutefois encourageant de constater que l’écart entre l’inflation et l’augmentation des coûts en santé est de seulement 1 %.

Si les hausses annuelles doivent être établies en fonction du PIB nominal, ce qui signifie probablement moins d’argent neuf en santé, les provinces peuvent au moins compter sur les transferts réels, c’est-à-dire la contribution de 20 % du fédéral aux coûts en santé. Enfin, pas tout à fait comme auparavant, puisque les modifications apportées en 2007 au cadre régissant les transferts en santé du gouvernement fédéral entraîneront en vigueur en avril 2014, ce qui veut dire qu’ils seront dès lors effectués en fonction de la formule des paiements en espèces égaux par habitant. Ce changement élimine donc le transfert de points d’impôt, qui représentait une part importante des transferts en santé, de même que la péréquation associée, qui compensait la valeur moindre des points d’impôt dans certaines provinces.

Comme on peut s’y attendre, le calcul pour établir la valeur relative des points d’impôt et déterminer l’allocation des fonds est fort complexe. Disons que le nouveau cadre réglementaire qui entrera en vigueur en 2014 simplifie la vie du gouvernement fédéral, et que la majorité des provinces risquent de voir leurs revenus baisser, certaines de façon plus marquée que d’autres. En conclusion d’un document de travail présenté au Parlement en février 2011 et intitulé Le Transfert canadien en matière de santé : changements dans les fonds alloués aux provinces, James Gauthier, du Service d’information et de recherche parlementaires, signale « que le gouvernement fédéral et les provinces n’ont pas encore véritablement entamé les négociations sur le meilleur moyen d’assurer une transition vers la formule des paiements en espèces égaux par habitant. On ignore pour l’instant quels arrangements ils pourraient prendre pour atténuer les effets de cette transition sur l’attribution aux provinces des fonds du TCS qui visent les soins de santé. »

Donc, dans bien des régions au pays, la prestation des soins orthopédiques semble entrer dans une ère d’austérité, les gouvernements provinciaux cherchant à limiter la hausse des coûts en santé en fonction de l’inflation. Je crois que toute spécialité médicale qui n’a pas de plan d’action pour contrer les répercussions de ces changements sera concrètement désavantagée quand elle cherchera à obtenir l’attention et la considération des ministres provinciaux de la Santé, de même que des administrateurs d’hôpitaux et d’autres décideurs.

À certains égards, l’ACO est assez bien préparée aux défis qui nous attendent. Elle dispose en effet de comités qui représentent les intérêts régionaux des associations provinciales et peut compter sur des sociétés qui représentent diverses sous-spécialités. L’initiative prise récemment par notre président afin de mieux coordonner les activités entre le Comité sur l’exercice orthopédique, l’économie et la satisfaction professionnelle (CEOESP) et le Comité sur les normes nationales afin d’étudier diverses questions clés et de recueillir des données fondamentales sur la profession est un pas dans la bonne direction. Nos efforts constants pour accroître la participation des orthopédistes au Registre canadien des remplacements articulaires (RCRA) sont sur le point de porter leurs fruits, ce qui nous fournira des données plus fiables sur les arthroplasties de la hanche et du genou. En tant que membre de l’Alliance sur les temps d’attente, nous avons accès aux ressources de l’Association médicale canadienne (AMC) et bénéficiés de son poids politique. Et, par l’intermédiaire de Santé des os et des articulations Canada, l’ACO dispose d’un processus pour la création de modèles de soins qui peuvent être adaptés aux réalités régionales et aux particularités des sous-spécialités.

Et c’est tant mieux, car le milieu de l’orthopédie fait face à un éventail de petites et grandes problématiques, dont les suivantes : peu d’emplois à temps plein pour les jeunes orthopédistes; temps d’attente pour tous les types d’interventions orthopédiques; relations tendues avec les médecins traitants; gaspillage et inefficacité dans l’ensemble du continuum des soins orthopédiques; risques pour la santé et la carrière associés aux infections par pathogènes à diffusion hématogène; prévalence de la violence conjugale constatée dans les cliniques de traitement des fractures; et pénurie inattendue de candidatures au service canadien de jumelage des résidents (CaRMS) pour les places en orthopédie. Et il risque d’y en avoir d’autres en raison de la restructuration rapide des soins de santé afin de limiter les coûts.

J’estime que nous devons avant tout nous entendre sur ce que la profession peut faire pour montrer qu’elle contrôle la situation et qu’elle est prête à faire preuve d’innovation.

Par exemple, le processus de création de modèles de soins peut favoriser l’innovation et la résolution de problèmes, puisqu’il permet de remédier aux accrocs dans le continuum des soins orthopédiques. Pratiquement tous ces changements ont lieu à l’extérieur du bloc opératoire. Les solutions nécessitent souvent de légères restructurations et quelques efforts de communication qui, en soi, n’ont pas beaucoup d’impact, mais dont l’incidence croît de façon exponentielle des qu’ils sont menés de concert avec d’autres mesures du genre. Au bout du compte, les gains d’efficacité obtenus peuvent réduire l’hospitalisation du patient et les coûts, ainsi qu’engendrer un réseau clinique multidisciplinaire aux avantages durables. Ce processus pourrait être adopté par la profession de son propre chef – les centres universitaires et leurs hôpitaux affiliés pourraient donner le ton – afin de faire preuve de diligence raisonnable dans les soins orthopédiques en période d’austérité. Cela montrerait à tout le moins que le milieu de l’orthopédie comprend le nouveau paradigme, qu’il est prêt à travailler en fonction de celui-ci et qu’il conçoit les outils nécessaires pour ce faire.

 Certaines questions risquent toutefois d’être beaucoup plus difficiles à régler que d’autres. Afin d’aider les orthopédistes en début de carrière à trouver un emploi en ces temps difficiles, la
Subspecialty Society Corner

In this new COA Bulletin feature, a different Canadian orthopaedic subspecialty society will be highlighted in each edition – Ed.

The Canadian Orthopaedic Oncology Society (CanOOS)

Peter C. Ferguson, M.D., FRCSC
President, Canadian Orthopaedic Oncology Society
Toronto, ON

There is an increasing trend in orthopaedics toward multi-institution collaboration, and perhaps nowhere is this more important than in the field of orthopaedic oncology. The extreme rarity of bone and soft tissue sarcomas make it essential for orthopaedic oncologists to participate in collaborative studies, thereby collecting adequate patient numbers to answer questions that no single centre can. It was with this purpose in mind that the Canadian Orthopaedic Oncology Society (CanOOS) was formed at the COA Annual Meeting in Quebec City in 2008.

There are a relatively small number of orthopaedic oncologists in Canada, who by nature of their practice, are concentrated in academic centres. Currently there are 20 members of CanOOS practicing from coast to coast, with members in British Columbia, Alberta, Ontario, Quebec, Nova Scotia and Newfoundland and Labrador. Canada is uniquely suited for the development of an orthopaedic oncology specialty society, because the catchment area of CanOOS members includes the entire country’s population – virtually every bone and soft tissue sarcoma in Canada is treated by a CanOOS member. For a single collaborative group to have access to a patient population of over 34 million may be unique in orthopaedics in Canada and also in orthopaedic oncology anywhere in the world.

Early CanOOS research endeavours included a retrospective study of the outcomes of patients with myxoid/round cell liposarcoma, by lead author Robert Turcotte (McGill University). In this study of 418 patients, the first collaborative publication of CanOOS in Annals of Surgical Oncology in November 2011, we demonstrated excellent local control for both entities but clearly superior systemic control in myxoid liposarcoma compared to round cell liposarcoma. We subsequently undertook an assessment of the oncologic outcomes of patients who develop infected tumour endoprostheses. In the upcoming publication of this work, we demonstrate that an infected prosthesis is associated with improved patient survival in osteosarcoma, but decreased survival in chondrosarcoma. At the upcoming COA Annual Meeting in Ottawa, we will be presenting the Canadian experience with Giant Cell Tumour of the distal tibia, a rare location that presents unique reconstructive challenges.

Two prospective projects are currently in their early stages. One study is attempting to assess the quality of life outcomes in patients with metastatic sarcoma undergoing aggressive surgical resection. This study will hopefully allow us to more judiciously recommend surgery in patients with poor systemic prognosis and be able to apply less disabling treatments in an attempt to control symptoms. Our most ambitious project is the PARITY (Prophylactic Antibiotic Regimens in Tumour Surgery) study, under the direction of lead investigator Michelle Ghert (McMaster University). This randomized prospective study will attempt to determine the optimal perioperative antibiotic regimen for patients undergoing resection of lower extremity bone sarcomas and reconstruction with tumour endoprostheses. Currently many hospitals expect us to utilize the same regimens

Nous aurons l’occasion de bien réfléchir à la question et à beaucoup plus encore à l’occasion de la retraite stratégique des membres du conseil d’administration et des comités de l’ACO, en mai, à Toronto. Il est fort probable que nous n’en tirerons pas de réponses à toutes nos questions, mais j’espère sincèrement que nous en viendrons à un consensus quant à la façon de procéder dans divers dossiers. Une fois notre orientation établie, et, espérons-le, un but commun cerné, nous pourrons élargir la discussion à la Réunion annuelle d’Ottawa, en juin. Si l’ACO convient d’une plateforme, c’est-à-dire d’un éventail de positions et d’énoncés publics nationaux sur des questions jugées prioritaires, elle pourra ensuite œuvrer à l’adoption d’un semblant de normes nationales dans chacun des dix systèmes de santé provinciaux au pays. Une telle plateforme pourrait assurément nous donner l’élan nécessaire pour approcher les décideurs de partout au pays.

révision de la position de l’ACO relativement à la réduction du temps de garde après 55 ans fait de plus en plus consensus. Les orthopédistes qui ne souhaitent plus être de garde pour les cas urgents devraient-ils tout simplement envisager de ne plus effectuer de chirurgies? Si un jeune orthopédiste assume la majorité du temps de garde d’un collègue chevronné, devraient-ils partager le temps passé en salle d’opération? Puisqu’il est peu probable que les services d’orthopédie prennent de l’expansion dans un avenir rapproché, un tel changement de position pourrait créer des ouvertures pour la nouvelle génération d’orthopédistes, dont l’importance est capitale. De même, les orthopédistes d’au moins 60 ans doivent avoir des possibilités de passer du bloc opératoire à une autre charge clinique ou administrative liée au traitement des troubles de l’appareil locomoteur. Une profession autoréglementée doit veiller au bien de tous ses membres.
The members of CanOOS are excited about our early successes and we hold much optimism that the future will see Canada as a world leader in multicentre research and education in orthopaedic oncology.

For more information about CanOOS, please contact:

Peter C. Ferguson, M.D., FRCSC
Associate Professor Department of Surgery
Program Director Division of Orthopaedic Surgery
University of Toronto
Department of Surgery Mount Sinai Hospital
Sarcoma Site Group Leader Princess Margaret Hospital
600 University Ave. Suite 476G
Toronto, ON M5G 1X5
Tel 416-586-4800 X 8687
Fax 416-586-8397
pferguson@mtsinai.on.ca

CanOOS inaugural meeting
From l to r: Bas Masri, Robert Turcotte, Kevin Jones (international member), Michelle Ghert, Peter Ferguson (standing), Jay Wunder, Michael Gross, Marc Isler, Paulose Paul, Ben Deheshi, Shannon Puloski, Joel Werier (standing), Paul Clarkson, Anthony Griffin (associate member), Norbert Dion

as patients undergoing conventional total knee replacement, despite the fact that studies have shown a much higher rate of infection in tumour endoprostheses. There are several American sites participating in this study, which was the only proposal funded by the Musculoskeletal Tumor Society (MSTS) in its most recent competition. This study will allow CanOOS members to continue the recent success of other Canadian subspecialty groups in the conduction of important prospective multicentre studies.

Although collaborative research is a crucial component of CanOOS’ mandate, we are active in the areas of education and lobbying as well. CanOOS members have contributed content to an online undergraduate education module on musculoskeletal tumours at the University of British Columbia, and are in the process of developing an educational website for orthopaedic residents focusing on musculoskeletal oncology. We have been able to collate data on oncology surgeon remuneration across the country in an attempt to provide our members in some provinces ammunition for government negotiations.
‘Outside the Box’

Editor’s note: In our current climate of political posturing and preaching about health care, it is easy to be discouraged by the big picture. Many orthopaedic teams have put their efforts, one project at a time, towards improving health care. This is likely how we will ‘solve’ the system’s failures, not by some grand politically restricted platform.

This edition’s article, one of more to come in this new “Outside the Box” column, demonstrates several successes: career path innovation/retirement alternatives and team organizations that work. It also serves to highlight the disparities in health care organization from province to province (in Québec, I can only dream of having access to medical charts and radiological images from a network of medical centres such as those described here). Perhaps this will catalyze the right person at the right time…

Second Wind
yes, there is life after the OR

Dennis Jeanes  
Manager, Communications & Advocacy  
Canadian Orthopaedic Association

Dr. Robert Glasgow is something of a rare bird. For starters, until not too long ago, he was practicing as a general orthopaedic surgeon in Edmonton: “We were trained in those days to do a bit of everything, and I have.” Even more rare nowadays, at age 71, he felt it was only fair to retire from active surgery to make room for the next generation: “They’re not creating any extra surgery time, as you know, and for those of us who are getting long in the tooth, maybe it’s time to back off a bit and let the young guys in.” And lastly, for someone who wasn’t at all ready to rest on his laurels – “I’m not one of those people who can sit around at home” – Glasgow was offered a rare opportunity to put his broad knowledge and experience to work at Edmonton’s Hip and Knee Clinic, one of three such clinics in Alberta (Calgary and Red Deer are the others) that have radically changed the delivery of services for total-joint replacement patients: “The only thing that isn’t done there is the actual surgery.”

Edmonton primary-care physicians who decide their patients need hip- or knee-replacement surgery must fill out an application form and refer them to the Hip and Knee Clinic, “no ifs, ands, or buts,” says Glasgow, who, for four days a week, assesses their patients’ needs (surgical or otherwise) and directs them to appropriate care. The application form offers the choice between “preferred surgeon” and “next available surgeon,” and the great majority of family doctors choose the latter. “I kid my colleagues,” says Glasgow, “that it kind of knocks your ego down a bit when they choose the ‘next available’ option. On the other hand, it’s a bit of an ego boost for the surgeons to have their name on the application.”

Up to half of the nearly 30 patients Glasgow sees in a day are not candidates for arthroplasty. They don’t have significant arthritis but often do have a torn meniscus or sciatica that likely will need surgical intervention. Or some patients don’t want the surgery for personal reasons (fear, living alone, son/daughter’s upcoming wedding), and others need non-surgical treatment for their specific MSK problem. This is where a career as a general orthopaedist really pays off. Glasgow’s discerning eye quickly weeds out the misdiagnosed and the misdirected, and puts them back on track with letters and phone calls to the right people: “It doesn’t take that long to make an assessment. And if they have sciatica or a torn meniscus, I’ll start the work-up and then write to the appropriate specialist asking for an opinion.”

The success of this model of care is utterly dependent on consensus and cooperation among Edmonton’s hip and knee arthroplasty surgeons. Glasgow notes that surgeons can get “a little ornery” at times, but in this case they quickly came together, although some “bucked a bit at first.” Each surgeon has a nurse and medical-office assistant at the Clinic who coordinate clinics and services, as well as booking OR time. Other staff include physiotherapists, occupational therapists, a dietician, as well as visiting specialists in internal medicine and anaesthesiology who participate in clinics when needed. Glasgow estimates that there...
are about 2000 patients in the Edmonton area waiting to see him (or a family physician recently hired to assist him with the case load): “When we started, the wait to come through me was about 11 months. We have it down now to about eight. If we could get that wait time down to about three months, I think everybody would be happy.”

Glasgow is also involved, along with other Edmonton trauma surgeons, in another groundbreaking program based at the Royal Alexandra Hospital called the Orthopaedic Consult Line. The service provides a surgeon on call between 7:30 am and 9:30 pm for family physicians to discuss orthopaedic trauma cases. Most in-coming calls on the trauma line are handled by EMTs who “know what they're doing,” says Glasgow, “then they contact us. We can move around, as long as we're in phone contact. Usually most of us are on site at the computer at the Royal Alex until about two o’clock in the afternoon.” The surgeons can view X-rays done at emergency departments in city or country hospitals. If necessary they can gain access to a patient’s electronic health records via Alberta’s Netcare to discuss features of the case and what the next steps might be: “The great benefit for the family doctor is that he or she gets to talk to somebody right away. Another thing that happens is, say, we learn there is a fractured hip from Redwater. I'll have a look at the X-rays and ask a little about how the patient is doing. Then the patient is put on a centralized surgical list and transferred to the first available bed at one of three Edmonton hospitals that do fractured hips. That way the surgeons who are on call at these hospitals are in the OR, busy with what they're supposed to be doing. They don’t get bothered. I handle it.”

When he started on the Orthopaedic Consult Line three years ago, Glasgow would occasionally fill in for surgeons who were unavailable to do their shifts. He enjoyed being back in the OR, but found it hard to fit into his schedule given the demands at the Clinic and hasn’t done any surgery for a number of months. Meanwhile, he's constantly amazed by the number of people he has treated throughout his career: “People I’ve long forgotten come in to the clinic and say, ‘I remember you from 30 years ago.’ I’ve always loved orthopaedics, so I get about as much satisfaction doing this as doing the surgery, because there’s patient contact and you’re making decisions.”

---

**BJC: Implementation of the National Hip Fracture Toolkit**

**Rhona McGlasson, BSc PT MBA**  
*Executive Director*  
Bone and Joint Canada  
*Toronto, ON*

In January 2012 Bone and Joint Canada (BJC) received funding from Health Canada to implement the National Hip Fracture Toolkit that was released in July 2011. The Health Canada funding was provided to support the dissemination of the Toolkit to health care professionals across Canada, knowledge translation on best practices and implementation activities in each province.

The National Hip Fracture Toolkit Implementation strategy was launched in a National Forum, held in Toronto on February 25, 2012. The purpose of the Forum was to provide updates on best clinical practices through expert speakers who presented examples of innovative programs across the country and to provide a networking opportunity for learning about service implementation and change processes. The Forum was well attended with 58 participants from nine provinces. Many provinces had a number of members from their multidisciplinary teams in attendance as these are the people with the knowledge and interest to change their province’s health care approach to the management of hip fracture patients. Forum participants included physicians, geriatricians, surgeons and internists, clinical nurses, nurse educators, nurse specialists, physical therapists, pharmacists, Informatics experts, provincial government representatives, national health organizations i.e. Public Health Agency of Canada, Association of Canadian Academic Healthcare Organizations, Osteoporosis Canada and attendees with academic positions at universities across Canada.

The Forum included a review of best clinical practices including information on preoperative care, surgery and weight-bearing, postoperative care and discharge to community care, and secondary prevention including falls prevention and osteoporosis. There were also three presentations which highlighted approaches to data gathering from across Canada to address the need for a coordinated system approach to data for hip fracture patients. The presentations were a program to report quality data from Ontario; a national Osteoporosis Surveillance Program through the Public Health Agency of Canada and the development of a provincial hip fracture registry in British Columbia. Through the next year there will be further work undertaken through the leadership of Bone and Joint Canada to develop a national hip fracture data framework.

**Provincial Plans**

In the afternoon each province outlined their proposed plans for 2012-2013 to improve the care for hip fracture patients. Access to Health Canada funding has allowed provinces to review their care continuum for hip fracture patients and identify a clinical or system issue where work is required to improve patient care. Most provinces plan to develop or update documentation such as care maps and preprinted orders to current best practice for medical care and secondary prevention including using the 2011 Osteoporosis Guidelines. There is also significant interest in
patient access to rehabilitation, ongoing rehabilitation in the community following discharge home, and prevention strategies such as falls prevention.

**Surgeon Participation**
The care of a hip fracture patient requires a coordinated multidisciplinary team to address their complex needs. Bone and Joint Canada is working with all provinces to ensure that there is surgeon participation in the proposed hip fracture projects. Surgeons are a critical team member with a role in ensuring this patient population has access to surgery within the 48 hours using a surgical approach that will secure weight-bearing directly post surgery to promote mobilization, prevent deconditioning and facilitate access to rehabilitation.

Over the next few months BJC will work with each of the provinces to assist with the implementation of their regional plans. Through this coordinated approach, hip fracture patients will have access to the best care allowing them to optimize their recovery and return home.

---

**Registered Orthopaedic Technologists**

**skilled hands in the front lines**

*Ross Leighton, M.D., FRCSC*
*Past President, Canadian Orthopaedic Association*
*Halifax, NS*

**M**any hands make light work, as the old saying goes, and never more so than when those helping hands belong to registered orthopaedic technologists. In fracture clinics and some emergency rooms, typically overflowing with patients, they do yeoman’s service splinting and casting limbs, allowing surgeons to see more patients and fully focus on their injuries. Registered orthopaedic technologists are an integral part of delivering quality orthopaedic care in Canada.

Since its inception in 1972, the Canadian Society of Orthopaedic Technologists (CSOT) has required a high level of skill and performance for someone to qualify as a registered orthopaedic technologist. Typically, candidates need to successfully complete a written examination, followed by comprehensive oral and practical exams. To maintain their registration, CSOT members must submit continuing education points annually.

Lately, in one province, licensed practical nurses can take an advanced orthopaedic course as part of their training, emerging as certified orthopaedic technicians. By comparison to the standards set by the CSOT, this program appears to fall short of imparting the practical skills and experience needed in the front lines of orthopaedics. The CSOT has taken the sensible step of offering recently graduated certified orthopaedic technicians a training pathway to qualify for CSOT membership – a strategy that the Canadian Orthopaedic Association supports fully.

Congratulations to the Canadian Society of Orthopaedic Technologists in its fortieth anniversary year, and here’s to many more years of close collaboration.

---

**COA Past President Publishes Memoirs**

**Sinai Surgeon, by R. Mervyn Letts, M.D.**

*Marc Isler, M.D., FRCSC*
*Editor in Chief, COA Bulletin*

**D**r. Merv Letts is a well known contributor to Canadian orthopaedic surgery. He has presented and published numerous works of research and educational value, and has been an active member of the COA throughout his career, serving as the Association’s President in 1994. I was first introduced to him by Dr. Morris Duhaime when, as a resident, I contributed my efforts to a chapter of his textbook on paediatric orthopaedic surgery. Other encounters followed at various meetings and events. I am thus not surprised by the fact that he has written a narrative account of an important but less known part of his life, that of his stint with UNEF in the Sinai desert.

The book, entitled *Sinai Surgeon*, reads somewhat like a national geographic magazine, with documentary sections mixed with personal anecdotes and some philosophical rumination. He underlines some important Canadian efforts in international history that are mostly unknown to those of my generation (or younger). He also shares a unique perspective with the culture of the Bedouin and Islam that should be read by anyone.
In this edition’s Forum section, Drs. Bas Masri and James Powell debate the role of hip resurfacing in the treatment of hip end stage arthritis. This debate is quite topical with the recent increased concern of early higher failure rates of metal-on-metal bearings associated with significant soft tissue destruction referred to as “pseudotumours”.

Interestingly enough, hip resurfacing was featured in the COA Bulletin (November/December issue #64) in 2004 as a scientific theme edited by Dr. Powell: “Role of Hip Resurfacing in the 21st century” where initial arguments for and against resurfacing were discussed. So where are we eight years later?

If one reads the conclusions of the 2004 Bulletin edition, although early clinical results were encouraging at that time, it was emphasized that we should not forget the predictable outcome of standard stem type hip replacement. More importantly, careful patient selection and visiting centres of expertise with significant experience with resurfacing were both advocated in order to minimize short-term failures. Resurfacing was thought to provide greater stability as well as minimize the morbidity of revision surgery. It is comforting to see in both Drs. Masri and Powell’s articles that their conclusions are not that different than those seen in 2004. Similarly, our initial enthusiasm for this procedure was no different than for other orthopaedic innovations with the hope of improving what our predecessors have done. Having said that, as nicely presented by Dr. Powell, the Canadian experience with hip resurfacing has been more prudent in its indications as well as who is performing this procedure. Our results presented by the Canadian Hip Resurfacing Work Group have shown a fairly low incidence of significant soft tissue reactions as well as an excellent survivorship in appropriately selected patients (likely due to our low percentage of female patients). In addition, some of the best quality evidence on hip resurfacing has been done here in Canada with three prospective RCTs being accomplished: two at the Université de Montréal and one at the University of British Columbia.

Enjoy the debate, and in any event, who wants an orthopaedic surgeon as patient anyhow? Hope to see you in Ottawa this June.

Paul E. Beaulé, M.D., FRCSC
Scientific Editor, COA Bulletin

Introduction to this Edition’s Debate

In this edition’s Forum section, Drs. Bas Masri and James Powell debate the role of hip resurfacing in the treatment of hip end stage arthritis. This debate is quite topical with the recent increased concern of early higher failure rates of metal-on-metal bearings associated with significant soft tissue destruction referred to as “pseudotumours”.

Interestingly enough, hip resurfacing was featured in the COA Bulletin (November/December issue #64) in 2004 as a scientific theme edited by Dr. Powell: “Role of Hip Resurfacing in the 21st century” where initial arguments for and against resurfacing were discussed. So where are we eight years later?

If one reads the conclusions of the 2004 Bulletin edition, although early clinical results were encouraging at that time, it was emphasized that we should not forget the predictable outcome of standard stem type hip replacement. More importantly, careful patient selection and visiting centres of expertise with significant experience with resurfacing were both advocated in order to minimize short-term failures. Resurfacing was thought to provide greater stability as well as minimize the morbidity of revision surgery. It is comforting to see in both Drs. Masri and Powell’s articles that their conclusions are not that different than those seen in 2004. Similarly, our initial enthusiasm for this procedure was no different than for other orthopaedic innovations with the hope of improving what our predecessors have done. Having said that, as nicely presented by Dr. Powell, the Canadian experience with hip resurfacing has been more prudent in its indications as well as who is performing this procedure. Our results presented by the Canadian Hip Resurfacing Work Group have shown a fairly low incidence of significant soft tissue reactions as well as an excellent survivorship in appropriately selected patients (likely due to our low percentage of female patients). In addition, some of the best quality evidence on hip resurfacing has been done here in Canada with three prospective RCTs being accomplished: two at the Université de Montréal and one at the University of British Columbia.

Enjoy the debate, and in any event, who wants an orthopaedic surgeon as patient anyhow? Hope to see you in Ottawa this June.

Paul E. Beaulé, M.D., FRCSC
Scientific Editor, COA Bulletin

Does Hip Resurfacing Still Have a Role?

Bas A. Masri, M.D., FRCSC
Professor and Head
Department of Orthopaedics
University of British Columbia and Vancouver Acute HSDA
Vancouver, BC

Wow! Cyclic orthopaedics, here we go again. It seems that as a profession we never learn our lessons from previous generations. In the early 1980’s, resurfacing was touted as a breakthrough to solve the problems with hip replacement surgery. There was a very short-lived euphoria, followed by a longer-lived era of fixing the problems that came with resurfacing. Even when I started practice 17 years ago, resurfacings of old were still being revised. Alas, resurfacing was not a new procedure at that time either!

Resurfacing of the femoral head predated total hip arthroplasty. In fact, Sir John Charnley invented the low friction arthroplasty because resurfacing did not work! He has been credited with initiating the concept of resurfacing back in 1951, yet...
he abandoned it in favour of total hip arthroplasty because it was not effective. In 1981, Dr. Bill Head wrote “Surface replacement of the hip, although not a new procedure, nevertheless should be considered an experimental one. In 1976 there were approximately 450 cases reported in the world literature, while in 1979 it was estimated that 5000 had been done.” I guess things never change. An experimental procedure with a checkered past, whose popularity skyrocketed in three years, only to have early reports of failure two years later. Does this sound familiar? It sure does to me. We have not learned because we repeated the same mistakes in the 2000’s. In his resurfacing series, Head reported a failure rate of 14 of 42 hips (33%) at a mean follow-up of 2.4 years, and maximum follow-up of 40 months. Most of the failures were on the femoral side. Those were cemented femoral components, not unlike today’s designs. Granted, surgical technique is now better, the implants are better designed and the instrumentation is more precise, so it is reasonable to expect more favourable outcomes on the femur. Yet the fact remains, these are cemented implants that can loosen, avascular necrosis can happen underneath them and the neck can narrow (advocates of resurfacing state that although we don’t know what neck narrowing means, it cannot be that bad), and they can ultimately fail. Despite that, we do them in more active patients and we expect them to outperform hip replacements.

The second reason for failure of the Wagner resurfacings was polyethylene wear and cup loosening. Howie et al reported a 70% survivorship at five years and 40% survivorship at eight years, and made the astute observation that we should not really adopt technology without minimum ten-year results with no loss to follow-up. Enthusiasm for resurfacing very quickly faded. However, Drs. McMinn and Amstutz continued to work on resurfacing, and through several iterations and several generations of poorly functioning resurfacings, came up with a concept that can potentially mitigate the problems with polyethylene wear that plagued previous generations of resurfacing. Cementless socket fixation will “theoretically” eliminate loosening. Metal-on-metal bearing surfaces will eliminate wear, and the hips will last forever and provide a more ‘normal feeling’ hip with better biomechanics, proprioceptive feedback, and better patient outcomes. This theory led, not only to an explosion in the numbers of hip resurfacings, but also in the variety of implants on the market. Reality, however, did not deliver on the promise of resurfacing. The prophecy of better outcome and perpetual function became a harbinger of potential for short-term harm, until the Oxford group drew metal ions from metal wear, no one paid attention to the

So What Happened with Modern Resurfacing?

While many were concerned about the long-term risk of metal ions from metal wear, no one paid attention to the potential for short-term harm, until the Oxford group drew attention to an alarming early complication of resurfacing, and indeed of all metal-on-metal hip replacements. Inflammatory pseudotumours, more euphemistically termed “Adverse Local Tissue Reactions” or “Adverse Reactions to Metal Debris” were noted. Since then, there has been an explosion of literature about these pseudotumours, which are thought to be related to metal ions locally within the soft tissue, and cause variable amounts of soft tissue destruction. They are much more common in women, and are related to smaller femoral heads and when they occur, they are potentially disastrous. There is also literature suggesting that revision total hip arthroplasty for pseudotumours yield worse outcomes than revisions for other reasons. In our pseudotumour revision experience, we have seen a higher prevalence of failure of ingrowth, sciatic nerve palsy due to pseudotumour involvement of the nerve, femoral nerve palsy and external iliac vein occlusion and permanent swelling of the leg with pseudotumours. We, as well as others, have reported on a very high rate of pseudotumours in asymptomatic individuals with resurfacing and with large head metal-on-metal hip replacements.

So has the promise of resurfacing been realized? Some studies have reported superior function after hip resurfacing, but they suffer from selection bias. Our randomized controlled trial showed no difference in patient-reported quality of life outcomes whatsoever. In reality, there is probably very little difference in function between resurfacing and total hip arthroplasty when one corrects for patient demographics. Not a single study has reported better biomechanics. In fact, it is more difficult to restore offset in resurfacing, but this is probably of no relevance. Resurfacing promised better proprioceptive feedback, whatever that is. Not a single study has actually proven this. Resurfacing does, however, offer a lower dislocation rate.

What about the long-term outcome of resurfacing? The Australian National Joint Replacement Registry showed equivalent results at ten years for males under the age of 65 and with femoral head diameters over 50 mm. Interestingly, revision of resurfacing was less predictable than primary total hip replacement with re-revision rates of 11% at five years. As such, early failures of resurfacing will have a negative impact on the overall outcome.

Again, has the promise of resurfacing been achieved? Yes, but only for males, under the age of 65 with large stature. As such, patient selection is extremely important, and I would submit that surgeon selection is even more important. This should not be an operation that is only done on occasion. The risks are high; the technique is demanding so as to avoid malalignment that leads to either high rates of metal ion generation or femoral neck fracture. The consequence of failure is worse than those of hip replacements. Thus, if resurfacing is to be done, it should be done by a select few surgeons and not by all.

In 2012, is there a role for resurfacing? In my practice, there is no role because I have yet to identify a patient population in whom the results of resurfacing are better than those of hip replacement. For young large stature males, the results are the same, but the cost is much higher. From a socioeconomic perspective, it makes no sense for all of us as tax-payers to pay for an operation that is significantly more expensive and no better than the tried and true gold standard.

As a youngish male in his late 40’s, would I have a resurfacing in 2012? Not on your life!
Modern hip resurfacing has recently come under even more scrutiny with the recognition of the very poor outcomes associated with the use of some metal-on-metal total hips. Now with ten years of clinical experience in England and Australia, the data is able to provide a more objective assessment of the role of hip resurfacing.

The introduction of hip resurfacing in Britain was supported by the NICE guidelines and initially the recommendations suggested an indication in women up to 55 years of age and in men up to 65 years. Outcome data from the Australian registry, and the Canadian experience have demonstrated an inferior survivorship for women by the five-year mark. The survivorship for men was 97% and women 92% at five years in the Canadian review. The survivorship is postulated to be as a consequence of: 1) poorer bone quality with resultant fracture of the femoral neck, 2) the high incidence of dysplasia in women with inadvertent implantation in higher combined anteversion than normal leading to edge loading, and 3) perhaps a different biologic response to the burden of metal debris in women.

The adverse reaction to metal debris is currently a subject of intensive research. The unexpected complication of so called pseudotumours has been of greatest concern. These are solid or cystic masses that occur in the periarticular soft tissues and can be aggressive and locally destructive to the soft tissues. Pseudotumours are not a new phenomenon and do occasionally occur in total hip arthroplasty. They are certainly seen more frequently in smaller women with hip dysplasia who undergo hip resurfacing. The frequency of pseudotumours among resurfacing arthroplasties in multiple Canadian centres was reported by Beaulé and co-investigators. The overall prevalence was 0.10%. Only one male of 2339 hips developed a pseudotumour.

There are several potential advantages to resurfacing. The dislocation rate is extremely low. Reconstruction of hip biomechanics for patients without significant deformity was investigated by Girard and coauthors who compared resurfacing with total hip arthroplasty. They assessed a number of parameters and noted that leg length and femoral offset were more accurately restored after resurfacing. They reported that leg length was restored to within 4 mm in 86% of patients and offset to within 4 mm in 59%.

There are a number of articles which have attempted to look at functional outcomes of resurfacing as compared with total hip arthroplasty. An excellent article by Shimmin and Bare concluded, after a detailed literature review, that resurfacing patients enjoyed similar outcomes to total hip arthroplasty at minimum and perhaps better outcomes according to some parameters.

With the ten-year experience of design surgeons and registry data now available, the data clearly supports a potential role for resurfacing in male patients with osteoarthritis under the age of 65. The design surgeons of two of the more successful resurfacing systems have reported their ten-year results. Amstutz reported a 99.7% survivorship for ideal candidates (large components and small defects) and 95.3% for hips with risk factors. Treacy and co-authors reported the ten-year results of a consecutive series of patients. The ten-year survivorship for men was 98%. With aseptic revision as an endpoint, the ten-year survivorship for the entire cohort was 95.5%. McMinn reports a ten-year survivorship of 98%.

A recent article by Shimmin in the British JBJS reports the first peer review data from a non design centre. The Melbourne orthopaedic group report an overall survivorship of 94.5%. Again, as in all reported series of any size, the male survivorship was significantly better than the female survivorship, 97.5% vs. 89.1%.

The survivorship at ten years in the Oswestry registry is 95.6%. The best registry data at ten years is from Australia. The Australian registry has virtually 100% compliance. At ten years, the Australian registry reports a 92% survivorship for all implants/surgeons/bearings against 97.5% survivorship in the category of men under 65 with osteoarthritis. It appears the durability is well established for the first decade of worldwide experience.

As we get ready to enter the second decade of experience with the current generation of hip resurfacing in Canada, can we refine our indications and anticipate greater success? The answer is yes. Obviously the indication for resurfacing in women is rare, if at all present, for various reasons. Men, however, in general,
have an excellent track record of survivorship and functionality. The technical understanding of implantation technique has evolved from a rudimentary caution against varus on the femoral side to precise acetabular positioning in a relatively more closed position to avoid edge loading. By careful patient selection and precise attention to the position of implantation, better results may be attainable.

References


Local and Regional Anaesthesia Techniques in Orthopaedic Surgery

Pain management following orthopaedic surgery is an important issue for orthopaedic surgeons and their patients. Failure to provide adequate analgesia may impair postoperative rehabilitation and result in delays in discharge from hospital. In many areas of orthopaedics, multimodal analgesia protocols have been developed to maximize pain control while minimizing side effects. Local and regional anaesthesia techniques are key components to these multimodal approaches to pain control. This edition’s Themes section aims to provide an update on local and regional anaesthesia techniques in orthopaedic surgery. Drs. Bradon Gammon and Ryan Bicknell will review the use of peripheral nerve blocks in the lower extremity. Finally, Dr Su Ganapathy will discuss spinal, epidural and lumbar plexus blocks in orthopaedic surgery. I would like to thank all the contributing authors for their time and effort in putting together these informative review articles.

Sincerely,

James L. Howard, M.D., MSc, FRCSC
Guest Editor
COA Bulletin Themes Section, Issue 96 (Spring 2012)
Local Infiltration in Orthopaedic Surgery

Edward M. Vasarhelyi, M.D., M.Sc., FRCSC
Clinical Fellow, University of Western Ontario
London, Ontario

Douglas Naudie, M.D., FRCSC
Associate Professor, University of Western Ontario
London, Ontario

Adequate control of postoperative pain following hip and knee arthroplasty can be a challenging task. Previous studies have shown that over 50% of patients undergoing surgery report postoperative pain as a major concern. Consequences of uncontrolled pain can include myocardial ischemia and infarctions, thromboembolic events, pulmonary infections, paralytic ileus, urinary retention, impaired immune function, as well as anxiety. In addition, inadequate control of pain may result in patient dissatisfaction, impaired patient rehabilitation, and prolonged hospitalizations.

The negative influence of postoperative pain on rehabilitation is particularly concerning for patients undergoing lower extremity joint replacement surgery. Functional recovery and return of muscle strength is dependent on the ability of patients to comply with rehabilitation. The drawbacks of inadequate rehabilitation are of particular significance in hip and knee arthroplasty, since faster mobilization leads to quicker discharge from the hospital. Furthermore, studies have shown that recovery from knee arthroplasty is prolonged up to 50 days postoperatively, far greater than recovery from hip replacement. Pain control is therefore especially important for knee arthroplasty patients to reduce the incidence of arthrofibrosis, and to allow recovery of range of motion and muscle strength for ambulation.

As the adverse outcomes from uncontrolled pain can be very significant to a postoperative arthroplasty patient, adequate pain management is critical. Two current and critical parts of contemporary pain management include pre-emptive analgesia and preventative multimodal techniques. While a multitude of multimodal techniques exist, this review will focus on the use of local infiltration techniques in orthopaedic surgery, particularly as it applies to hip and knee arthroplasty.

Local infiltration is simple and inexpensive, and has virtually no systemic effect or interference with other medications. This makes it a very attractive modality, and only recently has its efficacy been studied rigorously in randomized trials. Several studies have begun to examine the efficacy of intraoperative periarticular drug injection in comparison to other forms of postoperative analgesia.

In both total hip arthroplasty (THA) and total knee arthroplasty (TKA), patients have been shown to derive early benefit from local infiltration. Parvataneni et al. randomized patients to receive either a patient-controlled anaesthetic (PCA) pump or periarticular injection. THA patients in the periarticular injection group demonstrated significantly lower average pain scores and higher satisfaction than the PCA group. The injection group also had lower postoperative narcotic usage and side effects and an improved early functional recovery. Similarly, in a case series of 325 patients, Kerr et al. examined postoperative pain control in hip resurfacing arthroplasty (HRA), THA and TKA patients. Satisfactory pain control was achieved in nearly all patients. Two-thirds of the patients had no morphine requirements while in hospital during their postoperative course and 71% of patients were discharged home on postoperative day one. Early mobilization was achieved with assisted walking by six hours and independent walking was achieved between 13 and 22 hours.

In further studies, TKA patients alone have shown benefit from intra-articular injection. Vendittoli et al. randomized 42 patients to receive morphine via PCA or local infiltration and PCA. The local infiltration group in their study showed significantly lower morphine consumption at both 24 and 40 hours postoperatively and they reported fewer hours of nausea over the five-day postoperative period.

When comparing local infiltration and continuous epidural infusion, Andersen et al. demonstrated several advantages of local infiltration. In their study, forty TKA patients were randomized to receive either local or epidural infiltration; both groups also received morphine PCA. The local infiltration patients had lower visual analogue scale (VAS) pain scores both at rest and during mobilization, decreased morphine consumption, and a decreased length of stay by 25%.

In two separate studies, Busch et al. prospectively randomized TKA and THA patients to receive local periarticular injection or no injection. In both studies patients in the local injection group used less PCA morphine at six and 24 hours. The VAS score for pain on activity in the post anaesthetic care unit (PACU) was significantly less for injected patients in both groups. This finding was also demonstrated in the TKA patients at four hours postoperatively. There were no differences in wound complications; serum levels of ropivacaine were below toxic levels and no toxicities were observed.

Based on the work by Busch et al., we now routinely employ local infiltration in our primary and revision hip and knee arthroplasty procedures. A sterile injection mixture of 400 mg of ropivacaine,
30 mg of Toradol (ketorolac), 5 mg of epimorphine, and 0.6 ml of epinephrine (1:1000) is prepared by the anaesthesic team during the arthroplasty procedure. These medications are normally mixed with sterile normal saline solution to make up a combined volume of 100 ml. In total knee arthroplasty, the first aliquot of 20 ml of the mixture is injected in the operating room, just prior to implantation of the component, into the posterior aspect of the capsule and the medial and lateral collateral ligaments. Care is obviously taken to avoid infiltration in the area of the common peroneal nerve. After the implants have been cemented into place and while the cement is curing, the quadriceps mechanism and the retinacular tissues are infiltrated with an additional 20 ml of the mixture (Figure 1). The remaining 60 ml is used to infiltrate the muscle, subcutaneous and subcuticular tissues. A similar technique is employed in THA, with careful attention not to infiltrate in the distribution of the sciatic or femoral nerves.

In summary, intraoperative local periarticular infiltration has been shown to improve patient satisfaction and significantly reduce postoperative patient controlled analgesia requirements in patients undergoing total hip and knee replacement. This technique has also been shown to be safe and without apparent risks. There is evidence to suggest that it may also reduce hospital stay in comparison to other analgesic techniques. Future studies need to look at longer acting injectables, improved drug delivery systems, and development of a more comprehensive multimodal approach to pain control.

References


Peripheral Nerve Blocks in Lower Extremity Orthopaedic Surgery

Brent Lanting, M.D., FRCSC
University of Western Ontario
London, ON

James L. Howard M.D., MSc, FRCSC
Assistant Professor
University of Western Ontario
London, ON

Introduction

Regional anaesthesia is an increasingly utilized form of anaesthesia. Lower extremity peripheral nerve blocks are conducted with the objective of administering a small dose of local anaesthetic to a specific nerve via a controlled approach to provide adequate anaesthesia for the procedure required.

Benefits

Lower extremity peripheral nerve blocks have numerous benefits. These blocks allow diminished opioid use and reduce the associated side effects such as vomiting, confusion, urinary retention, sedation and respiratory depression. This has potentiated early rehabilitation and short-term gains in mobility, potentially allowing shorter hospital stays. Also, patient satisfaction and pain control is significantly improved in the immediate postoperative phase.
Risks
The most common problem with peripheral nerve blocks is inadequate anaesthesia, occurring in about 10% of patients in larger series, but with a wide range of reported values11,14. The second most common complication is vascular puncture with potential for local haematoma at about 5%. Although rare, the most concerning complication for the patient is the potential for nerve damage. Neuropathy can be secondary to intra-fascicle injections or direct trauma from the needle6. Nerve injuries occur less frequently in lower extremity blocks compared to upper extremity blocks, with an incidence of less than 0.5% in lumbar plexus, femoral, sciatic and popliteal nerve blocks7. Nerve injury typically is transient, with rare patients experiencing only partial recovery7. Although the nerve block catheters have high colonization rates8, local infections are rare and can readily be treated with antibiotics9.

Patient Factors
Lower limb blocks may not be appropriate if there is altered anatomy such as femoral nerve blocks in the setting of prior femoral vascular surgery, pre-existing nerve pathology6, or coagulopathic patients10. Patients that require careful postoperative neurologic monitoring may also not be appropriate, and consultation with the operative surgeon is required. Examples of patients that require close postoperative monitoring include patients who are going to have a significant valgus mal-alignment corrected by an osteotomy or a total knee arthroplasty or in patients with a high hip centre that may be lengthened during their total hip arthroplasty. Also, lower extremity blocks may not be appropriate in trauma patients who require postoperative monitoring for compartment syndrome11.

Technique
The goal of peripheral nerve blocks is to administer a small amount of local anaesthetic to a specific target. Peripheral nerve localization can be assisted by using ultrasound, peripheral nerve stimulation, elicitation of paraesthesia, double loss of resistance or a combination of techniques. Each technique has strengths, but a systematic review of literature indicates that ultrasound guidance provides decreased time to complete block with potentially fewer passes, a reduction in the volume of local anaesthesia used, and a higher success of the block for femoral and popliteal sciatic nerves4. Targets for the nerve blocks include the lumbar plexus, femoral, lateral femoral cutaneous, obturator, saphenous, sacral plexus, thibial, peroneal, posterior femoral cutaneous, and ankle nerves12. A variety of long-acting local anaesthetics have been used with similar effectiveness but different levels of potency and duration13.

Conclusions
Lower extremity peripheral nerve blocks are a safe method of providing excellent pain control without necessitating systemic narcotics. Improved immediate postoperative mobility with the resultant shorter hospital stays and an improved patient experience in the immediate postoperative phase may lead to an increased utilization of this treatment modality in the anaesthetist’s armamentarium.

References
Peripheral Nerve Blocks in Upper Extremity Surgery

Braden Gammon, M.D., FRCSC
Ryan T. Bicknell, M.D., MSc, FRCSC
Queen’s University
Kingston, ON

Introduction
The costs of inpatient surgical care are high and increasing, and many hospitals continue to seek out anaesthetic alternatives that allow outpatient surgery. Upper extremity procedures are being done more routinely with regional techniques, as these have been shown to be both efficient and effective for operative anaesthesia and postoperative pain control. Additional advantages include reduced recovery time and decreased postoperative opioid requirements. Finally, there is some evidence to suggest that regional anaesthesia is safer in the beach chair position, with a reduced risk of cerebrovascular events compared with general anaesthesia.

Techniques
One of the most common techniques is the interscalene block, which is primarily used in shoulder surgery. Local anaesthetic is administered at the level of the roots/proximal trunks, and spread from the region of injection is important for anaesthetizing branches of C3-4, which provide sensation to the “Cape” of the shoulder. Older series noted that the ulnar nerve remained unblocked in 30-50% of cases, though this is improving with newer techniques.

Moving distally along the brachial plexus, the supraclavicular block is used predominantly for hand and wrist surgery. It targets the plexus where the trunks are diverging into anterior and posterior divisions, above the first rib, where the plexus is posterolateral to the subclavian artery, and in close juxtaposition to the pleura. The neural structures are most densely oriented at this level, allowing for quick onset and reliable anaesthesia.

Further distal is the infraclavicular block, where the plexus is at the cord level and oriented circumferentially around the axillary artery. The infraclavicular block likely has a lower rate of pneumothorax compared with the supraclavicular block, but comes with the trade-off of lower rates of radial nerve blockade.

Still further distal, the axillary block is performed where the plexus subdivides into peripheral nerves. Successful axillary blocks typically require special attention to the radial nerve and multiple injections due to the variable course of the peripheral nerve branches at this level.

Other less common techniques include the cervical paravertebral block, intersternocleidomastoid block, suprascapular nerve block and selective peripheral nerve blocks.

The original technique for nerve blockade used a combination of landmarks and nerve paraesthesias to localize the injection site, and would later be combined with peripheral nerve motor stimulation for increased accuracy. Recent advances have included the use of ultrasound guidance, which has improved safety and efficacy. Ultrasound allows for better visualization of neural structure location, anomalous anatomy and the direction of local anaesthetic spread. Evidence currently also supports the implantation of a continuous infusion perineural catheter, allowing for more dynamic control of pain and blockade.

Contraindications
Hemidiaphragmatic paresis occurs in 100% of patients with interscalene blocks, and will reliably decrease respiratory function by 25-30%. Thus, patients with advanced respiratory comorbidities should not receive this type of block. Anticoagulation with an INR >1.4 is generally accepted as a contraindication to peripheral nerve blockade due to the risk of haematoma and secondary nerve dysfunction. Thirdly, patients who are febrile secondary to bacteremia should not have a regional anaesthetic technique due to the small but catastrophic risk of neural abscess formation. Finally, patients who are undergoing procedures that may be at increased risk of nerve injury (i.e. revision, complicated open procedures) may be better treated postoperatively, after neurologic examination.

Complications
Iatrogenic neural injury (0.02-0.4%) is the most feared complication. The likelihood of this increases the more proximal the block. Reasons are multifactorial, but a major contributor is the relative decrease in protective connective tissue within the epineurium as the nerve travels away from the spinal cord, making it more likely for a needle to transverse a fascicle proximally if the nerve is entered unintentionally. Neural injury...
can also be a consequence of mechanical trauma from the needle, ischemia from perineural vasospasm or chemical injury from intrafascicular local anaesthetic injection. These effects can be exacerbated by pre-existing conditions, which can precipitate a double crush phenomenon.

Other complications include injection site symptoms such as local pain, bruising or infection, respiratory symptoms secondary to pneumothorax from pleural puncture (0.001%), or respiratory failure from phrenic nerve paralysis. Finally, rare but catastrophic complications such as seizure (0.08%), cardiac arrest (0.01%) and death (0.005%) relate to local anaesthetic delivery to the circulatory system.

Summary
Brachial plexus blockade is a safe and effective method of regional anaesthesia for upper extremity surgery. It can occur at a variety of levels, each with their own advantages and pitfalls, and selection of the block location depends on these factors as well as the comfort and experience of the anaesthetist. In the future, orthopaedic surgeons can expect peripheral nerve blockade to play a major role in upper extremity surgery.

References

Figure 2
Regions of Cutaneous Anaesthesia by Block Type

Special thanks to Dr. Jason McVicar, Dept. of Anaesthesia, Queen’s University for supplying some of the source material for this article.
Spinals, Epidurals and Lumbar Plexus Blocks in Orthopaedic Surgery

Sugantha Ganapathy, FRPC, FRCA
Professor, Department of Anaesthesiology and Perioperative Medicine, University of Western Ontario, Director, Regional and Pain Research
London, ON

Orthopaedic surgeries are some of the most painful procedures. Apart from trauma-related orthopaedic surgery, the most common operations are major arthroplasties. As a result of developing painful osteoarthritis, patients are unable to exercise adequately and this may lead to the development of significant comorbidities. These include obesity, hypertension, diabetes, ischemic heart disease, cerebrovascular disease and propensity for venous thromboembolism. Obesity is often associated with sleep apnea, which makes titrating analgesia with narcotics a challenge. Obesity also results in the propensity for gastroesophageal reflux. Many patients are already on narcotics to control osteoarthritis pain. These patients may present with opioid-induced hyperalgesia and thus pose major challenges with postoperative pain management. General anaesthesia is particularly challenging in these patients.

A recent study has documented significant cost saving and improved pain scores with the use of spinal anaesthesia. This is particularly important in the current climate of economic downturn. Neuraxial techniques have also been an integral component to facilitate discharge of these patients on the day of surgery. Neuraxial techniques in a retrospective study have also been documented to result in less surgical site infection after major arthroplasty as compared to general anaesthesia. The possible mechanisms for this improved outcome could be improved oxygenation, reduced inflammatory response and better postoperative analgesia.

Because of the propensity for deep venous thrombosis (DVT), routine DVT prophylaxis is initiated on arrival following any trauma and, in many centres, the day before surgery, prior to elective arthroplasty. Although neuraxial techniques are reported to be associated with a lower incidence of DVT, we do not know if such a benefit is significant with the current medical therapy. Unfortunately, some of the medications used for DVT prophylaxis in the past have been associated with increased incidence of the dreaded neuraxial haematoma with resultant permanent paralysis. This can be as high as one in 50,000 with spinals and one in 10,000 with low-molecular-weight heparin started the day of surgery. The incidence of neuraxial haematoma in female patients with spinal stenosis seems to be as high as one in 3,000, causing many to shy away from these techniques in this subset of patients. Timing of initiation and discontinuation of neuraxial block seems to be crucial in avoiding such a catastrophic outcome. The newer anticoagulants such as rivaroxaban, dabigatran and fondoparinux have limited documentation in the literature. Thus it is important to understand the pharmacokinetics of these newer anticoagulants before one initiates neuraxial block. In this respect, it is easier to time a spinal than a continuous epidural analgesia. The epidural analgesia is initiated with a bigger needle – the needle and catheter both at insertion and at removal can cause vascular injuries in the epidural space. Although many have reported on the successful use of these techniques, the infrastructure for managing anticoagulation and the neuraxial block initiation and termination have to be coordinated. It is important to establish a mechanism of follow-up after the neuraxial blocks especially if the patients are discharged from the hospital early.

Apart from the worry of neuraxial haematomas, there is a certain failure rate with neuraxial techniques; epidural more than spinals. Introduction of spine imaging before initiating spinal anaesthesia as a routine paradigm is long overdue both to avoid spinal cord injury and to reduce repeated needle passes, both of which could be contributing factors for neuraxial haematoma. If the block is performed in a separate block area, this may also contribute to better resource utilization of the operating room time. With epidurals, one also has to remember the potential for unilateral analgesia and the need for bladder catheterization during therapy.

There are adjuvants that have been documented to provide prolonged analgesia – some of them are well validated and approved such as spinal morphine, while others, such as dexamethazone and magnesium, are used and documented to provide marginal improvement in analgesia duration.

Neuraxial techniques may be contraindicated in a patient following trauma when there is associated bleeding, hypovolemia and other neurological injuries requiring close monitoring. Combined spinal and epidural facilitate early onset of block with capacity to continue analgesia for a few days. This is particularly useful for revision arthroplasty and major osteotomies as well as for manipulating a stiff joint. The hypotension associated with the epidural has been documented to reduce blood loss and reduce allogeneic transfusions.

These techniques are particularly useful in the elderly both to reduce pulmonary complications as well as to reduce postoperative cognitive dysfunction.

Although many centres use lumbar plexus blocks for hip surgery, the posterior lumbar plexus blocks have been associated with a total spinal, a dreaded complication that can occur in 400 patients. This block has been documented to reduce blood loss during surgery in one study. This is considered a deep block and the same guidelines used for epidural analgesia have been recommended with this block too. A recent study by Ilfeld et al has documented that femoral block provides equally good analgesia but with greater motor blockade impeding ambulation. Some centres such as Pittsburgh have been discharging patients within 24 hours with the use of lumbar plexus block following hip arthroplasty. This block might be particularly useful in the elderly with hip fracture. There have also been reports of kidney injury and flank haematoma with adverse outcomes. The introduction of ultrasonography might see a resurgence of this block especially for hip fractures. One of the major problems with this block is positioning for initiating the block with the injured side up. Definitely expertise is needed to initiate and continue the block. By comparison, the spinal or epidural is in every anaesthesiologist’s repertoire.
References


Dear Colleagues, Guests and Sponsors;

I would like to invite you all to attend the Canadian Orthopaedic Association Annual Meeting taking place in Ottawa from June 8th – 10th, 2012.

I know that my local colleagues and our families are very excited to host you. The meeting is being held at the perfect time of year to explore Ottawa. We hope that you will attend with your family and take advantage of this opportunity to check out our Nation’s Capital!

To entertain you and your family, we have organized many great activities. The meeting is centered at the Westin Ottawa so you will be just steps from the Byward Market, Parliament Hill, Supreme Court of Canada and many of our national museums. Our “Blast to the Past” Gala on Saturday evening will be held at the War Museum. The dinner will take place in the LeBreton Gallery where you can wander and explore many of our old war vehicles. We know this is something your kids might want to see so we have a separate children’s menu and reduced ticket price available. After dinner, live entertainment by Ottawa’s own “Disco Inferno” will have everyone on the dance floor – so stay after dinner and enjoy!

The academic program at this year’s event will be excellent. Remember to attend the Opening Ceremonies on Friday evening. Come to hear our President, Dr. Emil Schemitsch, give us a “state of the union” on orthopaedic surgery in Canada in 2012. We have also invited the Quebec Orthopaedic Association (QOA) to represent Quebec as this year’s ‘featured province’ – a new element we have added to the Annual Meeting. The QOA will give us some insight into orthopaedic practice in their provincial environment.

Dr. Paul E. Beaulé and his team have put together an exciting meeting program that’s relevant to every orthopaedic surgeon in the country. We hope you enjoy this special COA Bulletin feature and look forward to seeing you in Ottawa in June!

Steve Papp, M.D., FRCSC Chair, Local Arrangements Committee 2012 COA Annual Meeting

À tous les membres, invités et commanditaires

Permettez-moi de vous convier à la Réunion annuelle de l’Association Canadienne d’Orthopédie (ACO), qui doit avoir lieu à Ottawa, du 8 au 10 juin 2012.

Je sais que mes collègues d’Ottawa et nos familles sont tous emballés de vous recevoir! D’ailleurs, la Réunion ne pourrait pas avoir lieu à un meilleur moment pour ceux qui souhaitent découvrir la ville. Nous espérons que vous serez accompagné de votre famille et que vous profiteriez de l’occasion pour explorer notre capitale nationale.

Afin de vous divertir, votre famille et vous, nous avons organisé beaucoup d’activités exaltantes. La Réunion se déroulera à l’hôtel Westin, ce qui veut dire que vous serez à deux pas du marché By, de la Colline du Parlement, de la Cour suprême du Canada et de nombre de nos musées nationaux. Le gala du samedi soir, Voyagez dans le temps avec l’ACO!, aura lieu au Musée canadien de la guerre. Le souper sera servi dans la galerie LeBreton, où l’on peut admirer beaucoup de vieux véhicules de guerre. Vos enfants seront peut-être intéressés, alors nous avons prévu un menu spécial et des billets à prix réduit pour eux. Après le souper, les invités sont conviés à une amusante soirée disco avec le groupe Disco Inferno d’Ottawa. Pourquoi partir après le repas quand il y a encore tant de plaisir qui vous attend?


Le Dr Paul E. Beaulé et son équipe ont mis sur pied un programme tout à fait emballant qui saura intéresser tous les orthopédistes au pays. Nous espérons que vous trouverez intéressant le présent numéro spécial du Bulletin de l’ACO, consacré à la Réunion annuelle. Au plaisir de vous voir à Ottawa en juin!

Steve Papp, MD, FRCSC Président du Comité organisateur Réunion annuelle de l’ACO 2012
2012 Annual Meeting Keynote Speakers / Conférenciers principaux de la Réunion annuelle 2012

Presidential Guest Speaker / Conférencier invité par le président

Saturday, June 9 • 11:55 / Samedi le 9 juin • 11 h 55
Confederation 2&3, Westin Hotel
Mohit Bhandari, MD
McMaster University, Hamilton, Ontario

“Think Big (and Simple)”

Dr. Bhandari currently serves as Professor and Academic Chair of the Division of Orthopaedic Surgery at McMaster University. He also holds a Canada Research Chair in Musculoskeletal Trauma Outcomes. Dr. Bhandari is recognized as a champion of evidence-based surgery and orthopaedic research receiving CIHR/CMAJ top achievements in health care research, the Royal College of Physicians and Surgeons Medal in Research, the J. Edouard Samson Award, and the Kappa Delta Award. He has been acknowledged among the top cited orthopaedic fracture surgeons in the world. He is currently leading several multinational research programs with funding from the CIHR, NIH and US Departments of Defense. Dr. Bhandari has prolifically published and presented around the world sharing a message of global collaboration. To this end, he was acknowledged among 30 of Canada’s most influential Indo-Canadians (2011-12 India Abroad Power List).

R.I. Harris Lecture / Conférencier R.I. Harris

Friday, June 8 • 11:05 / Vendredi le 8 juin • 11 h 05
Confederation 2&3, Westin Hotel
Daniel Berry, MD
President, American Academy of Orthopaedic Surgeons (AAOS)
Mayo Clinic, Rochester, Minnesota

“Introduction of New Technology in Orthopaedic Surgery: Lessons from Joint Arthroplasty”

Dr. Berry was an undergraduate at Dartmouth College; he graduated with Highest Distinction in Biochemistry, Magna Cum Laude and Phi Beta Kappa in 1980. He then attended Harvard Medical School, graduating in 1984. Dr. Berry performed his orthopaedic surgery residency in the Harvard Combined Orthopaedic Residency Program and was chief resident at Brigham and Women’s Hospital in 1989. He performed a six-month fellowship in surgery of the hip in Bern, Switzerland, with Maurice E. Müller and in Paris with Emile Letournel. From 1990 to 1991 he was a fellow in Adult Reconstruction at Mayo Clinic, Rochester, Minnesota. In 1991 Dr. Berry joined the Mayo Clinic as a staff member and has been on staff since that time. He was appointed Chairman of the Department of Orthopaedic Surgery at Mayo Clinic in 2005 and holds that position at the present time. He was also the recipient of the L.Z. Gund Professorship of Orthopaedics at the Mayo Clinic in 2008.

Dr. Berry has published over 140 peer-reviewed papers, over 60 book chapters and has edited four books on hip and knee arthroplasty.

Macnab Lecture / Conférencier Macnab

Friday, June 8 • 15:30 / Vendredi le 8 juin • 15 h 30
Governor General 1, Westin Hotel
John B. Medley PhD, PEng
Department of Mechanical and Mechatronics Engineering
University of Waterloo, Waterloo, Ontario

“Bearing Surfaces for Young (and Old) Active Patients”

John Medley received his BASc in 1974 and MAsc in 1979, both from the University of Waterloo, and a PhD from the University of Leeds in 1982. His graduate degrees were in mechanical engineering with the topics in the field of biotribology. Since 1982, he has been a faculty member in the Department of Mechanical and Mechatronics Engineering at the University of Waterloo conducting research mostly, but not exclusively, in orthopaedic biotribology. He has 135 publications including journal papers, conference papers, book chapters and technical reports. He was one of the team that won the Hip Society’s Otto Aufranc Award in 1999 and one of the authors of the paper that won the Duncan Dowson Award for the best 2006 paper in the IMechE Journal of Engineering in Medicine.
2012 Annual Business Meeting Notice

This year’s Annual Business Meeting will be held on Saturday, June 9 at 11:15 in the Confederation 2&3 rooms of the Westin Ottawa Hotel.

All COA members are asked to attend this meeting to receive and consider the financial statements, the auditor’s report, to elect the Association’s directors and other committee members, authorize a change to the by-laws, and to discuss other pertinent COA business matters. Open discussion is encouraged. This is your opportunity to bring your suggestions in person to the COA Executive.

We look forward to seeing you there.

The COA Annual Meeting Welcomes Quebec as the 2012 Featured Province

New this year! The COA is launching a new initiative that will feature and highlight a different Canadian province at each year’s Annual Meeting. We would like to welcome Quebec as the first featured province at the upcoming Ottawa Meeting.

The COA was founded in Montreal, Quebec in 1945 by members of the then, Montreal Orthopaedic Society. It is an honour and privilege to host Quebec as our first ever featured province at the 2012 Annual Meeting.

Dr. Louis Bellemare, President of the Quebec Orthopaedic Association (QOA), will present on behalf of the provincial society at the Opening Ceremonies on Friday, June 8th. Dr. Bellemare will discuss some of the history of orthopaedics in the province as well as the current realities and some of the challenges that the QOA is facing. Past and present key surgeon thought leaders as well as the outlook for orthopaedic manpower in Quebec will also be addressed.

Quebec will be highlighted in various ways throughout the meeting – please join us in welcoming ‘la belle province’ to our event.

Avis de convocation à la séance de travail de la Réunion annuelle 2012

La séance de travail de la Réunion annuelle aura lieu le samedi le 9 juin, à 11 h 15, aux salons Confederation 2 et 3 de l’Hôtel Westin Ottawa.

Nous demandons à tous les membres de l’ACO d’assister à la séance, qui a pour objet de présenter et d’examiner les états financiers et le rapport du vérificateur, d’élire les administrateurs et les membres des comités, d’autoriser une modification au Règlement général et de discuter d’autres questions d’intérêt pour l’ACO. On favorise les discussions franches. Ces séances sont une occasion de présenter en personne vos suggestions à la direction de l’ACO.

Nous espérons avoir le plaisir de vous voir à cette séance.

La Réunion annuelle de l’ACO souhaite la bienvenue au Québec, province-vedette en 2012

Nouveauté! En effet, à compter de cette année, l’ACO souhaite mettre en vedette une province canadienne à chaque réunion annuelle. Ainsi, nous souhaitons la bienvenue au représentant du Québec, première province du cycle, à la Réunion annuelle d’Ottawa.

L’ACO, a été fondée à Montréal, au Québec, en 1945, par des membres de la défunte Montreal Orthopaedic Society. C’est donc un honneur et un privilège pour nous de faire du Québec la première province à être mise en vedette à une réunion annuelle.

Le Dr. Louis Bellemare, président de l’Association d’orthopédie du Québec (AOQ), prononcera une allocution à titre de représentant de l’organisme provincial aux cérémonies d’ouverture, le vendredi 8 juin. Le Dr. Bellemare abordera l’histoire de l’orthopédie dans la province de même que le portrait actuel de la profession et quelques-uns des défis que l’AOQ doit relever. Il fournira également un court portrait des grands orthopédistes d’hier à aujourd’hui dans la province, ainsi qu’un aperçu de la main-d’œuvre en orthopédie.

Le Québec sera mis en valeur de diverses façons durant la Réunion. Veuillez vous joindre à nous pour accueillir la Belle province comme il se doit à notre manifestation.
Friday, June 8

0900-1030
Blood Borne Pathogens: What now? I have Hepatitis C
Moderator: Tracy Wilson
Speakers: William Fisher; Phil Wong, Hepatologist; Dennis Desai, CMPA; CPSO speaker (TBA)

0900-1030
What’s New in Continuing Orthopaedic Education: Responsible Introduction of New Techniques/Technology in Surgical Practice
Moderators: John Murnaghan, Chair CPD Committee; Wade Gofton

1330-1500
Manpower Issues: Where Have All the Jobs Gone?
Moderators: Eric Bohm, Chair National Standards Committee (NSC); Ken Hughes, Chair Committee on Orthopaedic Practice, Economics & Fulfillment (COPEF)
Speakers:
• No Ortho Jobs - Fact or Fiction?
• Orthopaedic Surgeon Perspective – Bas Masri
• Orthopaedic Resident Perspective – Marie-France Rancourt, CORA Co-Chair
• Should I look for work in the US? - James McAuley
• What is a «Reasonable» Practice Pattern for an Orthopaedic Surgeon? Ken Hughes, Chair COPEF
• Is the Demand for Orthopaedic Surgical Care Changing? What will it Look like in 10 Years? Eric Bohm, Chair NSC

1530-1700
International Symposium on Trauma/WHO Carousel Road Traffic Safety
Moderators: Richard Buckley; Emil Schemitsch, COA President
Speakers: Douglas Dirschl, AOA President; Mohit Bhandari, COA Presidential Guest Speaker
Panel: Andrew Furey; Brad Petrisor; Piotr Blachut; Wade Gofton; David Stephen; Rudy Reid

1530-1700
COA/CORS Symposium and Macnab Lecture: The Science behind Joint Replacement for Young & Active Patients
Moderators: Paul E. Beaulé, John Antoniou
Speakers:
• Macnab Lecture: Bearing Surfaces for Young (and Old) Active Patients - John Medley, University of Waterloo
• Implant Fixation Surfaces: Dennis Bobyn
• Evolving Hip Designs: Daniel Berry, AAOS President
• Assessing the Clinical Outcome of Hip/Knee Replacements in the Young: Michael J. Dunbar
• Evolving Knee Designs: James McAuley

Saturday, June 9

0730-0900
Fracture Prevention
Moderator: Earl Bogoch
• Atypical Subtrochanteric Femoral Fractures: Angela Cheung
• Practical Fracture Prevention through Fracture Risk Assessment (FRA): Earl Bogoch

www.coaannualmeeting.ca is your one-stop-shop for everything to do with the COA Annual Meeting. Online registration, social event tickets, program updates, guest speaker biographies, travel, tours and hotel information, details about the CORA and CORS meetings and so much more. We are updating the site regularly so check back often to stay informed!

Le site www.coaannualmeeting.ca est un guichet unique où vous pouvez tout trouver sur la Réunion annuelle de l’ACO, qu’il s’agisse de l’inscription en ligne, de la réservation de billets pour les activités sociales, des mises à jour du programme, de la biographie des conférenciers invités, des renseignements sur les déplacements, les visites proposées et l’hébergement, ou encore des détails sur les réunions de l’Association canadienne des résidents en orthopédie (ACRO) et de la Société de recherche orthopédique du Canada (SROC). Nous mettons régulièrement le site à jour, alors jetez-y un coup d’œil souvent pour rester informé!

www.coaannualmeeting.ca
The COA has asked Ottawa Tourism to assist our delegates on site with arranging sightseeing and customized tours. Ottawa Tourism will provide a variety of options to suit every member of the family. Please visit the information booth on Friday, June 8 near registration on the fourth floor of the Westin Hotel to sign up for tours or to get information. You may also contact them via e-mail at info@ottawatourism.ca, visit their web site at http://www.discoverthecityofottawa.ca/ or call them at 1-800-363-4465. Make sure to mention that you are attending the COA Annual Meeting. Registration for some activities may be limited on-site.

Planning Ahead? – Purchase Your Tickets NOW for These Exciting Tours

Brenda Papp from our Local Arrangements Committee has pre-arranged three exciting tours for meeting attendees and their guests. These family-friendly tours are Ottawa favourites. Space is limited and pre-registration is required. Reserve your ticket when you register online for the COA meeting.

Ottawa River Cruise:
Date and Time: Friday June 8, 14:00
Departure: 2pm from The Ottawa Locks, located at the foot of the Locks between Parliament Hill and the Fairmont Chateau Laurier Hotel.
PLEASE arrive 20 minutes ahead of the departure time
Duration of the tour: 90 minutes
Fee: $18.00 per Adult, $12.00 per child

The cruise offers you the view of the city as it was first conceived with the river as its main highway and resource. You will also see the natural beauty of the region that captured the imagination of the first European explorer Samuel de Champlain. You have the choice of watching the scenery of Ottawa from the open air environment on the upper deck or you may choose to relax on the lower deck where the fully stocked and licensed canteen can be found. Restrooms are also located on this level.

Book this river cruise when you register on-line for the meeting. www.coaannualmeeting.ca

Pirate Adventures Tour- family friendly
Date and Time: Saturday June 9, 10:00 - 13:00
Shuttle: leaves from the Westin at 9:15
Fee: $56.50 per person (includes Transportation, a BBQ lunch and the highly interactive Pirate Adventure)

Ahoy Maties! Welcome to Pirate Adventures on the Rideau, a unique, unforgettable experience for the entire family, aboard a pirate ship in the heart of downtown Ottawa along the Rideau Canal (by Mooney’s Bay Beach), Canada’s newest World Heritage site.

Join our band of pirates for a swashbuckling family outing and experience an exciting adventure! Whether you are just one pirate or a group of forty three, immerse yourself in the world of a pirate and live the unforgettable experience of Pirate Adventures!

Book this wonderful family adventure when you register on-line for the meeting. www.coaannualmeeting.ca

Tour of Parliament
Date and Time: Saturday June 9, 14:00 - 16:00
Entry: $25.00
Shuttle: Leaves from the Westin at 1:45pm

The seat of Canada’s federal government and the setting for national celebrations the year round, Parliament Hill is the most visited Ottawa attraction. Truly a must-see!

The tour includes: Guided tours take visitors through public galleries, to the Senate and House of Commons (when not in session) and to the top of the Peace Tower, where an observation deck provides the most dramatic 360º view of the Capital.

Book this tour when you register on-line for the meeting. www.coaannualmeeting.ca
Quoi faire à Ottawa
Programme des conjoints et visites

Programme d'activités des invités
L’ACO a demandé à Tourisme Ottawa d’aider les participants à la Réunion à prendre toutes les dispositions nécessaires pour des visites guidées et personnalisées. Tourisme Ottawa proposera une foule d’activités convenant à tous les membres de la famille. Rendez-vous au stand d’information installé près de l’accueil, au quatrième étage de l’hôtel The Westin Ottawa, le vendredi 8 juin, pour vous inscrire à une visite ou obtenir de plus amples renseignements. Vous pouvez en outre communiquer avec l’organisme par courriel, à info@ottawatourism.ca, ou par téléphone, au 1-800-363-4465, ou encore consulter son site Web, à http://decouvrirottawa.com. N’oubliez pas de préciser que vous assistez à la Réunion annuelle de l’ACO. Il peut être nécessaire de réserver à l’avance en raison du nombre restreint de places pour certaines activités.

Soyez prévoyant : Achetez vos billets pour ces visites emballantes dès MAINTENANT!

Croisière sur la rivière des Outaouais
Date et heure : Le vendredi 8 juin, à 14 h
Départ : 14 h, au pied des écluses d’Ottawa, entre la Colline du Parlement et l’hôtel Fairmont Château Laurier
VEUILLEZ arriver 20 minutes à l’avance.
Durée de la croisière : 90 minutes
Entrée : 18 $ par adulte, 12 $ par enfant

Voyez la ville du point de vue de ses pionniers, alors que la rivière était sa principale route et sa ressource première. Découvrez la beauté naturelle de la région qui a envoûté Samuel de Champlain, premier explorateur européen à s’y être aventuré. Vous pouvez admirer le paysage d’Ottawa en plein air sur le pont exposé ou bien relaxer au pont inférieur, où l’on trouve une cantine avec permis d’alcool et les toilettes.

Réservez pour cette croisière en vous inscrivant en ligne à la Réunion, à www.coaannualmeeting.ca.

Excursion familiale Pirate Adventures
Date et heure : Le samedi 9 juin, de 10 h à 13 h
Navette : Départ de l’hôtel The Westin Ottawa à 9 h 15
Entrée : 56,50 $ par personne (ce qui comprend le transport, un dîner barbecue et une aventure extrêmement interactive)

Oyez pirates d’eau douce! Pirate Adventures vous convie à une expérience aussi unique qu’inoubliable. Embarkez toute la famille sur un bateau pirate et traversez le cœur d’Ottawa le long du canal Rideau (à proximité de la plage de la baie Mooney’s), qui vient d’être désigné site du patrimoine mondial.

Joignez-vous à nos joyeux flibustiers pour une aventure familiale rocambolesque et emballante! Que vous soyez un corsaire solitaire ou 43 boucaniers, peu importe : plongez à la découverte de l’univers des pirates et vivez l’expérience unique de Pirate Adventures!

Réservez pour cette fabuleuse aventure en famille en vous inscrivant en ligne à la Réunion, à www.coaannualmeeting.ca.

Visite du Parlement
Date et heure : Le samedi 9 juin, de 14 h à 16 h
Entrée : 25 $
Navette : Départ de l’hôtel The Westin Ottawa à 13 h 45

Siège du gouvernement canadien et cadre des célébrations nationales qui ont cours dans l’année, la Colline du Parlement est l’attraction la plus visitée à Ottawa. Et elle vaut vraiment le détour!

La visite : Les guides conduisent les visiteurs dans les tribunes du public, le Sénat et la Chambre des communes (quand il n’y a pas de session en cours), ainsi qu’au sommet de la Tour de la Paix, dont la plateforme d’observation offre une époustouflante vue à 360° sur la capitale nationale!

Réservez pour cette visite en vous inscrivant en ligne à la Réunion, à www.coaannualmeeting.ca.
COA’s Blast to the Past!

Saturday, June 9
LeBreton Gallery, Canadian War Museum
Time: 18:30 reception, 19:30 dinner
Dress: Casual
Price: $150 No tickets for sale on site.

Join us with your family and colleagues for a fun evening of disco dancing to Ottawa’s own Disco Inferno and dinner in one of Canada’s most innovative museums. “With its spectacular location beside the Ottawa River and its stunning architectural design, the Canadian War Museum is a military history museum of international stature”.

The LeBreton Gallery has a permanent exhibit of Canadian Military Technology from the 18th Century to the present - you will see tanks and jets just a few feet from your table!

Your ticket will include shuttle service to and from the museum, dinner, and entertainment. Dress will be casual.

PLEASE NOTE: There will be NO tickets available for purchase in Ottawa!! Pre-order your tickets when you register online for the meeting: www.coaannualmeeting.ca

Voyagez dans le temps avec l’ACO!

Le samedi 9 juin
Galerie LeBreton, Musée canadien de la guerre, à Ottawa
18 h 30 (apéritif); 19 h 30 (souper)
Code vestimentaire : Tenue décontractée
Coût : 150 $ Aucun billet disponible sur place.

Votre famille et vous êtes invités à vous joindre à vos collègues à l’occasion d’une amusante soirée disco avec le groupe Disco Inferno d’Ottawa, ainsi que d’un repas sympathique dans l’un des musées les plus novateurs au pays. « Planté dans un décor spectaculaire, en bordure de la rivière des Outaouais, et fort d’une architecture audacieuse, le Musée canadien de la guerre est un établissement de classe mondiale consacré à l’histoire militaire. »

La galerie LeBreton propose une exposition permanente sur la technologie militaire canadienne du XVIIIe siècle à aujourd’hui; on peut entre autres y voir des chars d’assaut et des chasseurs à quelques mètres à peine des tables!

Votre billet comprend la navette aller-retour, le repas et les divertissements.
Une tenue décontractée est de mise.

REMARQUE : Il N’Y AURA PAS de billets disponibles sur place. Réservez donc vos billets en vous inscrivant en ligne à la Réunion, à www.coaannualmeeting.ca.

Bringing a Guest? Make sure you tell them about the COA’s Hospitality Suite

Join your friends and family in the Hospitality Suite for coffee and continental breakfast, available to registered guests and family members in Daly’s Café on the third floor of the Westin Ottawa, from 8:00 am - 10:00 am, Friday through Sunday. Please present your breakfast vouchers for your meal. Spouse/Guest Registration also includes access to the Opening Ceremonies and President’s Welcome Reception.

Vous serez accompagné? Parlez de notre salon d’accueil à vos invités!

Joignez-vous à vos amis et proches dans le salon d’accueil, au Daly’s Café (3e étage de l’hôtel The Westin Ottawa), où café et déjeuner continental seront servis de 8 h à 10 h, du vendredi au dimanche, à tous les invités et membres de la famille inscrits. Pour réclamer votre repas, vous n’avez qu’à présenter votre bon. L’inscription du conjoint et des invités comprend également une invitation aux cérémonies d’ouverture et à la réception de bienvenue du président.
Ottawa Trivia
Get to know our Annual Meeting’s Host City with these fun trivia questions

1. What international designation—a first for Ontario—did the Rideau Canal receive in June 2007?
UNESCO World Heritage Site. One of 15 sites in Canada, and the first in Ontario. www.rideauheritageroute.ca

2. What proportion of the area of the city of Ottawa is rural in nature?
90%, yet 90% of its population lives in the 10% of the urban area.

3. What is the name of the Father of Confederation who was shot dead on Sparks Street in 1868 in Canada’s first (and one of only two) political assassination?
Thomas D’Arcy McGee was killed on April 7 as he arrived home to his Sparks Street rooming house after a late-night Parliamentary session. Patrick James Whelan, suspected of being a Fenian, was convicted and ultimately hanged for the crime, though many think he was not, in fact, guilty. The gallows where Whelan was hanged are now part of the HI Ottawa Jail Hostel—where guests sleep in the very cells that once housed prisoners. D’Arcy McGee’s is also the name of a very popular Ottawa pub (the Sparks Street location was the first to open and is literally steps from the assassination site—you can find the newest D’Arcy McGee’s Irish Pub at the Ottawa International Airport domestic departures area). The brother of D’Arcy McGee was the father of famed Ottawa Silver Seven player Frank “One-Eyed” McGee, who once scored a record 14 goals against Stanley Cup challengers from the Yukon. The hockeyplaying McGee was killed in World War I in France in 1916, but his family home lives on in the Sandy Hill neighbourhood, as McGee’s Inn, one of the top 3 bed and breakfasts in Canada, according to the web site BedAndBreakfast.com. www.hihostels.ca/ottawa / www.darcymcgees.com / www.mcgeesinn.com

4. How many outdoor vendors sell on a typical busy summer day in the ByWard Market?
Up to 175. The ByWard Market (known as “the Market”) is one of the oldest and largest farmers’ markets in Canada, as well as the name of the eclectic neighbourhood that surrounds it. Ottawa’s entertainment district is filled with great restaurants, clubs, bistros, coffee shops, boutiques and food retailers. In a four-block-by-four-block radius, you can find more than 120 places to eat and drink. www.byward-market.com

5. What is the name of the once-secret bunker built outside Ottawa to withstand a nuclear attack?
The Diefenbunker: Canada’s Cold War Museum is located in the small town of Carp, just west of Ottawa. Built between 1959 and 1961 (when John Diefenbaker was Prime Minister) to house Canada’s military and political elite in case of nuclear attack, the museum features a broadcast centre, war cabinet room, hospital, morgue, Prime Minister’s suite and Bank of Canada vault. A monthly film club screens Cold War-themed movies inside their cafeteria! www.diefenbunker.ca

6. What does the term “Ottawa” mean?
“To Trade” From the Algonquin word “Adawe”

7. The term “Rideau” is quite popular in Ottawa. (Rideau Hall, Rideau Canal, Rideau River, Rideau Street, Rideau Centre, Rideau Falls, etc…) Who coined this term? What inspired this name?
French Explorer, Samuel de Champlain, coined the term for Rideau Falls, which looks like a curtain of water (curtain = rideau in French) as it falls into the Ottawa River.

8. What attraction is home to the world’s largest collection of hedge mazes?
Saunders Farm

9. What’s the name of the only urban aboriginal village option in Canada?
Aboriginal Experiences

10. Where were the medals for the 2011 Winter Olympic and Paralympic Games created?
Royal Canadian Mint in Ottawa
Since its inception in 1965, the Canadian Orthopaedic Foundation has evolved from an event-based organization to a source of valued and much-needed resources for orthopaedic patients – your patients. This progression has spiked in the past twelve months as a direct result of listening to, and addressing, specific surgeon needs from coast-to-coast. Today, the Foundation stands as a valued point of access for patient tools and education designed to help ease the time constraints and demands of a busy surgical practice.

A recent survey conducted by the Canadian Orthopaedic Association confirmed the continued need for patient education. The survey also revealed that a number of orthopaedic surgeons remain unfamiliar with the Canadian Orthopaedic Foundation’s library of resources available to them at no cost.

Patient Tools Available Free of Charge
The resources outlined below form a series of patient education pieces created and maintained by the Canadian Orthopaedic Foundation. Each resource is available free of charge, in hard copy or electronic formats, and in both English and French.

When developing its public programs, the Foundation asks how we can support every surgeon in Canada and make for smoother days in practices. We are able to do this by putting resources into the hands of patients that help free up surgeons’ time. All resources are developed with input from surgeons, and with the review of the Foundation’s Medical & Scientific Review Committee who ensure accuracy, reliability and national relevance.

Patient Resources:
• Ortho Connect Peer Support Service – Phone-based support program addressing non-surgical questions and insight to orthopaedic patients resulting in improved surgical outcomes.
• Orthoconnect.org – Complements the phone-based peer support service with on-line information, educational resources, and a virtual community of peers.
• OrthoLink Patient Newsletter – Electronic newsletter dedicated to bone and joint health.
• Procedure-Specific Information Sheets – Educational sheets which address foot and ankle procedure-specific information.

Patient Booklets:
• Planning for Maximal Results: Preparing for Your Surgery – 42 page pre-surgery booklet guides hip and knee patients from referral through surgery and restored mobility.
• Planning for Your Best Results: From Your Foot and Ankle Surgery – 40 page booklet is an in-depth and informative educational resource for foot and ankle surgery patients.
• Get Moving: Maximizing Your Activity After a Hip or Knee Replacement – 56 page post-surgery booklet is an in-depth and informative educational resource for patients who have undergone hip or knee replacement.
• A Parents’ Guide to Clubfoot – 33 page booklet intended for parents of children born with clubfoot to be treated with the Ponseti Method of correction.

Annual Activities and Programs:
In addition to the library of programs and materials, a number of the Foundation’s current annual activities, which were initiated long ago, remain living legacies today. The Foundation takes great pride in continuing to provide the following programs on behalf of all surgeons:
• The R.I. Harris Lecture, first given in 1966.
• The J. Edouard Samson Award, first awarded in 1967.
• The Anica Bitenc Fellowship, established in 1985.
• The Macnab Lecture, first given in 1994.
• The Canadian Orthopaedic Research Legacy (CORL), established in 2005.

How you can help
The Foundation has placed patient education at the forefront of its deliverables and has helped thousands of patients to prepare for and recover from their orthopaedic journey. Being the surgeons’ charity and acting as a not-for-profit organization, funding is derived from the generosity of surgeons as well as from those Canadians that rely on the organization for support. Essentially, the more people we are able to help, the more potential funding we gain to continue our mission. It is therefore critical that we continue to educate more and more people via surgeon offices.

Demonstrating your support is easy. The best way you can help is by ordering materials today, personally offering them to patients at every appointment and ensuring that every patient is provided with the opportunity to participate in the Ortho Connect peer support program.

By providing educational materials and inviting patients to benefit from Ortho Connect, together we are helping to keep Canadians moving while working towards the financial health of the Foundation. The support of surgeons is critical in positioning the Foundation to continue to serve Canadians for years to come.

We ask the surgeon community to continue to support our Foundation – to help ensure its strength and ensure that it’s there for us, for our patients, and for our field in the future. It’s the only Canadian charity that holds orthopaedics first and foremost in its mission.
Votre partenaire dans la prestation des soins
La Fondation Canadienne d’Orthopédie soutient les orthopédistes grâce à la sensibilisation des patients

**Fondation Canadienne d’Orthopédie**

Depuis sa création, en 1965, la Fondation Canadienne d’Orthopédie a axé sur une manifestation à source de ressources utiles et bien nécessaires pour les patients en orthopédie, vos patients. Dans la foulée de l’établissement des besoins particuliers des orthopédistes d’un bout à l’autre du pays et de notre volonté d’y répondre, cette progression a été fulgurante au cours de la dernière année. Aujourd’hui, la Fondation constitue un précieux point d’access à des outils et renseignements à l’intention des patients conçus pour atténuer les contraintes de temps et les demandes pressantes qui caractérisent l’exercice orthopédique.

Un sondage réalisé récemment par l’Association Canadienne d’Orthopédie confirme le besoin continu de renseignements à l’attention des patients. Ce sondage nous a aussi permis de constater qu’un certain nombre d’orthopédistes ne connaissent toujours pas les ressources que la Fondation Canadienne d’Orthopédie met gratuitement à leur disposition.

**Outils à l’intention des patients offerts gratuitement**

Les ressources précisées ci-après font partie d’une série de livrets d’information à l’intention des patients conçus et mis à jour par la Fondation Canadienne d’Orthopédie. Chacun de ces documents est disponible gratuitement, en copie papier ou format électronique, et ce, en français et en anglais.

Dans l’élaboration de ses programmes publics, la Fondation cherche à soutenir tous les orthopédistes en facilitant leur exercice. Pour ce faire, elle met à la disposition des patients diverses ressources qui, au bout du compte, aident les orthopédistes à gagner du temps. Toutes les ressources sont conçues d’après la rétroaction des orthopédistes et l’avis du Comité d’examen scientifique et médical de la Fondation, qui veille à la précision, fiabilité et pertinence nationale de ces ressources.

**Ressources à l’intention des patients :**

- **Soutien par les pairs Connexion Ortho** – Programme de soutien téléphonique permettant aux patients en orthopédie d’obtenir des réponses à leurs questions autres que chirurgicales et un aperçu de ce qu’ils vont vivre, ce qui améliore les résultats postchirurgicaux.

- **orthoconnect.org** – Site complémentaire au programme téléphonique de soutien par les pairs offrant des renseignements en ligne, des ressources éducatives et une cybercommunauté de pairs.

- **Bulletin LiaisonOrtho** – Cyberbulletin à l’intention des patients et consacré à la santé des os et des articulations.

- **Fiches d’information propres à des conditions et interventions** – Fiches éducatives traitant de diverses procédures au pied et à la cheville.

**Livrets pour les patients :**

- **La planification pour des résultats optimaux : Préparation en vue de votre chirurgie** – Livret de 42 pages qui guide les patients en attente d’une chirurgie à la hanche ou au genou dans leur cheminement, de leur aiguillage à leur retour à la mobilité.

**Activités annuelles et programmes :**

En plus de l’éventail de programmes et de documents qu’elle propose, la Fondation compte diverses activités annuelles, dont certaines ont été mises de l’avant il y a longtemps déjà et sont aujourd’hui des témoignages vivants de son apport. La Fondation est en effet très fière de continuer d’offrir les programmes suivants au nom de tous les orthopédistes :

- **La conférence R.I. Harris**, donnée pour la première fois en 1966
- **Le Prix J.-Édouard-Samson**, remis pour la première fois en 1967
- **La bourse de voyage Anica Bitenc**, créée en 1985
- **La conférence Macnab**, donnée pour la première fois en 1994
- **L’Héritage de la recherche orthopédique au Canada**, créé en 2005

Comment pouvez-vous donner un coup de main ?

La Fondation a fait de la sensibilisation des patients sa priorité, et ses ressources ont permis d’aider des milliers de patients à se préparer à leur cheminement orthopédique et à se rétablir d’une intervention. À titre d’œuvre de bienfaisance des orthopédistes et d’organisme à but non lucratif, la Fondation dépend de la générosité des orthopédistes et des Canadiens et Canadiennes qui font appel à son soutien pour financer ses activités. Bref, plus nous pouvons aider de personnes, plus nous augmentons notre financement potentiels et il nous permet de poursuivre notre mission. Il est donc primordial que nous poursuivions notre travail de sensibilisation auprès d’un nombre croissant de personnes par l’intermédiaire des cabinets des orthopédistes.

**Rien de plus simple que de manifester votre soutien !**

La meilleure façon de nous aider est de commander de la documentation dès aujourd’hui, de l’offrir à vos patients à tous leurs rendez-vous et de veiller à ce que chacun ait l’occasion de participer au programme de soutien par les pairs Connexion Ortho.
En fournissant des documents de sensibilisation et en incitant les patients à profiter du programme Connexion Ortho, vous nous aidez à assurer la mobilité de la population canadienne tout en favorisant la santé financière de la Fondation. Sans le soutien des orthopédistes, la Fondation ne pourra tout simplement pas poursuivre son travail auprès des patients au cours des années à venir.

Nous invitons donc les orthopédistes à soutenir leur fondation, à l’aider à assurer son avenir, sa présence, tant pour nous que pour nos patients et l’avenir de notre profession. C’est le seul organisme de bienfaisance canadien qui se consacre avant tout à l’orthopédie.

We Heard You!
The Canadian Orthopaedic Foundation is working for you.

Canadian Orthopaedic Foundation

The Canadian Orthopaedic Foundation is your charity. We aim to make your life easier by lowering the amount of patient follow-up phone calls you receive, and by relieving patients’ anxiety and helping them become more prepared for their surgery. Below are some frequently asked questions pertaining to the Ortho Connect peer support program.

I like the idea of promoting Ortho Connect to my patients but I am already pressed for time. How much of a time commitment is required to promote the program?

If you can afford five minutes, than you can promote the program. Ortho Connect has been designed to save time – not to create more work for surgeons. The Foundation has devised a promotional kit that will take five (5) minutes to set-up. You will recoup these five minutes with a lower call volume to your office, all while your patients benefit from increased confidence as their surgery date approaches.

The kit contains:
- Three Posters to display and promote the program in your waiting room and/or examination rooms
- 50 Ortho Connect Postcards and accompanying holder to display in your waiting room
- One Ortho Connect Surgeon Tear Off Pad to keep handy on your desk or in your pocket. Rip off a sheet and give to your patients at every appointment to direct the patient to our services
- Send an e-mail to joanne@canorth.org (or call her at 1-800-461-3639 ext. 4) with your address and a request for the Ortho Connect Kit.

How can I expect my patients to benefit from the Ortho Connect program?

Ortho Connect is a phone-based peer support program provided free of charge to your patients. All volunteers have been carefully selected and have experienced successful orthopaedic surgeries. They are well trained to address your patients’ non-medical questions.

Orthoconnect.org complements the phone-based peer support program by providing your patients with information, educational resources, and a virtual community of peers online. Ultimately, the outcome is a better prepared individual with realistic expectations resulting in improved surgical outcomes.

Inaugural Sherry Bassin “Bad to the Bone” Charity Golf Classic

Support the Canadian Orthopaedic Foundation by participating in the Inaugural Sherry Bassin “Bad to the Bone” Charity Golf Classic taking place this June in Toronto. You will have the opportunity to golf with NHL legends. Prior to tee off, perfect your swing with tips and instruction from CPGA Teaching Professionals and enjoy a delicious lunch. The game begins with a shotgun start at 1:30pm. Afterwards you can relax with a cocktail and bid on items in the silent auction, followed by a gourmet dinner and stories of Canadian hockey with emcee Sherry Bassin and other hockey legends. For more information, please visit our web site at www.badtothebonegolf.org or contact Joanne at 1-800-461-3639 x4.

La première classique de golf Sherry Bassin Bad to the Bone

Appuyez la Fondation Canadienne d’Orthopédie en participant à la première classique de golf Sherry Bassin Bad to the Bone, qui se tiendra à Toronto, en juin. Vous aurez l’occasion de croiser le fer avec les légendes du hockey. Avant le départ, travaillez votre élan grâce aux conseils et directives d’instructeurs membres de l’Association canadienne des golfeurs professionnels (ACGP) et régalez-vous d’un succulent dîner. Les départs simultanés de la classique sont prévus à 13 h 30. Une fois le parcours franchi, vous pourrez relaxer cocktail à la main et faire des enchèrées à l’encan silencieux, qui sera suivi d’un repas gourmet où le maître de cérémonie, Sherry Bassin, et d’autres légendes du hockey vous distrairont avec diverses anecdotes sur le hockey canadien. Pour de plus amples renseignements, veuillez consulter notre site Web, à www.badtothebonegolf.org (en anglais seulement), ou communiquer avec Joanne, au 1-800-461-3639, poste 4.
Nous sommes à l’écoute!
La Fondation Canadienne d’Orthopédie travaille pour vous.

Fondation Canadienne d’Orthopédie

La Fondation Canadienne d’Orthopédie est votre œuvre de bienfaisance. Elle souhaite vous faciliter la vie en réduisant le nombre d’appels de suivi que vous recevez des patients, tout en rassurant les patients et en les aidant à mieux se préparer à leur chirurgie. Voici certaines des questions sur le programme de soutien par les pairs Connexion Ortho qui reviennent le plus souvent :

J’aime bien l’idée de faire la promotion de Connexion Ortho auprès de mes patients, mais je manque déjà de temps. À quel point la promotion du programme est-elle prenante?

Si vous pouvez prendre cinq minutes pour en parler, c’est suffisant pour promouvoir le programme. Le concept de Connexion Ortho vise à faire gagner du temps aux orthopédistes, pas à leur imposer davantage de travail. La Fondation a conçu une trousse promotionnelle qui ne prend que cinq minutes à deployer. Vous aurez vite fait de récupérer ces cinq minutes, puisque vous recevrez moins d’appels à votre cabinet alors que vos patients gagneront en confiance à l’approche de leur chirurgie.

Contenu de la trousse :
- Trois affiches à installer dans votre salle d’attente ou d’examen pour faire la promotion du programme
- 50 cartes postales Connexion Ortho et leur porte-cartes pour votre salle d’attente
- Un carnet de fiches détachables Connexion Ortho pour les orthopédistes, à garder à portée de la main, sur votre bureau ou dans vos poches. Détachez une fiche et remettez-la aux patients à tous les rendez-vous pour les aiguiller vers nos services.

Pour obtenir une trousse, faites-en la demande à joanne@canorth.org (ou au 1-800-461-3639, poste 4), en veillant bien à fournir votre adresse.

De quelle façon mes patients peuvent-ils bénéficier du programme Connexion Ortho?

Connexion Ortho est un programme téléphonique de soutien par les pairs offert gratuitement à vos patients. Tous les bénévoles ont été soigneusement choisis et ont subi avec succès au moins une chirurgie orthopédique. Ils sont tous bien formés pour répondre aux questions de nature non médicale des patients.

Site complémentaire au programme téléphonique de soutien par les pairs, orthoconnect.org offre à vos patients des renseignements, des ressources éducatives et une cybercommunauté de pairs. Le patient qui a recours au programme est donc mieux préparé à sa chirurgie, nourrit des attentes réalistes et en tire de meilleurs résultats.

The COA’s 2012 CFBS Fellows
Drs. Marie-Eve LeBel & Dominique Rouleau

Drs. Marie-Eve LeBel (London, ON) and Dominique Rouleau (Montreal, QC) have been selected as the COA’s 2012 Canada-French-Belgian-Swiss (CFBS) travelling fellows. They are the first female Canadian CFBS fellows.

Dr. LeBel completed both her M.D. degree and orthopaedic residency at the Université Laval in Québec City. She went on to pursue subspecialty training in orthopaedic sports medicine at the Fowler-Kennedy Sport Medicine Clinic in London, Ontario as well as a Masters Degree in Health Professions Education with a special interest in surgical simulation at the University of Illinois at Chicago. She maintains an academic position at the University of Western Ontario with clinical interests in shoulder and knee pathology in orthopaedic sports medicine.

Her main research focus is in surgical simulation. She was awarded numerous research grants at the local and provincial levels. Her and her team of engineers at the CSTAR lab (Canadian Surgical Technologies and Advanced Robotics) have developed a physical knee simulator with force-sensing capabilities. Dr. LeBel had the opportunity to present her work in Europe, North America and South America.

She is also the mother of two beautiful toddlers who keep her active at home.

Dr. Rouleau completed both her M.D. degree and orthopaedic residency at the Université de Montréal. She pursued subspecialty training in shoulder surgery at the University of Western Ontario as well as in trauma surgery at the Université de Montréal. She completed a Masters Degree in Clinical Research at the same centre.
Dr. Rouleau is Assistant Professor at the Université de Montréal with a clinical practice at the Hôpital du Sacré-Cœur, a Level 1 trauma centre. Her research interests include upper limb trauma, reconstruction and anatomy. Involved in both clinical and biomechanical studies, she described a new angle in the proximal ulna (PUDA) with important implication in fracture fixation. Dr. Rouleau also validated measurement methods for assessment of joint reduction in the shoulder and elbow. She is developing a new classification for greater tuberosity fractures. Her research is funded by international and national grants and she is involved in COTS and JOINTS research groups. Dr. Rouleau had the pleasure of participating as a volunteer in the Vancouver Olympic Medical Team. In 2012, she chaired the first JOINTS Canada Montreal Shoulder Course in Montreal. Outside of work, Dr. Rouleau enjoys outdoor sports and rowing.

Both surgeons will tour centres in France, Belgium and Switzerland for four weeks beginning in October of this year and will attend the SoFCOT meeting in Paris. We wish them both safe travels and a most enjoyable tour! Stay tuned for a summary of their experience in an upcoming edition of the COA Bulletin.

Les Dres Marie-Ève LeBel et Dominique Rouleau
Lauréates de la Bourse de voyage CFBS 2012 de l’ACO

Les Dres Marie-Ève LeBel (London, Ontario) et Dominique Rouleau (Montréal, Québec) sont les lauréates de la Bourse de voyage canado-franco-belge-suisse (CFBS) 2012 de l’ACO. Il s’agit des premières femmes à recevoir la Bourse de voyage CFBS au Canada.

La Dre LeBel a effectué son doctorat en médecine et sa résidence en orthopédie à l’Université Laval à Québec. Elle a ensuite poursuivi sa formation en se spécialisant en médecine sportive à la Fowler-Kennedy Sport Medicine Clinic, à London, en Ontario, de même qu’en décrochant une maîtrise en éducation pour les professions de la santé spécialisée en simulation chirurgicale à l’Université de l’Illinois, à Chicago. Elle occupe un poste à l’Université de Western Ontario, où ses intérêts cliniques se concentrent sur la pathologie de l’épaule et du genou en médecine sportive.


Elle est également mère de deux magnifiques tout-petits, qui la gardent occupée à la maison.

La Dʳ Rouleau a effectué son doctorat en médecine et sa résidence en orthopédie à l’Université de Montréal. Elle a ensuite poursuivi sa formation en se spécialisant en chirurgie de l’épaule à l’Université de Western Ontario, de même qu’en chirurgie traumatologique à l’Université de Montréal. Elle a décroché une maîtrise en recherche clinique au même centre.

La Dʳ Rouleau est professeure adjointe à l’Université de Montréal et tient une pratique clinique à l’Hôpital du Sacré-Cœur, centre de traumatologie de niveau 1. Ses travaux de recherche portent entre autres sur les traumatismes, la reconstruction et l’anatomie des membres supérieurs. Participant tant à des études cliniques que biomécaniques, elle a établi un nouvel angle articulaire qui a une incidence importante sur la fixation des fractures à l’ulna proximal. La Dʳ Rouleau a aussi validé des méthodes de mesure pour l’évaluation de la réduction articulaire à l’épaule et au coude. Elle travaille actuellement à la conception d’une nouvelle classification des fractures de la grosse tubérosité. Ses travaux de recherche sont financés par des bourses nationales et internationales, et elle collabore avec des groupes de recherche de la Société canadienne d’orthopédie traumatologique (COTS) et de la jonction en orthopédie pour l’initiation de projets nationaux et de travaux sur l’épaule (JOINTS). La Dʳ Rouleau a eu le plaisir de participer aux Jeux olympiques de 2010, à Vancouver, à titre de bénévole au sein de l’équipe médicale. En 2012, elle a été coresponsable du premier cours sur la chirurgie de l’épaule offert par JOINTS Canada, à Montréal.

Dans ses loisirs, la Dʳ Rouleau s’adonne aux sports de plein air, dont l’aviron.

Ces deux orthopédistes visiteront des centres français, belges et suisses pendant quatre semaines à compter d’octobre, en plus d’assister au congrès de la Société française de chirurgie orthopédique et traumatologique (SOFCOT) à Paris.

Nous leur souhaitons à toutes deux un voyage sans pépins et des plus agréables! Nous vous présenterons un résumé de leur expérience dans un numéro à venir du Bulletin de l’ACO.
Navy blue ties made from 100% silk with embroidered COA crest
Cravate en soie bleu marine avec armoiries de l’ACO
$40.00

Please include 5% GST / Pour le Québec, veuillez s’il vous plaît ajouter 5 % (TPS) et 7.5 % (TVQ)

Orders are payable by cheque, VISA or Master Card.

Send your order to the attention of Cynthia Vezina at the COA Office - Tel: (514) 874-9003 ext. 3 or email: cynthia@canorth.org and details will be forwarded to you.

Orthopaedic Surgeon – Surgery Program
Eastern Regional Health Authority
Eastern Health in collaboration with Memorial University division of orthopaedics invites applications for the position of Orthopaedic Surgeon available immediately.

This fee for service position will be located in St. John’s, Newfoundland with the selected candidate joining an established group in an academic setting. The successful candidate will be expected to participate in the call schedule and must be proficient in orthopaedic trauma.

Candidates should hold Canadian specialty certification in Orthopaedics or the equivalent and be eligible for licensure in Newfoundland and Labrador. The selected candidate should hold fellowship training in upper extremity surgery and be willing to participate in the general orthopaedic call rota. Preference will be given to Canadian citizens and permanent residents.

For more information regarding Eastern Health and practicing in Newfoundland and Labrador please visit the following web sites: www.easternhealth.ca and www.practicenl.ca. For more information about Memorial University please visit www.mun.ca.

Interested applicants should send curriculum vitae and the names of three references prior to May 31st, 2012 to:

Dr. John Guy
Director Medical Services, Eastern Health
300 Prince Philip Drive
St. John’s, Newfoundland A1B 3V6
Fax # (709) 778-6307
Email: john.guy@easternhealth.ca

**Memo**

Under this section appear important announcements and news items pertaining to the COA and its activities.

Sous cette rubrique, apparaîtront les annonces, les nouvelles et les activités de l’ACO.

**Article submissions to the COA Bulletin are always welcome!**

Contributions of 500-800 words, plus no more than 3 photos should be submitted to: Cynthia Vezina.

Tel: (514) 874-9003 ext. 3
E-mail: cynthia@canorth.org

**Les contributions au Bulletin de l’ACO sont toujours les bienvenues!**

Les contributions de 500 à 800 mots accompagnées d’au plus 3 photos doivent être soumises a Cynthia Vezina.

Tél.: 514-874-9003, poste 3
Courriel : cynthia@canorth.org

**Orthopaedic Surgeon – Surgery Program**
**Eastern Regional Health Authority**

Eastern Health in collaboration with Memorial University division of orthopaedics invites applications for the position of Orthopaedic Surgeon available immediately.

This fee for service position will be located in St. John’s, Newfoundland with the selected candidate joining an established group in an academic setting. The successful candidate will be expected to participate in the call schedule and must be proficient in orthopaedic trauma.

Candidates should hold Canadian specialty certification in Orthopaedics or the equivalent and be eligible for licensure in Newfoundland and Labrador. The selected candidate should hold fellowship training in upper extremity surgery and be willing to participate in the general orthopaedic call rota. Preference will be given to Canadian citizens and permanent residents.

For more information regarding Eastern Health and practicing in Newfoundland and Labrador please visit the following web sites: www.easternhealth.ca and www.practicenl.ca. For more information about Memorial University please visit www.mun.ca.

Interested applicants should send curriculum vitae and the names of three references prior to May 31st, 2012 to:

Dr. John Guy
Director Medical Services, Eastern Health
300 Prince Philip Drive
St. John’s, Newfoundland A1B 3V6
Fax # (709) 778-6307
Email: john.guy@easternhealth.ca

**ESPACE PUBLICITAIRE**

Le Bulletin, publication officielle de l’Association Canadienne d’Orthopédie (ACO), a été désigné par nos membres comme l’un des services les plus utiles que nous leur offrons.

Placer une annonce dans le Bulletin de l’ACO assure une visibilité inégalée auprès des orthopédistes, résidents et infirmières en orthopédie les plus influents au pays.

Ne manquez pas cette occasion! Pour faire partie de notre cycle de publication en 2011, communiquez avec Cynthia Vezina, au bureau de l’ACO, au 514-874-9003, poste 3, ou a cynthia@canorth.org.

**ADVERTISING SPACE AVAILABLE**

The COA Bulletin, the official journal of the Canadian Orthopaedic Association, has been declared by our membership as one of the most valuable membership services.

By placing your advertisement in the COA Bulletin, you will be communicating with the largest number of Canada’s leading orthopaedic surgeons, residents and nurses.

Don’t miss out on this kind of opportunity! Become a part of our 2011 publication cycle by contacting Cynthia Vezina at the COA Office - Tel: (514) 874-9003 ext. 3 or email: cynthia@canorth.org and details will be forwarded to you.

**Send In Your Order Today! Passez votre commande aujourd’hui!**

Navy blue ties made from 100% silk with embroidered COA crest
Cravate en soie bleu marine avec armoiries de l’ACO
$40.00

Please include 5% GST / Pour le Québec, veuillez s’il vous plaît ajouter 5 % (TPS) et 7.5 % (TVQ)

Orders are payable by cheque, VISA or Master Card.

Send your order to the attention of Cynthia Vezina at the COA Office at:
4150 O. Ste-Catherine W., Suite 450
Westmount, QC H3Z 2Y5
Fax/Télécop.: (514) 874-0464
E-mail/Courriel : cynthia@canorth.org
Here you will learn of future orthopaedic-related activities.

Ici vous découvrirez les activités orthopédiques professionnelles à venir.

THE 10th BIENNIAL CANADIAN ORTHOPAEDIC FOOT AND ANKLE SYMPOSIUM
April 20-21 avril
Fairmont Royal York Hotel
Toronto, ON
Web Site/Site Int. : http://sites.cepdtoronto.ca/footankle/
Tel./Tél. : (416) 978-2719/1-888-512-8173
E-mail/Courriel : info-sur1205@cmetoronto.ca

INNOVATIONS IN ORTHOPAEDICS AND FRACTURE ESSENTIALS
CSOT 40th Anniversary
April 27-29 avril
Doubletree by Hilton Toronto Airport
Web Site/Site Int. : www.pappin.com/csot

INTERNATIONAL CARTILAGE REPAIR SOCIETY (ICRS) 10th WORLD CONGRESS
May 12-15 mai
Montreal, QC
Advancing Science & Education in Cartilage Repair Worldwide
E-mail/Courriel : office@cartilage.org
Web Site/Site Int. : www.cartilage.org

AMERICAN ORTHOPAEDIC ASSOCIATION (AOA) 125th Annual Meeting
June 27-30 juin
Gaylord National Hotel
Washington, DC
E-mail/Courriel : meetings@aoassn.org
www.aoassn.org

SOUTH AFRICAN ORTHOPAEDIC ASSOCIATION (SAOA)
58th ANNUAL CONGRESS
September 3-6 septembre
Durban, South Africa
www.saoa.org.za

AOA~Kellogg Leadership Series • Module 7
April 20-22, 2011
Northwestern University’s Kellogg School of Management
James L. Allen Centre, Evanston, Illinois
(conveniently located 30 minutes from O’Hare and Midway Airports)

A “can’t miss” opportunity for orthopaedists interested in capitalizing on or enhancing their strategic leadership and management skills. This Module provides:

- Programming designed specifically for orthopaedic surgeons
- Case studies, examples and exercises relevant to the orthopaedic profession
- An intimate setting for active and engaging discussions with fellow participants and world-renowned professors
- Access to the online AOA–Kellogg Leadership Alumni Centre for continuing resources to help you find ways to implement what you’ve learned into your daily practice

Session 1: Dispute & Conflict Management
Session 2: Strategies for Effective Negotiations
Session 3: Avoiding Risks: Taking them Wisely
Session 4: Leadership & Organizational Change

Cost: AOA Members/Emerging Leaders: $1,000 • Non-members: $1,275
Includes all meals, snacks, materials, and pre-/post-Module online resources
For more details:
Visit www.aoassn.org/meetings-events/aoa-leadership-education
The Canadian Orthopaedic Foundation is pleased to have awarded the following research grants for 2011:

**J. EDOUARD SAMSON AWARD**

Dr. Albert J.M. Yee

“Treating Cancer Spread to the Spine: Translating Research from the Clinic to Bench and Back”

Sponsored by: / Commanditaire :

**Bayer HealthCare**

**CANADIAN ORTHOPAEDIC RESEARCH LEGACY GRANT**

Dr. Steven J. MacDonald
Sharon E. Culliton

“A randomized controlled trial to establish patient expectations of total knee arthroplasty”

The Canadian Orthopaedic Foundation opens its annual research grant process in the summer. Please visit www.canorth.org for more information.

La Fondation Canadienne d’Orthopédie est heureuse d’accorder les prix et bourse de recherche suivants pour 2011 :

**PRIX J.-ÉDOUARD-SAMSON**

Dr Albert J.M. Yee

« Treating Cancer Spread to the Spine: Translating Research from the Clinic to Bench and Back »

Sponsored by: / Commanditaire :

**Bayer HealthCare**

**BOURSE DE L’HÉRITAGE DE LA RECHERCHE ORTHOPÉDIQUE AU CANADA**

Dr. Steven J. MacDonald
Sharon E. Culliton

« A randomized controlled trial to establish patient expectations of total knee arthroplasty »

La Fondation Canadienne d’Orthopédie lance son processus annuel d’octroi de prix et bourses de recherche à l’été. Veuillez consulter le site www.canorth.org pour obtenir plus de renseignements.
An Innovative Design to Handle Post-Operative Challenges

☑ Skin Friendly
☑ Flexible and Extensible
☑ Waterproof*
☑ Antimicrobial Protection*§

*When dressing remains intact with no leakage
§When using silver dressing format

For more information, please call our Customer Relations Center (Registered Nurses on staff) at 1-800-465-6302, Monday through Friday, 8:00 AM to 6:00 PM (EST), or visit our Web Site at www.convatec.ca
See what you need.

Focus on what matters.

See success more clearly.
You’re Invited to the 20th Anniversary of Hip Hip Hooray!

Encourage your patients to celebrate their mobility and achieve their fitness goals by becoming involved in *Hip Hip Hooray!* Promote the event within your office, and participate yourself, to help raise money for the Canadian Orthopaedic Foundation’s patient education programs.

**When:** September 26 to 30, 2012

**What:** Challenge yourself to meet a personal fitness goal, and track your progress by wearing a pedometer for five days

**Where:** Promote the event in your office; Participate anywhere that’s convenient.

**How:** Request promotional and participant packages by emailing hhh@canorth.org or calling 1-800-461-3639 extension 1.

---

Vous êtes invité à souigner le 20e anniversaire de *Hip Hip Hourra!*

Invitez tous vos patients à célébrer leur mobilité et à atteindre leurs objectifs de mise en forme grâce à la campagne *Hip Hip Hourra!* Faites la promotion de cette campagne dans votre cabinet, prenez-y part vous aussi et aidez-nous à amasser des fonds pour les programmes de sensibilisation des patients de la Fondation Canadienne d’Orthopédie.

**Date :** Du 26 au 30 septembre 2012

**Activité :** Mettez-vous au défi! Essayez d’atteindre vos objectifs de mise en forme et notez vos progrès en portant un podomètre.

**Endroit :** Faites la promotion de cette campagne à votre cabinet. Participez partout où c’est possible de le faire!

**Méthode :** Demandez vos trousses promotionnelle et du participant par courriel, à hhh@canorth.org, ou composez le 1-800-461-3639 poste 1.
The next generation is here.

Comprehensive® Reverse Shoulder System