Urinary incontinence is the complaint of any involuntary leakage of urine and it affects 25-45% of women in the general population. 5-15% of middle-aged and older females have daily incontinence. Consequently, urology nurses will encounter female patients with this symptom in their daily work.

There are several types of incontinence. Stress incontinence is leakage of urine related to coughing, sneezing, laughing, running, jumping, or any other activity that causes the abdominal pressure to rise, squeeze on the bladder and override the bladder’s closure mechanism. Urge or urgency incontinence is the complaint of leakage of urine accompanied by urgency (a sudden compelling desire to pass urine) and inability to get to the bathroom in time. Mixed incontinence is a combination of stress and urgency incontinence: the complaint of involuntary leakage associated with urgency and also with physical exertion, sneezing or coughing.

Urgency incontinence (UI) is one of the 3 symptoms that make up the overactive bladder syndrome (OAB). The other symptoms are urgency and frequency of voiding. OAB is often divided into OAB with incontinence (OABw) and OAB without incontinence (OABw). Urgency incontinence and OAB may be idiopathic or can be associated with many types of neurological disease. The underlying cause of UI and OAB is usually a bladder that contracts involuntarily at the wrong time and place (called ‘detrusor overactivity’).

About 50% of all incontinent women have stress incontinence. Younger women typically have pure stress incontinence while older women usually have mixed or urgency incontinence.

There are risk factors and causes of urinary incontinence.

In stress incontinence they include damage to pelvic floor musculature by pregnancy, labour and delivery. The risk is probably increased by multiple pregnancies, prolonged labour or difficult deliveries. Chronic cough also damages the pelvic floor musculature and may predispose to stress incontinence. Long-term, repetitive, heavy lifting may contribute to stress incontinence. Smoking and obesity are thought to increase the risk of incontinence. Other risk factors include previous pelvic or vaginal radiation and chronic constipation.

In urgency incontinence, risk factors include neurological disease (such as stroke, multiple sclerosis, Parkinson’s disease, spinal cord injury or pathology), diabetes, cognitive impairment or dementia, estrogen deficiency, pelvic organ prolapse, and surgical prolapse repair. Often however the cause of urgency incontinence is idiopathic.

It is important to consider other risk factors that contribute from outside the lower urinary tract and are usually considered to be transient or reversible. It is particularly important to look for them in older people and addressing them may significantly improve or resolve the incontinence. The mnemonic DIAPPERS helps to identify them.

| Delirium                              |
| Infection (symptomatic UTI)          |
| Atrophic vaginitis/urethritis        |
| Psychological (severe depression, neurosis) |
| Pharmacological (side effects of medications) |
| Excess fluid intake or output        |
| Restricted mobility and environmental barriers |
| Stool impaction (constipation)       |

Continued on page 2 & 3
How can a urology nurse do a quick assessment?
A quick history and a bladder diary are helpful in determining the type and degree of incontinence. A bladder diary is available on the website indicated at the end of this article. Ask the following questions:
- How often do you leak urine? [from once a week or less, to several times a day or all the time]
- How much do you think you leak each time? [a small, moderate or large amount]
- How much does it bother you? [from not at all to a great deal]

For patients with stress incontinence the bladder diary will usually show the symptoms of small to moderate leakage, in the daytime, associated with physical activity. For urge incontinence the symptoms are more likely to be larger amounts of leakage, day and night-time, frequency of voiding, and leakage on the way to the bathroom.

What is the evidence-based conservative management of urinary incontinence?

Levels of evidence are expressed on a scale of 1 to 4, with 1 being the strongest.

<table>
<thead>
<tr>
<th>Level of evidence</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>involves meta-analysis of trials or a good quality randomized controlled trial (RCT)</td>
</tr>
<tr>
<td>2</td>
<td>includes lower quality RCTs or meta-analysis of good quality prospective cohort studies</td>
</tr>
<tr>
<td>3</td>
<td>includes good quality retrospective case-control studies or good quality case series</td>
</tr>
<tr>
<td>4</td>
<td>includes expert opinion</td>
</tr>
</tbody>
</table>

Grades of recommendation are derived from the levels of evidence and are expressed on a scale of A to D, with A being the strongest.

<table>
<thead>
<tr>
<th>Grade of recommendation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>usually depends on consistent level 1 evidence and often means that the recommendation is effectively mandatory</td>
</tr>
<tr>
<td>B</td>
<td>usually depends on consistent level 2 and/or 3 studies</td>
</tr>
<tr>
<td>C</td>
<td>usually depends on level 4 studies</td>
</tr>
<tr>
<td>D</td>
<td>“No recommendation possible;” usually used where the evidence is inadequate or conflicting</td>
</tr>
</tbody>
</table>

The conservative management of urge incontinence includes the above, with the addition of:
- caffeine reduction (grade of recommendation B)
- dietary restriction (spicy foods, alcohol, acidic foods, carbonated drinks, artificial sweeteners)
- urge suppression (quick pelvic floor muscle squeezes combined with relaxation techniques, to control the bladder when urgency is experienced: a strategy highly valued by patients)
- bladder training (grade of recommendation A)
- habit training or timed voiding with 2-hour voiding intervals (grade of recommendation C)

Further description of conservative therapies

Fluid management:
- If the diary indicates fluid intake below or over 6-8 glasses per day, recommend that intake be increased or decreased accordingly. It is also important that intake be balanced throughout the day and decreased in the evening if there are night-time issues (grade of recommendation C).

Behavioral therapy includes
- decreasing excessive fluid intake (but adequate fluid intake should be maintained)
- voiding every 3 to 4 hours during the day
- bowel management
- quitting smoking (Level of evidence 2)
- losing weight (if overweight) (grade of recommendation A)

Weight loss programs: There is moderate evidence that nonsurgical weight loss in obese patients is effective in urinary incontinence (level of evidence 1).

Pelvic floor muscle training (PFMT)
- the exercises increase the strength and function of the pelvic floor muscles and urethral sphincter (see website) (grade of recommendation A)
- biofeedback and electrical stimulation therapy (usually done by a specialized physiotherapist or nurse) may be helpful for those who find it difficult to do pelvic floor muscle exercises and for those who do not improve on a home regime. Biofeedback added to PFMT may provide additional benefit.

Bowel management:
- Existing constipation should be treated (level of evidence C)

Caffeine reduction:
- Reducing caffeine intake improves frequency and urgency (level of evidence A)

Bladder training:
- This involves increasing time between voids using urge suppression (see sheet on website). It is a recommended first-line therapy for urgency incontinence (grade of recommendation A).

Pessary:
There is some evidence for treatment of urinary incontinence with a pessary (a vaginal device intended to elevate the pelvic floor, support the bladder neck and compress the urethra). It may be effective in managing stress incontinence, particularly...
Absorbent products
Containment products are not the first line of management for incontinence but they are an important component of a comprehensive approach. Provision of good quality products enhances quality of life. Women should be encouraged to use an incontinence product rather than a menstrual one, to protect the skin and control odour. In stress incontinence a pad with an adhesive strip, placed inside close-fitting underwear, is recommended.

Case study 1 - Female with urgency incontinence
Lydia is a 52 year old female hospitalized for an open nephrectomy. She has a 2-year history of urinary incontinence. She works as an accountant and is distressed with the impact this is having on her work and social life. She experiences frequency every 30 min to one hour during the day and gets up twice at night. She gets a sudden urge to void and leaks moderate to large amounts, especially at night. Her urgency is triggered by running water and cold temperatures.

She had a hysterectomy at age 50. Her BMI is 27 (overweight) and she reports frequent constipation. Urinary tract infection has been ruled out.

She restricts her fluids, has given up caffeine with some good effect and does not drink alcohol.

Her bladder diary shows a low fluid intake (1 cup of water in the early morning and 2 cups in the evening). She voids 8 times during the day. Her leakage occurs day and night and usually on the way to the bathroom.

Discussion
Lydia’s history and bladder diary are an indication of urgency incontinence, and her symptoms of urgency and frequency with leakage match the definition of OAB

What do we advise?
Initially we would try conservative therapy. This would include:

1. Lifestyle changes
   - Fluid adjustment: encourage fluid intake of 6-8 cups with a balanced intake throughout the day but decrease evening intake due to nocturia.
   - Continue to eliminate caffeine and check for other bladder irritants.
   - Encourage weight loss, as it has been shown to improve urgency symptoms.

2. Behavioural therapy includes:
   - Pelvic floor muscle training, urge suppression and bladder retraining. This therapy teaches the patient to progressively postpone voiding using urge suppression and pelvic muscle contractions. It can be helpful in reducing or curing frequency and urgency.(For patient instruction sheet see website.)
   - If Lydia is not improving she should be referred to a physiotherapist for pelvic floor muscle training, possibly with additional biofeedback or electrostimulation.

3. Bowel management
   - Increase fibre and exercise. Encourage adequate fluid intake, especially water. Avoid laxatives if possible. (For patient instruction sheet see website.)

4. Vaginal estrogen has been shown to be effective in alleviating the symptom of urgency (refer to family physician).

5. Products
   - While incontinence persists, suggest that she use a product suitable for her degree of incontinence. It might be an extra absorbent pad, a slip-on, or protective underwear.

When conservative therapy does not work for the overactive bladder

- Medication
  If conservative therapies are unsuccessful, Lydia should see a physician regarding a trial of antimuscarinic (anticholinergic) medication (e.g., oxybutynin, tolterodine, darifenacin, solifenacin, or trospium). A newer drug, mirabegron, with a different mode of action is also available.
  Lydia should be monitored by the prescribing physician and another medication should be tried if the one she is using is not effective.

- For the patient who has not improved with behavioural therapy alone, a combination of drug and behavioural therapy might be more successful. It may be possible to weaken her from medication as bladder control improves.

- Botox is now an approved therapy for patients with refractory overactive bladder.

As a urology nurse you can make a significant difference to the quality of life of patients like Lydia by addressing urinary incontinence, introducing conservative therapies and utilizing professional resources.

By Gloria Harrison, RN, NCA and Derek Griffiths, PhD
Website www.learncontinence.com

References
The 27th Urology Nurses of Canada’s conference was hosted by the Ottawa chapter at the majestic Fairmont Chateau Laurier. Sue Freed and the organizing committee did an amazing job, it was a huge success. All delegates were treated like royalty and any encounter with the hotel staff was met with a resounding “my pleasure.”

The welcome reception was a great way to network with colleagues from across the country. It was also a good opportunity to meet the industry representatives to learn about the new equipment and products that are available for your practice.

Friday morning Dr. Anthony Bella M.D., FRCS (C) started the conference with his presentation “Levering our Care of Non-Oncologic Urological Disease to Impact Overall Men’s Health - more Opportunities than you think!” This gave us all inspiration to help educate men on how to have a healthier life. We were given a great synopsis on the evolution of castrate resistant prostate cancer and the role of targeted agents by Dr. Bobby Shyeghan, M.D. FRSC (C). Dr. Hisham KHalil Bsc, M.D. FRCS (C) explained pelvic floor dysfunction and female incontinence from a gynecologist’s perspective. I particularly enjoyed the talk on PSA screening guidelines by Louis Watson RN. This was timely as the Task Force Statement on PSA screening was released in Oct. 2014 and I felt I had been educated and could offer an opinion. We finished off our day with an invaluable talk from Dr. Katherine Moore RN PHD on Indwelling Catheters in Acute care. How we can prevent trauma from the catheter by reducing tension. This will change practice in urology care across Canada.

Friday night, was a night to relax in the drawing room of the hotel. Laughing and socializing as we tried to solve the Big Times Murder Productions murder mystery. Great food, great friends, great night!

Saturday morning Dr. Simon Pierre M.D.FRCS (C) gave us a look at the state of the art treatment for renal cell carcinoma and “The new frontiers of treatment”. This was followed by Dr. Ingrid Harle M.D. FRCS (C) and Jan Giroux, RN MSn, CCN (C), both of whom spoke on palliative care in urology. The differences between end of life care and palliative care. How to get quality of life with a terminal illness through shared care.

During the concurrent sessions we were updated on Vaginal Atrophy, Education of Patients Post Treatment of Prostate Cancer, A Patients Perspective, Building a Culture of Continuous Performance Improvements and Well patients with chronic diseases to name but a few of the topics.

Saturday’s lunch was extra special with “High Tea” served in the drawing room. Everyone was greeted before entering the room and handed a beautiful fascinator which was hand made by our Conference Chair, Susan Freed. During the luncheon the awards were handed out. I was honored to be one of the recipients of the UEC Attendance Award along with Heather Ley and Ellen Young-Morse. The Award of Merit was awarded to Lisa Lynch for all her hard work and commitment to the UNC over the years. The Life Time Members Award went to a very surprised and deserving Katherine Moore for her years of dedication to the field of Urology Nursing and the UNC.

Another highlight was a clear and straight forward explanation from Mark Kearney on antibiotics and anticoagulation for the urology patient. I loved the way he explained dosages and duration of all the different drugs. This pharmacist was so clear that I have a better understanding of the new, the old, and the ones that we should be using. He highlighted why some drugs need a high level in the body, some need a level for many days and some need both. Some antibiotics are being under used and some over used.

We were sent home with an inspirational talk from Kathie Donovan on “How to make the shift to Happiness.”

The conference is over for another year; the awards have been given out, education updated, networked with old and new colleagues, and we came home with renewed energy and confidence that we are giving great care and meeting the standard in urology across the country. A big thank-you to the Ottawa Chapter. Plan to attend next year in Edmonton Alberta.

Emmi Champion RN NCA
UNC Provincial Representative for NS
After 6 years as our President, Fran Stewart has now moved on to the role of Past President. Fran has been instrumental in keeping education as UNC’s priority. During her terms as President/ Sponsorship, both the UEC Attendance and the Nursing Education Initiative awards were created. Fran has done a phenomenal job working with our sponsors and has kindly agreed to carry on for the time being. Please join us in recognizing and thanking Fran for all she has accomplished over the past six years!

The UNC Executive was saddened to receive and accept the resignation of LuAnn Pickard effective November 7, 2014 as the UNC Executive Secretary. LuAnn has been a great asset to the board since taking on the position in 2009 and leaves a big set of shoes to fill. LuAnn’s warm smile, sense of humor and “get the job done” attitude will be greatly missed. Please join us in thanking LuAnn for her all her past work. (Note: For the time being the duties will be shared among the existing board.)

UNC Kingston Chapter News

UNC Kingston Chapter is still going strong thanks to our incredible group of nurses.

We had great representation at the national meeting in Ottawa, with 8 of our group participating. Amazing conference!

We continue to offer fantastic learning opportunities:
- Monthly evening meetings – multi-sensitivities in the IC/BPS population, UTIs and the elderly, Reflective Practice, etc
- Hospital lunch and learns- Bladder cancer, interstitial cystitis, prostate cancer, incontinence.

We are currently working to change hospital policy on meatal cleansing pre-catheterization.

Our April Memorial Conference is in the final stages of planning. Guest speakers are Dr Shawna Johnston speaking on “sexuality and the aging woman”, and Dr Steele speaking on “sexuality and the aging man”. The combination of these dynamic speakers and interesting topic are sure to bring the crowds.

By Kerri-Lynn Kelly
UNC Kingston Chapter President

Montreal Chapter News

The Montreal Chapter of the UNC hosted an educational event on September 10, 2014. The event was sponsored by Novartis. We were pleased to have fifteen nurses in attendance. Our speaker Stephane St. Pierre presented on Tuberous Sclerosis. We look forward to an opportunity to host further events in the future.

By Raquel DeLeon
UNC Provincial Representative for QC

Saint John Chapter News

Thandis was the place to be on June 16, 2014 for an evening of learning and great dining (delicious food). Fifty five nurses were in attendance. The evening was generously sponsored by Astellas. Our Urology Resident, Dr Ross Mason presented on overactive bladder and treatment options. Two of our own Urologists were in attendance also. Dr Steven Bryniak reviewed prostate cancer with watchful waiting as a treatment option. Dr Tom Whelan ended the evening speaking on renal calculi, treatment options and helpful dietary changes.

General information on the Urology Nurses of Canada and our membership was handed out and a brief overview given. Attendees were made aware of the UEC in Ottawa. A nurse from the Extra mural programme in Sussex won a free registration to attend the conference September 18-20th and one of our OR Nurses from St. Joseph’s Hospital won a free 2015 UNC membership.

Many thanks to all who participated and made the evening such a success. Remember, UNC chapters do not have to be large to make a difference. We are planning to hold this event again and the date will be announced in early 2015.

By Nancy Carson RN, NCA
Secretary, Saint John local chapter. UNC Treasurer

Victoria Chapter News

The Victoria chapter has an active core group that is busily working at increasing it’s membership. The group is currently planning education sessions for the New Year. Stay tuned!

By Jill Jeffery
UNC Executive

President: Gina Porter
Past President: Frances Stewart
Vice-President West: Liz Smits
Vice-President Central: Susan Freed
Vice-President East: Frankie Bates
Membership: Sylvia Robb
Sponsorship: Frances Stewart
Treasurer: Nancy Carson
Secretary:

UNC Provincial Representatives

West: British Columbia: Shirley Turcotte
Alberta: Linda Brockmann
Saskatchewan:
Northwest Territories: Dot Bergman
Central: Manitoba: Emily Blunden
Ontario: Sandi Disher
Ontario: Jan Giroux
Quebec: Raquel De Leon
East: New Brunswick: Nancy Carson
Nova Scotia: Emmi Champion
Newfoundland and Labrador: Sue Hammond
Prince Edward Island: Kim Smith

How to form a local UNC Group

1. Contact nurses and allied health in your area interested in Urologic Nursing.
2. Pick a topic and a speaker (for initial meeting).
3. Book meeting room
4. Contact local sales rep for potential support of meeting.
5. Advertise meeting and distribute information about the UNC.
6. Create local executive e.g. chairperson, secretary, treasurer.
7. Organize educational meetings/events.
8. Contact UNC provincial representative regarding local business meetings.
9. Encourage submissions of articles and upcoming events to The “Pipeline”.

Local Chapter news info: www.unc.org

Victoria Info: Jill Jeffery - Tel: (250) 658-5632
Edmonton Info: Liz Smits - Tel: (780) 407-6154
Toronto Info: Frances Stewart - bladderqueen@hotmail.com
Kingston Info: Sylvia Robb - Tel: (613) 548-7800
Ottawa Info: Susan Freed - freeds@teksavvy.com
Montreal Info: Raquel DeLeon - raquel.deleon@muhc.mcgill.ca
New Brunswick Info: Gina Porter - gina.porter@horizonnb.ca
Halifax Info: Emmi Champion - emmi.champion@cdha.nshealth.ca
Newfoundland Info: Sue Hammond - Tel: (709) 368-0101
Comming Events

28th Annual Urological Excellence Conference

“Branch Out: Discover and Embrace Change”
September 17th –19th, 2015
Westin Hotel
Edmonton, AB

Call for Abstracts open soon!
Please visit www.unc.org

Abstract deadline is February 28th, 2015.

70th Annual CUA
June 27th—30th, 2015
The Westin Ottawa,
Ottawa, ON
www.cua.org
Nurses meeting at CUA
Details to be announced

28th Annual UEC
“Branch Out: Discover and Embrace Change”
September 17th –19th, 2015
Westin Hotel,
Edmonton, AB
www.unc.org

45th Annual ICS 2015
October 6th - 9th, 2015
Montreal, Quebec
www.iscoffice.org

2014 Annual CANO/ACIO
October 4th - 7th, 2015
Fairmont Royal York Hotel,
Toronto, ON
www.cano-acio.ca

Society of Urologic Nurses and Associates:
46th SUNA Annual Conference
October 23rd– 26th, 2015
Rio All-Suite Hotel,
Las Vegas, NV, USA
www.suna.org
find SUNA on facebook-
www.facebook.com/UrologicNursing

If your chapter or organization has an upcoming event that you would like to advertise in the Pipeline, submit the information with contact email to uncpipeline@hotmail.com