# Canadian Urological Association

Spring 2005 Newsletter

## PRESIDENT'S MESSAGE

**Ronald G. Gerridzen,** MD, FRCSC, FACS
*President, CUA*

As Spring envelops Canada's beautiful capital city in warmth and colour, it seems like we just returned home from the 59th Annual Meeting in the exotic mountain resort of Whistler— and now the challenge of delivering a spectacular 60th anniversary meeting in Ottawa is just around the corner. Local Arrangements Chair Stuart Oake, and his wife Ann, have both been working incredibly hard with our convention management company, Taylor & Associates, to be able to deliver a memorable event. Scientific Program Chair Chris Morash and his committee have toiled diligently to successfully recruit excellent guest faculty members, develop clinically important educational forums, and sift through a large number of submitted abstracts. One new addition to our program this year is a 90-minute unopposed exhibit hall session on Monday, which will provide our corporate sponsors and exhibitors with maximal exposure to delegates.

By the time you read this, you should have received the Ottawa meeting registration package. Please note the various registration deadlines, as they will be enforced. Make your hotel reservations now — by using one of the three methods indicated — at either the upscale Westin Ottawa, our primary hotel, which is connected to The Ottawa Congress Centre, or at the beautiful, historic Fairmont Chateau Laurier, which is just across the street. Choosing either place will ensure that you have a comfortable and elegant stay while you enjoy the meeting and its social programs. Be sure to check out the CUA website (www.cua.org) for on-line registration forms and links to the convention hotels.

Numerous interesting and reasonably priced tours and events have been arranged for companions. This year's golf tournament will be held at The Marshes, an exclusive course that provides plenty of water-filled challenges in a gorgeous venue in western Ottawa, just south of the Ottawa River. If you're a golfer, sign up quickly!

Plan to attend the Sunday welcoming brunch at 11:00 a.m. in the Exhibit Hall at the Ottawa Congress Centre to meet our exhibitors and sponsors. Meet friends and colleagues at the informal Welcome Reception Sunday evening in the Colonel By Salon, replete with ample food and beverages. Stroll the historic Byward Market afterwards, perhaps stopping at an outdoor café for a late evening cappuccino and dessert. The Monday evening family fun-night will be a "Canada Day at the CUA" event, with all kinds of entertainment that you will not want to miss. This occasion will be capped by a performance by well-known Canadian entertainers.

This year's children's program is all-inclusive: all events are covered with one

## In this issue…



Publications Mail Agreement Number 1756958

simple registration fee. Adequate numbers of qualified supervisors will be retained to ensure the safety of your children, as they explore the Museum of Civilization, enjoy an IMAX movie, spend a day at the Mont Cascades Waterpark, go to their own opening reception on Sunday, and attend a closing Fiesta banquet Wednesday evening.

For these and other reasons too numerous to mention, you will not want to miss this Diamond Anniversary meeting of the CUA in Ottawa, a city that is one of the most desirable places to visit according to many travel experts. With the "real" Canada Day celebrations immediately following our meeting, plan to stay on in Ottawa after the CUA, and take part in some of the many birthday festivities that Canada's capital will be offering.

The agenda at the winter executive meeting this year was lengthy, but thanks to a dedicated executive and spirited discussions, we got through it. Our Secretary, Michael Leonard, outlines the major discussion points later in this newsletter.

Prior to the Ottawa meeting, Pat and I look forward to hosting the CUA President's Reception at the AUA meeting in San Antonio, which will take place on Monday, May 23, from 5:30 to 8:00 p.m., in the Salon del Rey South & Central, at the Hilton Palacio del Rio Hotel, 200 South Alamo Street. A plentiful selection of appetizers and beverages will be available. We will be joined by members of the AUA Executive and representatives from our 2005 CUA meeting's corporate sponsors and exhibitors. Please read your invitation included in this mailing, and plan to attend.

It has been exciting and fulfilling serving the CUA membership over the past 12 years, and I thank the members for this privilege. I have seen many beneficial changes for the organization, including incorporating our association, retaining a solid financial and legal advisory structure, and getting liability insurance protection. In 1997, new educational forums led to increased levels of corporate sponsorship. The central office established in 2003 has been a tremendous addition. I am pleased that our 2005 convention management company (Taylor and Associates), the central office, and the Canadian Journal of Urology have collaborated in many ways to construct this year's meeting — hopefully making it easier for the increased role of the central office in 2006, when it takes over the entire delivery of the Annual Meeting. Patient information pamphlets are a superb benefit of CUA membership. Our dues have not changed, our meeting registration fees remain low, and candidate membership is working successfully. The indexation and quality of The Canadian Journal of Urology cannot go unmentioned, thanks in no small part to the leadership of Laurence Klotz and the dedication of the Georgieffs. The CUA Scholarship Foundation has flourished over the past decade and has attained excellent levels of scholarship support under the stewardship of Normand Sullivan, Jack Sales, Luc Valiquette, Joe Chin, and, more recently, Hassan Razvi and Tony Khoury.

Serving the CUA in various roles, including 1995 Local Arrangements Chair, then Treasurer, Vice-President, and so on, in what Denis Hosking refers to as the "engine room" of the CUA, has been educational and a great experience. I thank my wife Pat, and my daughters Jennifer and Laura, for their patience and understanding, as service to the organization does take its toll on personal and family time. Without their support, this would not have been possible. They have all contributed unselfishly in numerous ways to the CUA, and for their efforts I sincerely thank them.

As I ease my way out of the CUA Executive, I see an organization running with full wind in its sails. I leave it to the next generation to further its growth and development, benefiting members and patients, as the Canadian flagship of our great surgical specialty.

Respectfully submitted,

**Ronald G. Gerridzen, MD, FRCSC, FACS**
President, Canadian Urological Association
Ottawa, Ontario

## WHERE ARE THEY NOW?

The following members have contact information that is outdated. If anyone knows their whereabouts, please contact the CUA central office (central.office@cua.org) with their current demographic information.

| | | |
|---|---|---|
| Active | 3397 | Darren T. Beiko |
| Active | 3330 | Dariusz Bochinski |
| Active | 2773 | Stephane Bolduc |
| Active | 2851 | L. Lawson Douglas |
| Active | 2863 | Jean-Louis Durier |
| Active | 2886 | Hasan Farsi |
| Active | 2902 | Christopher French |
| Active | 2908 | Ronald G. Garston |
| Active | 2933 | Ronald W. Hamilton |
| Active | 2945 | Dianne M. Heritz |
| Active | 3414 | Peter C. Ho |
| Active | 3370 | John Kell |
| Active | 3027 | James L. Lee |
| Active | 3057 | Carlos Marois |
| Active | 3095 | Lawrence W. Mix |
| Active | 3110 | Michael J. Morse |
| Active | 3328 | Ali Obied |
| Active | 3176 | Jean Robert |
| Active | 3239 | Anthony M. Thijssen |
| Active | 3242 | Lars D. Thompson |
| Active | 3249 | Camille Torbey |
| Active | 3251 | Simon P. Treissman |
| Associate | 2862 | A. Emerson Dunphy |
| Associate | 3556 | Bernhard Eigl |
| Associate | 2912 | William O. Geisler |
| Associate | 2968 | William Jacobson |
| Associate | 3415 | Richard W. Johnson |
| Associate | 3421 | Sue McGarvie |
| Associate | 3422 | Manohar Rajani |
| Associate | 3540 | Ali Abdul Jalil Thwaini |
| Associate | 3429 | Carson Wong |
| Candidate | 3473 | Ashraf Abusamra |
| Candidate | 3501 | Sebastien Daigle |
| Candidate | 3516 | Benoit Duclos |
| Candidate | 3440 | Kurt Eeg |
| Candidate | 2891 | Tony A. Fischer |
| Candidate | 3502 | Brian C.M Fong |
| Candidate | 3522 | Christopher C Hoag |
| Candidate | 3356 | Niels E. Jacobsen |
| Candidate | 3460 | James K Kuan |
| Candidate | 3510 | Thierry Lebeau |
| Candidate | 3055 | Victor Mak |
| Candidate | 3505 | John D Nehme |
| Candidate | 3514 | Simon Ouaknine |
| Candidate | 3132 | Paul Jr. Ouellette |
| Candidate | 3507 | Philippe Spiess |
| Candidate | 3427 | Thomas Trinh |
| Candidate | 3442 | Peter Vlaovic |
| Honorary | 3416 | Douglas E. Johnson |
| Inactive | 3403 | David H. Barnhouse |
| Inactive | 3062 | Aldrich Martinez |
| Inactive | 3420 | Gordon E. Martyn |
| Senior | 3404 | John L. Bishop |
| Senior | 3431 | J. J. Bourgouin |
| Senior | 3405 | John M. Brewster |
| Senior | 2779 | Robert W. Bridge |
| Senior | 2797 | Barry B. Caplan |
| Senior | 2806 | C. A. Cawker |
| Senior | 2807 | Warren H. Chapman |
| Senior | 3406 | George E. Chenard |
| Senior | 2823 | Gerald U. Coleman |
| Senior | 2825 | Barry W. Cook |
| Senior | 3407 | Gerald T. Cook |
| Senior | 2828 | Leonard Cox |
| Senior | 2830 | Leonard Crimp |
| Senior | 3409 | Jean Denys Dufresne |
| Senior | 2880 | William A. Ernst |
| Senior | 2898 | R. R. Francis |
| Senior | 2904 | Norman G. Futter |
| Senior | 2920 | Paul H. Good |
| Senior | 2952 | Floyd Hoffman |
| Senior | 2966 | Earl G. Isbister |
| Senior | 2979 | Hjalmar W. Johnson |
| Senior | 2985 | Jean F. Joyal |
| Senior | 2995 | Ara G. Keresteci |
| Senior | 3008 | Henry P. Krahn |
| Senior | 3033 | Peter E. Levers |
| Senior | 3418 | Stephen G. MacIsaac |
| Senior | 3419 | Gary Mackie |
| Senior | 3073 | Charles F. McKiel |
| Senior | 3075 | David A. McLeod |
| Senior | 3079 | Alvin R. Mercer |
| Senior | 3088 | Boushra R. Mikhael |
| Senior | 3115 | Rama N. Murthy |
| Senior | 3144 | Charles F. Pearce |
| Senior | 3145 | Roger Pelletier |
| Senior | 3153 | Elliott J. Phillips |
| Senior | 3160 | Norborne B. Powell |
| Senior | 3423 | Nicholas A. Rety |
| Senior | 3424 | Bernard B. Robinson |
| Senior | 3182 | Ionel Rovinescu |
| Senior | 3200 | John R. Sharpe |
| Senior | 3205 | Alexander B. Sinclair |
| Senior | 3241 | G. Douglas Thompson |
| Senior | 3246 | Brian E. Tomka |
| Senior | 3428 | Getchel D. Williams |
| Senior | 3286 | John A. Williams |

## FUTURE CUA MEETINGS

**2005 (60th Anniversary CUA)**
Ottawa, ON
Ottawa Congress Centre
Westin / Fairmont Chateau Laurier
June 26-29

**2006**
Halifax, NS
Sheraton Hotel
June 25-28

**2007**
Quebec City, QC
Hilton Hotel
June 24-27

**2008**
Edmonton, AB
Hotel MacDonald / Westin
June 22-25

**2009**
Toronto, ON
Westin Harbour Castle
June 28-July 1

# SCIENTIFIC PROGRAM: OTTAWA 2005

## Sunday, June 26, 2005

09:00 Industry-Sponsored Symposium
*Bayer Inc.*

10:00 Industry-Sponsored Symposium
*Sanofi-Aventis*

11:00 Exhibit Grand Opening and Welcome Brunch
Unmoderated Poster Viewing

12:00 Scientific Program Opening Ceremonies

12:15 Royal College Address: Highlights of the SIU Consensus Conference on Bladder Cancer
*Guest Speaker: Dr. Mark Soloway*

12:45 Podium Session

13:20 Rising PSA after Radical Prostatectomy: Natural History and Therapeutic Options
*Guest Speaker: Dr. Peter Scardino*

13:50 Podium Session

14:30 Health Break in Exhibit
Unmoderated Poster Viewing

15:00 Podium Session

15:35 CUA Scholarship Address:
Prostate Cancer – A Continuing Dilemma
*Guest Speaker: Dr. John Trachtenberg*

16:05 Educational Forum: Prostate Cancer: Over-diagnosed? Over-treated?

17:30 Adjournment

18:00 Welcome Reception

## Monday, June 27, 2005

07:00 Industry-Sponsored Symposium
*Sanofi-Aventis*

08:00 Industry-Sponsored Symposium
*GlaxoSmithKline*

09:00 Innovations in the Surgery of Male Infertility: Life at the Cutting Edge
*Guest Speaker: Dr. Marc Goldstein*

09:30 Podium Session

10:00 Health Break in Exhibit
Unmoderated Poster Viewing

10:30 Educational Forum: Laparoscopy

11:30 Podium Session

12:00 Lunch in Exhibit
Unmoderated Poster Viewing

13:30 AUA Address:
*Dr. Lawrence Ross*, President-Elect

13:35 The Role of Diet in Kidney Stone Formation
*Guest Speaker: Dr. Dean Assimos*

14:05 Podium Session

15:00 Health Break in Exhibit
Unmoderated Poster Viewing

15:30 Moderated Poster Session: Basic Science

15:30 Antibiotics and Urology: Patient, Community and Global Implications
*Guest Speaker: Dr. Martin Koyle*

16:00 Podium Session

16:30 Educational Forum: Office Pediatric Urology: Update and Controversies

17:30 Adjournment

18:30 Fun Night at Canada Aviation Museum

## Tuesday, June 28, 2005

07:00 Industry-Sponsored Symposium
*AstraZeneca Canada Inc.*

08:00 Industry-Sponsored Symposium
*Merck Frosst Canada Ltd.*

09:00 The Uncontrolled Retroperitoneum in Non-Seminomatous Germ Cell Tumors
*Guest Speaker: Dr. Joel Sheinfeld*

09:30 Podium Session

10:30 Health Break in Exhibit
Unmoderated Poster Viewing

11:00 Educational Forum: Oncology

12:00 Adjournment for Golf and other Optional Social Activities

## Wednesday, June 29, 2005

07:00 Industry-Sponsored Symposium
*Pfizer Canada Inc.*

08:00 Industry-Sponsored Symposium
*Lilly ICOS*

09:00 Surgical Treatment of Female Stress Incontinence: Where Do We Stand in 2005?
*Guest Speaker: Dr. Victor Nitti*

09:30 Podium Session

10:30 Health Break

11:00 Educational Forum: Update on Peri-Operative Care

12:00 CUA AGM

14:00 Moderated Poster Sessions:
Oncology, Incontinence,
Pediatrics/Misc., Endourology/Stones

16:30 Meeting Adjournment

19:00 President's Reception and Banquet

Unmoderated Posters will be available for viewing throughout exhibit hours from Sunday through Tuesday.

MOCERT credits have been requested from the Royal College of Physicians and Surgeons of Canada.

Program Subject to Change without Notice.

Visit "Meetings" at www.cua.org regularly for updates.

# AFFILIATED SOCIETIES AND COMMITTEE MEETINGS: OTTAWA 2005

## Friday, June 24, 2005

| | |
|---|---|
| CUA Guidelines Committee | 08:00-16:00 |
| CUA Patient Information Committee | 08:00-16:00 |
| CUA Socioeconomic Committee | 13:00-16:00 |

## Saturday, June 25, 2005

| | |
|---|---|
| Canadian Academy of Urological Surgeons (CAUS) | 07:00-12:00 |
| CUA Executive Committee | 12:00-17:00 |
| Canadian Prostate Health Council (CPHC) | 13:00-14:00 |
| CUA Committee on Training, Education and Evaluation (Royal College Specialty Committee for Urology) | 13:00-17:00 |

## Sunday, June 26, 2005

| | |
|---|---|
| CUOG Executive Committee | 07:00-09:00 |
| CUA Executive Committee | 07:00-11:00 |
| Canadian Endourology Group | 09:00-11:00 |
| CUOG Annual Meeting | 09:00-12:00 |
| Pediatric Urologists of Canada (PUC) | 13:00-17:00 |

## Monday, June 27, 2005

| | |
|---|---|
| Canadian Urological Research Consortium (CURC) | 07:00-09:00 |
| Canadian Male Sexual Health Council | 08:00-11:00 |
| CUASF Scientific Committee | 10:00-12:00 |
| CUA Nominating Committee | 12:00-13:00 |
| SIU Canadian Section | 12:00-13:00 |
| CUASF Administrative Committee | 12:00-14:00 |
| Urology Nurses of Canada | 16:00-18:00 |

## Tuesday June 28, 2005

| | |
|---|---|
| Council of Canadian University Urology Chairs (CCUUC) | 06:30-08:00 |
| Canadian Journal of Urology (Board Meeting) | 06:30-08:00 |

## Wednesday June 29, 2005

| | |
|---|---|
| CUA Finance Committee | 09:30-12:00 |
| CUA Annual General Meeting | 12:00-14:00 |

## CANADIAN ACADEMY OF UROLOGICAL SURGEONS

The Canadian Academy of Urological Surgeons will be holding its annual meeting on Saturday June 25th, 2005. Members will be mailed meeting notification and dues notice prior to the meeting. This year's meeting will focus on "Ethics in Clinical Research". Drs. John Mahoney and Mireille Gregoire look forward to an exciting meeting and to your active participation.

## CUASF SCHOLARSHIP ANNOUNCEMENT

The CUASF provides three categories of support:

1. Canadian University based researcher. The award is $40,000.00 per annum for a recent (within 2 years of initial appointment) Canadian University faculty appointment at the level of lecturer or assistant professor. The award is for a one-year term, but may be renewed based on individual merit and the availability of funds.
2. Community based researcher. The award is $15,000.00 for a one-year term. It is to be applied to a specific research project. The award is not renewable.
3. CUA-SIU International Scholarship. The award has recently been increased to $20,000.00 per annum – intended as salary support for fellows from foreign countries in order that they may obtain specialized urological training at Canadian academic centers.

Deadline for applications is March 1st of each year for funding commencing July 1st of the same year. For application information / submission please contact:

Dr. Tony Khoury
Chair, Scientific Council CUASF
Hospital for Sick Children
555 University Avenue
Toronto, ON M5G 1X8
Telephone: 416-813-6460
Fax: 416-813-6461
Email: cuasf-research@cua.org

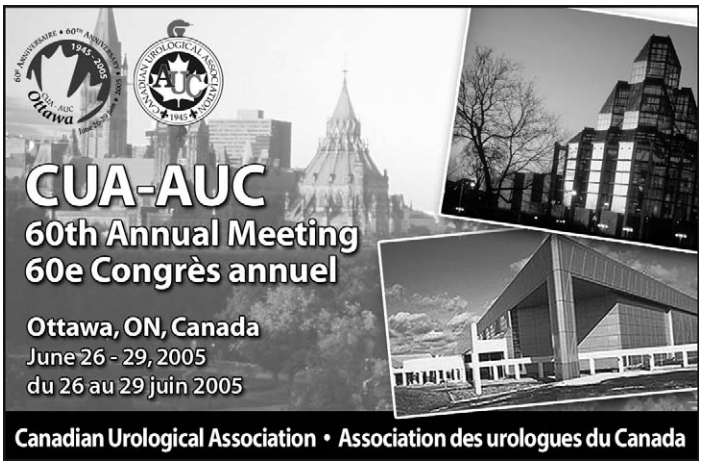
## CUA PATIENT INFORMATION BROCHURES

Thirty-five patient information brochure topics are now available to CUA members (active, senior, honorary) as a complimentary benefit of association membership. Series 7 was launched in the fall of 2004, and Series 8 should be launched in the spring of 2005. Since its inception in 2001, over 1 million CUA patient information brochures have been shipped to members in Canada, and abroad. The full list of brochure topics is easily accessed on the CUA website (www.cua.org) and brochures may be ordered by several means:

- Mailing in order forms sent with the brochure packages
- Call 514-744-1184
- Fax 514-744-1138
- Email cuabrochures@ca.inter.net
- Visit www.cua.org and click on "Patient Information" menu choice.

## CUA ANNUAL MEETING, OTTAWA, JUNE 26-29, 2005

As mentioned earlier in the newsletter, the annual meeting in Ottawa promises to be an excellent scientific and social experience in our Nation's Capital. This meeting also represents a milestone for the CUA as our organization celebrates its 60th anniversary. Ottawa is a beautiful city with national monuments, museums, and opportunities to enjoy the great outdoors minutes away from the city centre. Registration will soon be sent out by mail or one may register on line by a link from the CUA website (www.cua.org). Hope to see you all in Ottawa!



## NOMINATIONS OPEN FOR 2005 AGM

There are a number of positions open for nomination at this year's Annual General Meeting. CUA Active members in good standing may be nominated by another CUA member in good standing to fill any of the positions open. The names of such nominated individuals should be forwarded to the Chair of the Nominating Committee in advance of the AGM. The Chair will then bring the names forward to other members of the Nominating Committee for review. The Chair will subsequently contact nominated individuals to discuss the responsibilities of the position and their willingness to stand. If after this discussion more than one candidate exists for a given position, an election will be held at the time of the AGM. Nominations may also occur from the floor of the AGM. Once again, such nominations must be made from the Active membership by any CUA member in good standing. The individual nominated must be present at the AGM to accept the nomination and stand for election.

### Positions open for nomination prior to or at the AGM 2005:

- Vice-president (to be President for Edmonton, 2008)
- Treasurer-elect (to replace Dr. Jerzy Gajewski in July 2006)
- Two Executive Committee Members-at-large to replace Drs. Laurence Klotz and Jacques Corcos
- Chair Information Technology Committee to replace Dr. Tom Kinahan
- Historian to replace Dr. Bruce Palmer
- Chair CUASF Administrative Council to replace Dr. Hassan Razvi

Please contact the Chair of the Nominating Committee with any names that you feel should be brought forward to fill the above positions:

Dr. Larry Goldenberg, Past-President CUA
Chair Nominating Committee
D-9 Heather Pavilion
Vancouver General Hospital
2733 Heather Street
Vancouver, BC
V5Z 3J5
Telephone: 604-875-5003
Fax: 604-875-5604
Email: past-president@cua.org

## PROPOSED BYLAWS CHANGES 2005

The following are proposed bylaws changes, which will be voted on by members at the Annual General Meeting in Ottawa on June 29, 2005. These proposed changes have had their genesis based on discussions held at the CUA executive meetings, and are crafted to help our association evolve. Dr. Mike Jewett as President-Elect chairs the Bylaws Committee, which suggests the following changes:

**ARTICLE VII: STANDING COMMITTEES**

(n) The Endorsement Committee

*The following text is proposed to replace the present section (iv) which would be renumbered to (v):*

The CUA logo is the exclusive property of the Association and can only be used on material produced by the CUA for its own use, in relation to educational activities accredited by the CUA Continuing Professional Development Committee, or where specifically approved by the CUA Endorsement Committee. When the logo is used, it must not be modified in any way.

Request for approval of the use of the logo by the Endorsement Committee must be addressed to the Secretary sufficiently in advance of printing deadlines to allow for the approval process

**ARTICLE X: MEETINGS OF THE MEMBERS**

*Present*

(b) Quorum

Seventy-five Voting Members present in person at any meeting of the Members shall constitute a quorum at any such meeting.

*Proposed*

(b) Quorum

Ten percent (10%) of the Voting Members (active and senior members) present in person at any meeting of the Members shall constitute a quorum at any such meeting.

## CUA WINTER EXECUTIVE MEETING, OTTAWA JANUARY 2005

The following comprise highlights of the Winter Executive meeting of the CUA which was held at the Chateau Laurier Hotel in Ottawa on January 29, 2005. For the complete version of the minutes please contact Dr. Michael Leonard, CUA Secretary at secretary@cua.org or the CUA Central Office at central.office@cua.org

- The CUA is assessing the possibility of expanding the role of the CUA central office to encompass an "Office for Professional Urological Development". This would allow for the coordination of educational activities for urologists and urology residents nationwide. A task force has been struck to examine this possibility and has been charged with reporting back to the Executive in time for the 2005 Summer Executive / Annual General Meetings.
- The CUA Socioeconomic Committee is being re-evaluated as regards its role and structure. There have been difficulties with attendance at the committee meetings as of late, and it is uncertain whether this is due to timing issues and/or lack of clear direction from the Executive. This process is being carried out with the support and inclusion of the current committee chair Dr. Peter Pommerville.
- The relationship of the CUA with its Health Councils, primarily the Canadian Prostate Health Council and Canadian Male Sexual Health Council were discussed. Closer cooperation in the production of patient education materials and guidelines was encouraged. It is hoped that a joint distribution mechanism for CUA patient information pamphlets and those produced by the Health Councils will soon come to fruition.
- The CUA reviewed its relationship with the Central Office. It was felt that the office is now running the administrative aspects of the organization smoothly and efficiently. The Central Office will soon be expanding its role to that of meeting organization starting with the Halifax meeting in 2006. This is not intended to eliminate the local flavor of the meetings, but rather to provide some efficiency in time and cost for procedures that are duplicated year after year. Future planning for an "Office for Professional Development" is being explored (vide supra).
- Drs. Larry Goldenberg, Martin Gleave and Andrew Moore were congratulated by the Executive for a successful meeting at Whistler BC in June 2004. This meeting featured an excellent scientific and social program in a unique setting. In addition, excess revenue over expenditure was realized by the CUA.
- A CD-ROM promoting Urology as a career choice for medical students has been produced under the guidance of Dr. Hassan Razvi. It will soon be made available to all university undergraduate deans / Urology program directors. This project was funded by the CUA and it is hoped that this will help to attract the best and brightest to our specialty.
- The Continuing Professional Development Committee under the chairmanship of Dr. Peter Anderson has been awarded the right to certify CPD activities. The Royal College of Physicians and Surgeons of Canada granted this after a one-year probationary status. This will allow the CUA to accredit its own meetings for MoCERT and will also potentially allow for income generation, as pharmaceutical companies look for accreditation for their own educational programs.
- The CUA central office is now maintaining the CUA website. There is a plan for modernizing the website and increasing its role in the provision of CPD, but this will have to await the input of the Information Technology Committee.
- The CUA and CUASF remain on solid financial footing. Detailed reports from Dr. Hassan Razvi (CUASF) and Dr. Jerzy Gajewski (CUA) are available to members if they wish to request them.
- The Guidelines Committee has been reinvigorated under the leadership of Dr. Sender Herschorn and is busily working to generate new guidelines and revise existing ones. CUA guidelines are available on line at www.cua.org
- The Patient Information Committee will be producing its eighth series of pamphlets for this coming spring. It is felt that once 50 topics (10 series) are complete that new topic production will cease. The committee is also reviewing older pamphlets to ensure that their content is current. This has been a very successful initiative by the CUA, with over 1 million pamphlets shipped to members over the last four years.
- The CUA is examining its relationship with international urological societies. It would hope to encourage international visitors to annual meetings to increase the opportunity to interact with them and establish connections. This year a group of Brazilian urologists are being contacted to encourage them to attend the Ottawa meeting. Expenses for these invited guest will not be covered by the CUA.

# NEW PROPOSED GUIDELINE – URINARY INCONTINENCE

The CUA Guidelines Committee has been busy developing new guidelines and updating existing ones. A subcommittee chaired by Dr. Jacques Corcos has produced this draft guideline. This draft will be voted on at the AGM in June 2005.

Draft 2004-02-01

## SUMMARY OF THE GUIDELINE

### TERMINOLOGY

We recommend following the terminology proposed by the standardization committee of the International Continence Society (ICS)

### EVALUATION OF INCONTINENCE

Adult patients with a history of urinary incontinence (UI) should undergo a basic evaluation that includes a history, physical examination, evaluation of post void residual volume, and urinalysis. Completion of a voiding diary and a quality of life questionnaire by the patient or caregiver is helpful in determining the severity of symptoms, their impact on patient lifestyle and treatment efficacy. A more detailed evaluation is recommended for complex cases or if initial management fails.

### NON PHARMACOLOGICAL TREATMENTS

**Lifestyle Adjustments** Lifestyle adjustments must be reviewed with patients, highlighting areas that need reinforcement (fluid intake, caffeine, alcohol, timed-voiding, bladder training etc.) It is recommended to implement these measures first before considering other forms of treatment.

**Pelvic Exercises** Pelvic exercises can be helpful for the mildest cases of pelvic relaxation in motivated compliant patients (Kegel exercises, pelvic floor physiotherapy, and endovaginal cones). They must be offered to patients when indicated with the help of allied health professionals (physiotherapists, nurse clinician etc.).

**Neuromodulation** In highly selected patients it can offer improvement in patient quality of life. Posterior tibial nerve stimulation look to be an easy and less expensive way to reach satisfactory results.

**Devices** Catheters, pessaries, penile compression devices, etc. play an important role in selected patients.

### PHARMACOLOGICAL TREATMENT

| TREATMENT | INDICATIONS | GENERIC NAME | BRAND NAME | STARTING DOSE | MAXIMAL DOSE | CLINICAL EVIDENCE |
|---|---|---|---|---|---|---|
| first line | OAB | oxybutynin ER | Ditropan XL® | 5 mg o.d. | 10 mg o.d. | proven |
| | OAB | tolterodine ER | Unidet™ | 2 mg o.d | 4 mg o.d. | proven |
| second line | OAB | tolterodine L-tartare | Detrol™ | 2 mg o.d. | 2 mg b.i.d. | proven |
| | OAB | oxybutynin chloride | Ditropan® | 2.5 mg t.i.d. | 5 mg q.i.d. | proven |
| specific indications | OAB | propantheline bromide | Pro-Banthine® | 7.5 mg t.i.d. | 15 mg q.i.d. | proven |
| | OAB, SUI | imipramine HCL | Tofranil® | 25 mg h.s. | 25 mg t.i.d | suggested |
| | SUI | estrogens | | | | suggested |
| optional | OAB | flavoxate HCL | Urispas® | 200 mg t.i.d. | 400 mg q.i.d. | unproven |

### SURGICAL TREATMENT OF STRESS URINARY INCONTINENCE

#### WOMEN

Surgery is indicated when the degree of incontinence is sufficiently troublesome to the patient, the incontinence has been observed by the examiner, its causes adequately evaluated and conservative therapies have been reviewed.

Primary stress urinary incontinence in the female is effectively treated by a retropubic suspension (Burch or Marshall-Marchetti-Krantz), or a pubovaginal sling procedure.

Pubovaginal slings are the procedure of choice in the presence of significant intrinsic sphincteric deficiency (ISD), the absence of hypermobility, or in the treatment following a failed retropubic suspension

Periurethral injectables (collagen or silicone) are recommended first line treatment of SUI when available.

#### MEN

Artificial sphincter is the treatment of choice in neurogenic and non-neurogenic man with SUI.

#### OTHER SURGICAL TREATMENTS

In neurogenic bladders and sometimes in "non-neurogenic" bladders other forms of surgeries such as bladder denervation, bladder augmentations, neuromodulation, neurostimulation, urinary diversion can be considered as the treatment of choice for individual patients.

## GUIDELINES DOCUMENT

### BACKGROUND

Urinary incontinence is a wide spectrum of different conditions leading to an "involuntary loss of urine" . The prevalence of incontinence in Canada is estimated at 17.3% in women and 3.4% in men.

Important advances in the diagnosis, the evaluation of the impact, and in medical and surgical treatments have completely changed the medical approach of this condition in the last twenty years. This field is in constant change; notions developed in this document reflect medical knowledge of years 2003-2004

Until recently, urinary incontinence was mainly managed by urologists and some gynaecologists. The introduction of improved medical therapy, and better-understood physical therapies have brought in general practitioners, physiotherapists and specialised clinical nurses. We feel that urinary incontinence should not be treated by physiotherapists and other health professionals without an initial medical consultation. The role of urologists and gynaecologist specialists remains essential in any atypical case or any case not responding to behavioural modifications or pharmacological treatment.

## IMPORTANT CONSIDERATIONS

The explosion of knowledge regarding urinary incontinence, the introduction of new drugs, and new surgical techniques have led to the creation of a new branch of our specialty, erroneously called "female urology". We feel that it should be called "incontinence medicine" since we also deal with paediatric and male incontinence. However, regarding the particular aspect of female urology, urologists share the management of these patients with gynaecologists called urogynecologists. In order to better manage their patients, urologists must collaborate closely with gynaecologists interested in the field, but they should also receive formal and adequate training in the management of women with different forms of pelvic floor dysfunction including pain and prolapse, as well as post-menopausal changes and complications of pregnancy.

Our document will be divided in five parts:

A. Terminology
B. Evaluation
C. Non-pharmacology treatment
D. Pharmacologic treatment
E. Surgical treatment

## A – TERMINOLOGY

We suggest following the 2002 recommendations of the International Continence Society. Lower Urinary Tract Symptoms (LUTS) are divided into 3 groups: storage, voiding and post-micturition symptoms.

### Storage symptoms

- **Urinary incontinence:** involuntary leakage of urine;
- **Enuresis:** involuntary loss of urine (to denote incontinence during sleep, it should always be qualified with the adjective "nocturnal");
- **Nocturnal enuresis:** loss of urine during sleep;
- **Stress urinary incontinence:** involuntary leakage on effort; exertion, sneezing or coughing;
- **Increased daytime frequency:** (named also pollakiuria): patient consider that he/she voids too often by day;
- **Urgency:** a sudden compelling desire to pass urine, which is difficult to defer;
- **Urge urinary incontinence:** involuntary leakage accompanied by or immediately preceded by urgency;
- **Nocturia:** patient has to wake at night one or more times to void;
- **Nighttime frequency:** includes also voids that occur after the individual has gone to bed, but before he/she has gone to sleep, and voids which occur in the early morning which prevent the individual from going back to sleep as he/she wishes;
- **Mixed urinary incontinence:** involuntary leakage associated with urgency and also with exertion, effort, sneezing or coughing;
- **Continuous urinary incontinence:** continuous leakage;
- **Other types of incontinence:** may be situational (e.g. during intercourse, giggle incontinence);
- **Bladder sensation:**
  - ***normal:*** aware of bladder filling and increasing sensation up to a strong desire to void
  - ***increased:*** early and persistent desire to void
  - ***reduced:*** aware of bladder filling but does not feel a definite desire to void
  - ***absent:*** no sensation of bladder filling or desire to void

### Voiding symptoms

- **Slow stream:** individual's perception of reduced urine flow, usually compared to previous performance or in comparison to others.
- **Intermittent stream** (= intermittency): urine flow stops and starts, on one or more occasions, during micturition.
- **Hesitancy:** difficulty in initiating micturition resulting in a delay in the onset of voiding.
- **Straining:** muscular effort used to initiate, maintain or improve the urinary stream.
- **Credée manoeuvre:** suprapubic pressure used to initiate or maintain urine flow.
- **Terminal dribble:** prolonged final part of micturition, when the flow has slowed to a trickle/ dribble.

### Post-micturition symptoms

- **Feeling of incomplete emptying:** self-explanatory term.
- **Post-micturition dribble:** involuntary loss of urine immediately after he/she finished passing urine (usually after leaving the toilet in men and after rising from the toilet in women).

N.B.: - Stranguria, bladder spasm, dysuria are difficult to define and of uncertain meaning. Should not be used in relation to lower urinary tract dysfunction.

### Symptom syndromes suggestive of lower urinary tract dysfunction

Overactive bladder syndrome
Urge syndrome
Urgency – frequency syndrome

} these terms are synonyms and are defined as urgency, with or without urge incontinence, usually with frequency and nocturia

- LUTS suggestive of bladder outlet obstruction:
  - In men complaining of voiding symptoms in the absence of infection
  - In women usually thought to suggest detrusor underactivity rather than bladder outlet obstruction

## B – EVALUATION

### Basic Evaluation

*All adult patients with a history of urinary incontinence (UI) should undergo a basic evaluation that includes a history, physical examination, evaluation of postvoid residual volume, and urinalysis.*

### Rationale

The purposes of the basic evaluation are to:

1. Confirm the presence of UI.
2. Identify potentially reversible and contributing factors.
3. Identify patients who should receive initial treatment without further testing and those who require further evaluation before any therapeutic interventions are attempted.
4. Develop a presumptive diagnosis, if possible.

### Focused history

### Medical history

- History suggesting conditions affecting the lower urinary tract
  - pelvic organ prolapse (women)
  - possible obstruction (men)
  - urinary tract infection
  - hematuria
  - pelvic pain
  - significant post-void residual
  - atrophic vaginitis/urethritis
  - pregnancy/vaginal delivery/episiotomy
  - prostatectomy
  - radical pelvic surgery
  - pelvic irradiation
  - constipation/stool impaction
  - suspected fistula
- History suggesting increased urine production
  - metabolic (hyperglycemia, hypercalcemia)
  - excess fluid intake
  - volume overload
  - venous insufficiency with edema
  - congestive heart failure

- History suggesting impaired ability or willingness to reach a toilet
  - delirium
  - chronic illness, injury, or restraint that interferes with mobility
  - psychological
  - prescription and non-prescription medication use/ polypharmacy (and side effects):
  - diuretics (polyuria, frequency, and urgency)
  - caffeine (aggravation or precipitation of UI)
  - anticholinergic agents (urinary retention, overflow incontinence, and impaction)
  - psychotropics
  - antidepressants (anticholinergic actions and sedation)
  - antipsychotics (anticholinergic actions, sedation, rigidity, and immobility)
  - sedatives/hypnotics/CNS depressants (sedation, delirium, immobility, and muscle relaxation)
  - narcotic analgesics (urinary retention, fecal impaction, sedation, and delirium)
  - alpha-adrenergic blockers (urethral relaxation)
  - alpha-adrenergic agonists - present in many cold and diet over-the-counter (OTC) preparations (urinary retention)
  - beta-adrenergic agonists (urinary retention)
  - calcium channel blockers (urinary retention)
  - alcohol (polyuria, frequency, urgency, sedation, delirium, and immobility)

### Neurologic history

- immobility/chronic degenerative disease
- impaired cognition
- other neurologic conditions

### Incontinence history

- duration and character of UI, such as stress, urge, or dribbling
- frequency, timing, and amount of continent voids and incontinent episodes
- precipitants of incontinence (e.g., situational antecedents, cough, certain types of exercises, surgery, injury, previous pelvic radiation therapy, trauma, new onset of diseases, and/or new medications)
- other lower urinary tract symptoms (e.g., nocturia, dysuria, hesitancy, poor or interrupted stream, straining, hematuria, and/or suprapubic or perineal pain)
- fluid intake pattern, including caffeine-containing or other diuretic fluids
- previous treatments and their effects on UI
- alterations in bowel habits or sexual function
- use of pads, briefs, and protective devices – amount and types
- a mental status evaluation and
- assessment of mobility, living environment (environmental barriers), and social factors, especially in elderly patients
- goals and expectations for outcomes of treatment
- most bothersome symptom(s) to the patient
- impact on quality of life (includes sexual dysfunction). Only 3 QoL questionnaires are presently fully validated and can be used clinically (King's Health Q. , Incontinence Impact Q. , IQoL )
- a 4-day voiding diary

*Completion of a voiding diary by the patient or caregiver may be helpful in determining severity of symptoms, the frequency, timing, and amount of voiding, fluid intake, other factors associated with UI, clues about the underlying cause of UI, and for evaluating treatment efficacy.*

### Assessment of Risk Factors

*Risk factors associated with UI should be identified so attempts can be made to modify them.* Risk factors for urinary incontinence include:

- immobility/chronic degenerative disease
- impaired cognition or delirium
- medications
- morbid obesity
- diuretics
- fecal impaction
- environmental barriers
- high-impact physical activities
- diabetes
- stroke
- estrogen depletion
- pelvic muscle weakness

- childhood nocturnal enuresis
- race
- pregnancy/vaginal delivery
- previous anti incontinence surgery
- previous hysterectomy

### Physical examination

The physical examination should include:

- General examination for:
  - conditions such as oedema that may contribute to nocturia and nocturnal UI
  - neurologic abnormalities that may suggest multiple sclerosis, stroke, spinal cord compression, or other neurologic conditions
  - assessment of mobility, cognition, and manual dexterity related to toileting skills among frail and functionally impaired patients
- Abdominal examination for
  - organomegaly
  - masses
  - other abnormalities
- Rectal examination for:
  - perineal sensation
  - sphincter tone (resting and active)
  - fecal impaction
  - rectal mass
  - consistency and contour of the prostate in men
- Genital examination in men for:
  - skin condition
  - abnormalities of the foreskin, glans penis, meatus and perineal skin.
- Pelvic examination in women for:
  - perineal skin condition
  - genital atrophy
  - pelvic organ prolapse (cystocele, rectocele, or uterine prolapse evaluated in supine and standing position)
  - pelvic mass
  - paravaginal muscle tone
  - urethral discharge or tenderness that suggesting a urethral diverticulum, carcinoma, or inflammatory condition of the urethra
  - other abnormalities
- Direct observation of urine loss using the cough stress test

### Estimation of postvoid residual (PVR) volume :

Estimation of PVR volume is better done by catheterization or pelvic ultrasound. However in the screening phase of the management of a patient an evaluation by clinical examination (abdominal, vaginal) is acceptable.

Residual volume (repeat test if high residual volume) of 50 to 100ml are considered "acceptable" but in any case clinical history and circumstances would have to be analysed

### Urinalysis

Urinalysis is performed to assess for:

- hematuria (suggestive of infection, cancer, or stone)
- glucosuria (which may cause polyuria and contribute to UI symptoms)
- pyuria and bacteriuria (suggestive of infection)
- proteinuria

### Blood tests, if indicated

Blood tests may indicate an increase in:

- creatinine levels in patients suspected of having obstruction, noncompliant bladders, or urinary retention
- glycemia and calcemia (for patients with polyuria)

If the basic evaluation identifies a transient cause of UI and/or provides a presumptive diagnosis, treatment should be initiated unless there is an indication for further evaluation.

### Further Evaluation

### Rationale for further evaluation

Patients requiring further evaluation include those who meet any of the following criteria:

- uncertain diagnosis and inability to develop a reasonable treatment plan based on the basic diagnostic evaluation (for example, when there is a lack of correlation between symptoms and clinical findings
- failure to respond to the patient's satisfaction to modification of risk factors and/or an adequate therapeutic trial, and patient's pursuit of further therapy
- consideration of surgical intervention, particularly if previous surgery failed or the patient is a high surgical risk

- unexplained hematuria
- comorbid conditions, such as:
  - incontinence associated with recurrent symptomatic UTI
  - persistent symptoms of difficult bladder emptying
  - history of previous anti-incontinence surgery or radical pelvic surgery
  - beyond hymen and symptomatic pelvic prolapse
  - prostate nodule, asymmetry, or other suspicion of prostate cancer
  - abnormal PVR urine
  - neurological condition, such as multiple sclerosis and spinal cord lesions or injury.

Further evaluation may not be appropriate for patients whose medical condition precludes treatment or who do not desire treatment.

### Specialized Tests

Specialized diagnostic tests must be carefully selected on the basis of the question to be answered. When performing urodynamic studies, the health care provider should attempt to reproduce the patient's symptoms.

### URODYNAMIC TESTING

Cystometrogram

Detrusor Leak Point Pressure

Pelvic floor EMG

Urethral function testing (Urethral Pressure Profile – UPP, or Valsalva Leak Point Pressure–VLPP)

Pressure Flow Study (PFS)

Flowmetry

**Note:** Videourodynamics are done on a case by case basis when the diagnosis remains unclear or visualization of anatomy is required. It is, however, highly suggested in any case of neurogenic bladder dysfunction.

### OTHER TESTS

Pad test

Electrophysiologic testing (evoked potentials, conduction speed, etc.)

Voiding Cystogram (VCUG)

Pelvic ultrasounds (supra pubic or transvaginal)

Pelvic MRI

## C – NON-PHARMACOLOGICAL MANAGEMENT

In general, many patients have incorporated lifestyle changes to minimize wetting before seeking medical attention. Lifestyle adjustments must be reviewed with patients, highlighting areas that need reinforcement.

### Lifestyle Adjustments

**Fluid Intake:** Using this simple reliable method, urgency, frequency and nocturia will all be improved with fluid restriction. Patients with recurrent UTIs or urinary stones are ill advised to restrict intake and are more challenging cases.

**Caffeine:** Caffeine acts as a local irritant and as a diuretic. Caffeine restriction/elimination should be advised.

**Ethanol:** As well as a local irritant and powerful diuretic, ethanol relaxes the pelvic floor and should be taken in moderation.

**Timed Voiding:** Timed voiding can be effective in keeping bladder volumes below urge trigger volume. Voiding diaries or urodynamic studies can be used to estimate this volume and appropriate voiding frequency. This can be caregiver-mediated with incompetent or institutionalized patients.

**Bladder training:** Difficult and uncomfortable for patients, evidence exists that lengthening intervals between voiding episodes can be effective at reducing urge and mixed incontinence.

### Pelvic Exercises

Pelvic exercises can be helpful in the mildest cases of pelvic relaxation in motivated compliant patients.

*Prophylactic Kegels* These should be stressed in young females as part of school health curriculum and to pregnant and postpartum females. Little benefit is seen in more severe cases. Interrupting the urinary stream is an effective method of identifying the pelvic floor/sphincter and there is direct feedback when the patient can stop her stream. A few seconds at a time are effective if done frequently, with little risk of leading to incomplete emptying. An analogy for patients is doing sit-ups until one has a hard tummy with good muscle tone even at rest.

*Therapeutic Kegels* Compliant patients with mild-moderate stress incontinence will usually see benefit after 6-12 months of diligent Kegels, in particular learning to interrupt their stream. They need regular

reinforcement and encouragement, as benefits come slowly. Referral to local Physiotherapy or Nurse Continence Advisor will increase likelihood of benefit. Benefits to patients with urge incontinence will be more modest. Kegels should be recommended to men following TURP and Radical Prostatectomy, as the external sphincter becomes the sole method of continence.

***Biofeedback*** Pelvic muscle exercises and bladder inhibition can be augmented by Biofeedback. It is more effective than placebo in women with urge and mixed incontinence.

***Vaginal Weights and Pelvic Exercises*** Vaginal weights add little to the benefits of exercise alone, and local irritation, pain and poor compliance are noted.

***Pelvic Floor Electrical Stimulation*** This is thought to induce electrical activity and contraction in pelvic floor muscles. Good data are lacking, but it may have some benefit in stress and mixed incontinence.

### Neuromodulation

Neuromodulation may take the form of an implanted "bladder pacemaker". It requires test procedures with temporary electrodes and external stimulator. The electrode is implanted at a sacral nerve root, acting to inhibit the bladder efferents. If a favourable result is obtained during these tests, a permanent pacemaker and electrode are implanted.

In highly selected patients this seemingly drastic step can offer improvement in quality of life.

*SANS* (Stoller Afferent Nerve Stimulator) works by a similar mechanism, but by stimulating the posterior tibial nerve above the ankle, which has a common sacral cord insertion as bladder efferents. An acupuncture-type needle is inserted and electrical stimulation is applied. Curling or flaring of the toes indicates the nerve is being stimulated. Half-hour treatments on a weekly basis, eventually stretching out to monthly, are needed. While results are unpredictable, successful results can be observed in patients who have failed to respond to (or could not tolerate) anticholinergic medication.

### Miscellaneous

***Clean Intermittent Catheterization*** (CIC) CIC can be very effective in reducing wetting episodes in patients with overflow incontinence. Patients with atonic bladders with high residuals may benefit from CIC. Clean technique is usually all that is needed unless the patient is immune compromised. Prophylactic antibiotics may be needed in these cases. Nitrofurantoin is an excellent first choice due to the low rates of resistance.

***External Collection Devices*** In males who do not carry high residual volumes, condom drainage is an effective management. Careful skin care is needed to avoid irritation under the condom. There has not been an effective well- tolerated external collection device for females.

***Indwelling Foley Catheter*** This is almost never recommended to manage an incontinent patient. In the short term or with a debilitated patient, an indwelling catheter can offer simplified nursing care and hygiene. However, infections, bleeding, leakage around the catheter, and bladder stones are the frequent end result of a chronic indwelling Foley.

***Suprapubic Catheter*** In highly selected patients a suprapubic catheter is a viable long-term option. Bed bound patients can be nursed more easily with a suprapubic catheter, and the usual complication rates are lower.

***Penile Compression Devices*** There are no good data on penile clamps, compliance is poor and most are uncomfortable in the long term.

***Pessaries and Vaginal Inserts*** These widely used devices suffer poor compliance from local irritation, retention, ulceration. They are usually used in elderly females not otherwise good surgical candidates. Modifications of classic designs to better support the bladder neck and reduce incontinence have unproven track records.

## D – PHARMACOLOGICAL TREATMENT

The following table summarizes the available drugs, their indications, doses and the level of evidence of their efficacy. When anticholinergics are indicated and reimbursement is not an issue, the prescription of long acting formulations (Oxybutinin XL or Tolterodine (Unidet) is preferable over the immediate released ones. This recommendation is based mainly on their better side effect profile and their "one pill a day" presentation.

| TREATMENT | INDICATIONS | GENERIC NAME | BRAND NAME | STARTING DOSE | MAXIMAL DOSE | CLINICAL EVIDENCE |
|---|---|---|---|---|---|---|
| first line | OAB | oxybutynin ER | Ditropan XL® | 5 mg o.d. | 10 mg o.d. | proven |
| | OAB | tolterodine ER | Unidet™ | 2 mg o.d | 4 mg o.d. | proven |
| second line | OAB | tolterodine L-tartare | Detrol™ | 2 mg o.d. | 2 mg b.i.d. | proven |
| | OAB | oxybutynin chloride | Ditropan® | 2.5 mg t.i.d. | 5 mg q.i.d. | proven |
| specific indications | OAB | propantheline bromide | Pro-Banthine® | 7.5 mg t.i.d. | 15 mg q.i.d. | proven |
| | OAB, SUI | imipramine HCL | Tofranil® | 25 mg h.s. | 25 mg t.i.d | suggested |
| | SUI | estrogens | | | | suggested |
| optional | OAB | flavoxate HCL | Urispas® | 200 mg t.i.d. | 400 mg q.i.d. | unproven |

## E - SURGICAL TREATMENT

### Female Stress Urinary Incontinence

Surgery to correct female stress urinary incontinence is indicated when the degree of incontinence is sufficiently troublesome to the patient to warrant surgery, conservative non-invasive therapies have been considered, and the incontinence has been observed by the examiner and its causes adequately evaluated.

### Factors To Be Considered in Choice of Procedure Include

1) Relative contributions of urethral hypermobility and intrinsic urethral insufficiency (ISD).
2) The patient's lifestyle, expectations, age and overall health.
3) Presence of associated pathology (vaginal prolapse, urethral diverticulum).
4) The availability of the technique (re cost for injectable).
5) Regardless of the choice of procedure, the surgeon must be experienced enough with whatever procedure is chosen to perform it competently.
6) The success rates of transvaginal suspensions in general are significantly less than open retro pubic or sling procedures.

### Difficulties in Establishing Evidence Based Guidelines

Many reports lack long-term follow-up, whereas failures often become manifest five years or more after the procedure. Reports of 6-month or 1-year follow-up do not establish efficacy compared to procedures like the Burch Sling, MMK or PV Sling where long-term follow-up of large numbers of patients exists.

There are inconsistencies in the patient selection criteria, definition of success, few studies are prospective and almost none are randomized and comparative.

### General Guidelines for Procedure Selection

1) Primary stress urinary incontinence in the female is effectively treated by a retropubic suspension (Burch or MMK), or a pubovaginal sling procedure.
2) Pubovaginal slings are the procedure of choice in the presence of significant ISD, the absence of hypermobility, or in the treatment following a failed retropubic suspension where an element of ISD is likely.
3) Urethral bulking agents (when available) are recommended as first-line treatment of SUI with or without hypermobility.
4) New, less invasive, techniques like Tension Free Vaginal Tape (TVT) have good short term results, but await long-term and comparative studies to establish their merit and their appropriate indications. Presently TVT has the strongest literature evidence of safety and efficacy
5) Artificial sphincters are not recommended as the primary therapy in women.

### Stress Urinary Incontinence in Men

When lifestyle modifications and pelvic floor exercises fail to improve the patient's quality of life sufficiently, surgical approach must be considered.

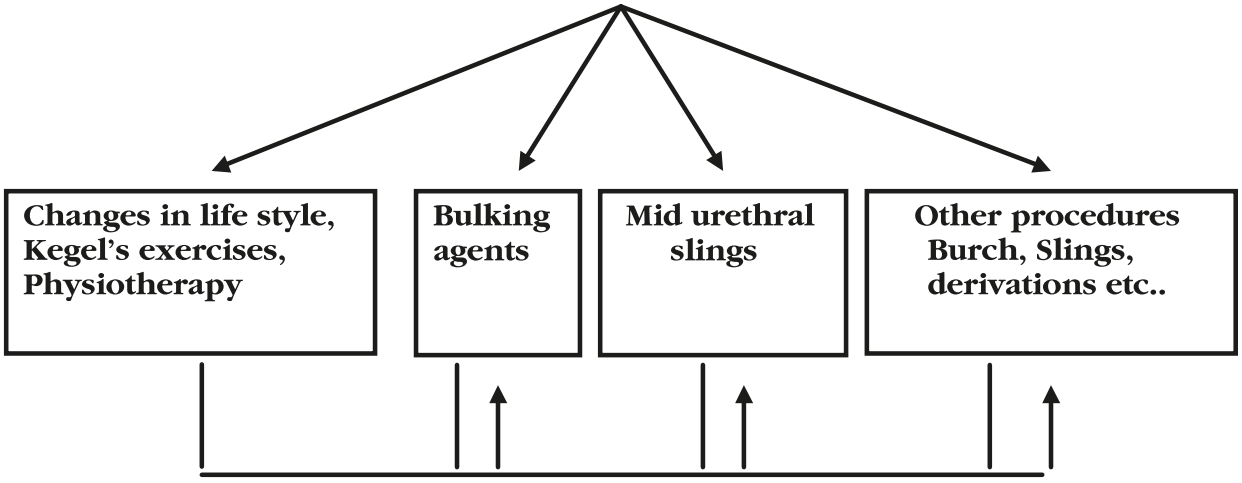
- Periurethral or pericervical bulking injections
  Variable success rates and lack of long-term results don't allow the recommendation of these techniques.
- Artificial sphincters
  It is the treatment of choice in neurogenic and non-neurogenic SUI in men. However, patients must be informed of the high rate of incomplete continence and mechanical failures.
- Male slings
  Different techniques of male slings, with or without bone anchors are presently offered. However, they must still be considered as an experimental approach considering the lack of long-term results available.

### Surgical Treatment of Anatomical Abnormality Leading to Incontinence

Vesicovaginal and ureterovaginal fistulas, ectopic implantation of ureters, urethral diverticulum, etc. are conditions that have to be treated surgically.

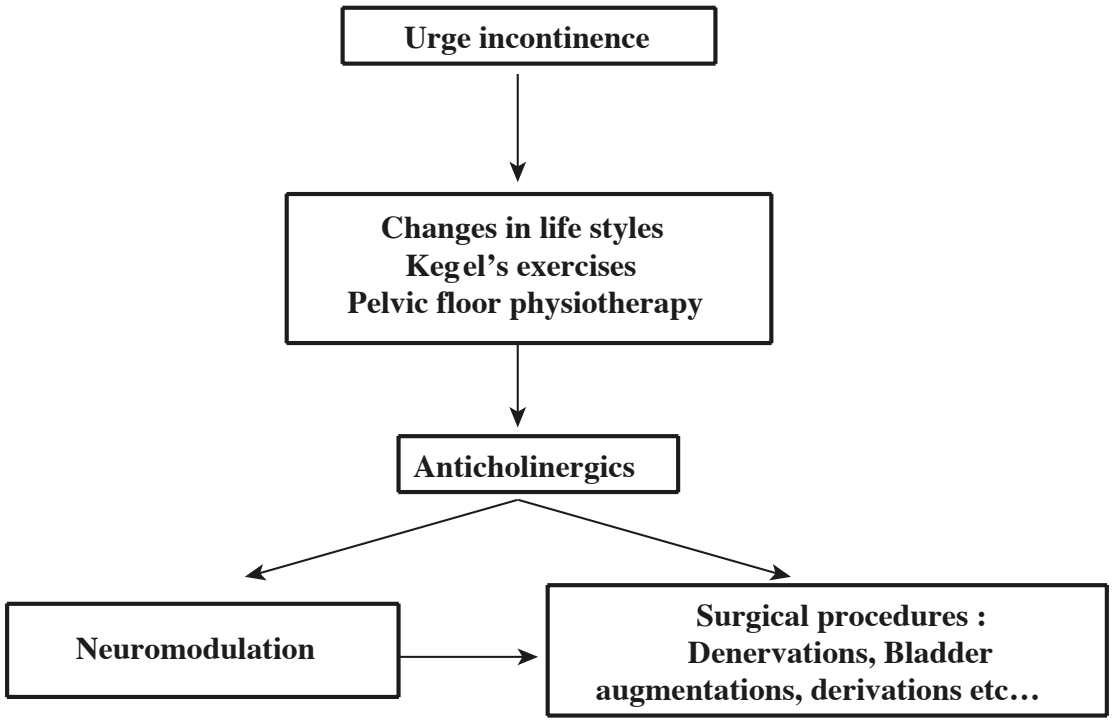
## Treatment Algorithm 1

### FEMALE
### STRESS URINARY INCONTINENCE

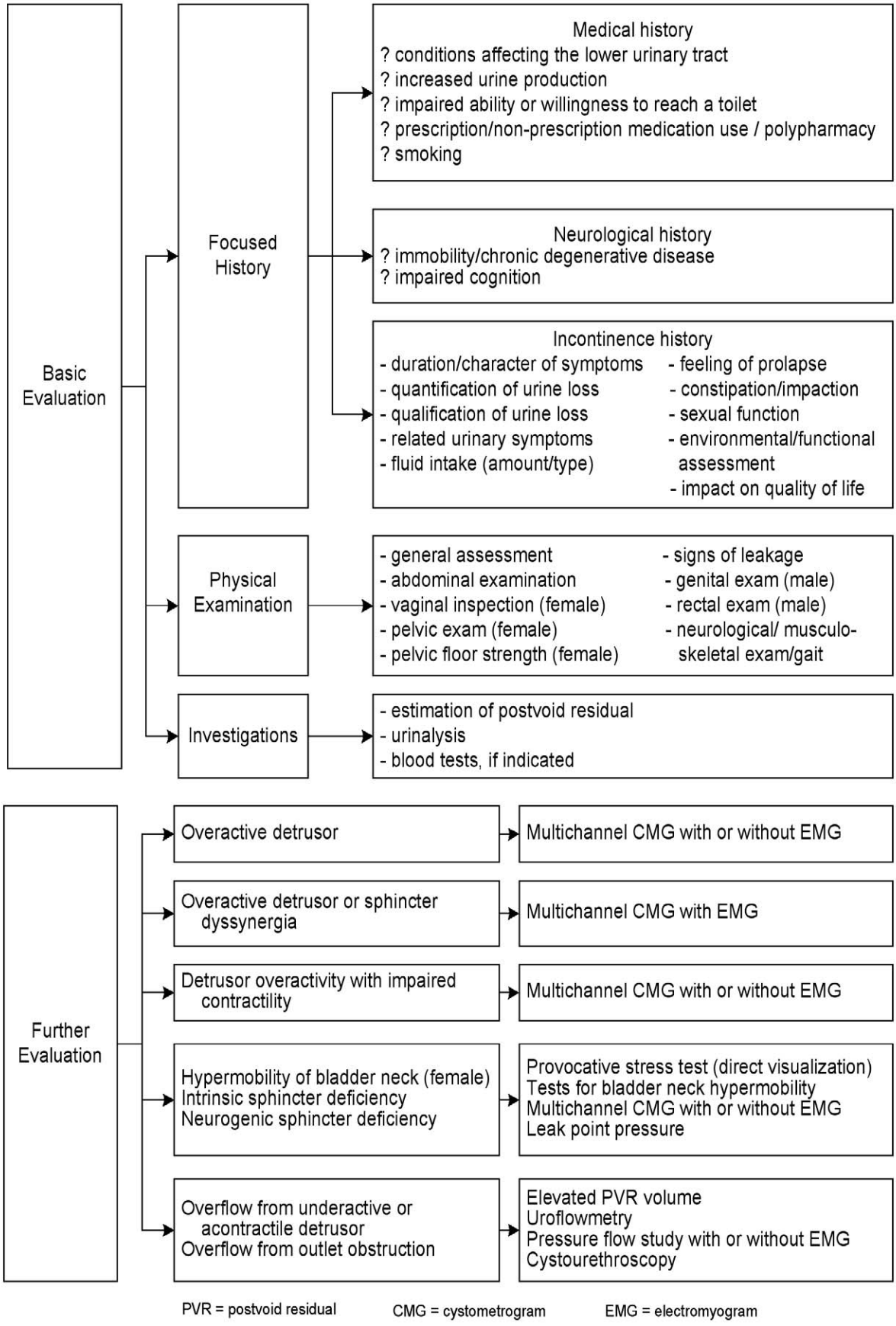



## Treatment Algorithm 2

### FEMALE
### STRESS URINARY INCONTINENCE



# The Canadian Urological Association Guidelines for Investigation of Urinary Incontinence (General)




PVR = postvoid residual CMG = cystometrogram EMG = electromyogram