Aims of course/workshop
This workshop will focus on the assessment and conservative management of urinary incontinence in special populations including cognitively impaired older adults and postpartum women. This workshop is in English but being translated into Japanese.

Learning Objectives
After this workshop participants should be able to:
1. Increase knowledge of incontinence assessment including interpretation of urodynamic testing results
2. Discuss current research/evidence-based approaches for managing incontinence in high risk populations such as older adults with dementia and postpartum women
3. Examine the role of the nurse on multi-disciplinary teams managing incontinence

Learning Outcomes
After the course, the student will be able to:
1. Apply the information and knowledge gained to update their clinical practice skills
2. Use the information to develop or improve service provision for patients in their practice, e.g. postpartum women or older adults with dementia in long-term care incontinence within their local area
3. Inform or educate colleagues of the most current approaches for managing incontinence the patient groups discussed

Target Audience
Nurses and members of other health care disciplines who collaborate with nurses in research and practice.

Advanced/Basic
Basic

Conditions for learning
This course is interactive and will encourage discussion of case studies.

Suggested Reading before workshop attendance
Delegates are not required to complete any reading or webcasts before attending the workshop.

Suggested Reading
• Satoh W, Horie T. Changes in Lower Urinary Tract Symptoms and QoL in Frail Elderly Over a One-Year Period. 43rd Annual Meeting of the International Continence Society, Barcelona; August, 2013.
• Satoh W, Suyama K, et.al. Outcome of Toileting assistance guideline for frail elderly to facilitate Evidence Based Practice, 19th Japan Academy of Gerontological Nursing Conference, Nagoya, June, 2013.

Donna Bliss
This workshop, planned by the ICS Nursing Committee, will feature three speakers focusing on nurse-led initiatives regarding the assessment and conservative management of urinary incontinence. These topics are an integral part of nursing care across clinical settings and patient populations. The workshop focuses on populations at high risk for incontinence and will explain the technology of urodynamics testing.

More specifically, the first speaker will address evidence-based management of urinary incontinence in older adults with cognitive impairment/dementia in long-term care. The session will focus on the role of prompted voiding and highlight new modifications of the procedure used in Japan. The speaker will share her experience utilizing this intervention and evaluating its effectiveness and invite participants to do so also.

The second speaker will focus on the prevention and management of postpartum incontinence and explain the use and effectiveness of pelvic floor muscle training for this problem. The management of postnatal retention of urine in postpartum women will also be discussed.

The third speaker will explain the indications for urodynamic testing and the interpretation of testing results. She will discuss how to identify good quality tracings and show how knowledge of those results can be used to inform nursing practice and improve patient care.

Case studies will be used by all speakers to increase understanding of key points as well as to stimulate discussion of effective continence care approaches. Participants will be encouraged to discuss their own experiences and dilemmas in their various international settings.

Wakako Satoh
Behavioural Management of Incontinence in Cognitively Impaired Elders
In 2015, Alzheimer's Disease International (ADI) reported that, nearly 47 million people worldwide live with dementia. This number is expected to more than triple by 2050 to 132 million. Urinary incontinence is a common problem in dementia particularly in nursing home settings. While incontinence in cognitively impaired older adults is often considered, “functional incontinence,” these individuals can experience a variety of lower urinary tract symptoms (LUTS) at different times during their disease. Furthermore, LUTS in patients with dementia is often multifactorial, including not only the effects of their underlying neurological disease, but also those of other co-morbid health problems and/or pharmacotherapy. Consequently, different therapeutic approaches may be needed during the course of the disease.

A common approach to managing urinary incontinence in patients with dementia is behavioural therapy, primarily focusing on toileting interventions. One of these toileting approaches, “prompted voiding,” is recognized as a useful behavioural intervention for cognitively impaired elders. Prompted voiding typically combines regular prompts to toilet with positive feedback and social support when the residents voids in the toilet. Nursing staff participate in implementing prompted voiding. In a recent systematic review of systematic reviews, Roe and colleagues reported that there is evidence to support the short-term effectiveness of prompted voiding. Their conclusion is consistent with the previous systematic review of Eustice et al. Both reviews cited the lack of research examining the long-term effects of this intervention.

Modified prompted voiding protocols have been developed in recent years in Japan. In this workshop, we will introduce this innovative behavioural intervention procedure and new technology for the assessment of its outcomes using case studies from nurses caring for residents in long-term care facilities. In addition, we will discuss the role of the nurse on interdisciplinary teams in long-term care and in home care aimed to improve management of urinary incontinence in cognitively impaired elders in the future. Participants are invited to discuss their experience with strategies for managing urinary incontinence in older adults with dementia in their countries.
**Take home message**
Different therapeutic approaches may be needed to manage urinary incontinence in older adults with dementia during the course of their disease. Prompted voiding and modifications of this procedure seems effective for managing incontinence in older adults with dementia in long-term care.

**References**

**Karen Logan**

**Postpartum Continence Care**
Urinary leakage after childbirth can be a common and upsetting problem for women. Postnatal care in the period after birth is an important time to engage women in preventative health strategies and promoting continence. This lecture will discuss postpartum incontinence including, symptoms, screening, assessment and practical advice and interventions. Case studies advocating pelvic floor muscle exercises will be used to illustrate the benefits of post-partum care.

Postpartum urinary incontinence is an important but often an overlooked form of maternal morbidity. Studies have shown that vaginal delivery induces urinary incontinence, especially the first vaginal birth. Studies have also attempted to discover the particular obstetric event that causes the incontinence. Large babies and “difficult deliveries” with lengthy pushing phases with or without instrumentation are implicated. No clear single event is responsible, postpartum urinary incontinence arises from multifactorial factors. The consequences of this pathophysiology are not limited to urinary incontinence. Pelvic organ prolapse (cystocele, rectocele, and uterine prolapse) and anal incontinence are also troublesome sequelae of vaginal delivery.

Preventing the damage that causes postpartum urinary incontinence is difficult, but mitigating the damage is an important endeavour for nurses, midwives and physiotherapist. New mothers will benefit from routine symptom screening and early discussion of healthy drinking, bladder habits and proper muscle training techniques as part of their postpartum care. Pelvic floor muscle exercises not only help to strengthen the muscles but they can enhance healing and reduce swelling by increasing blood circulation to damaged tissue. Educating patients and offering pelvic floor muscle rehabilitation can be advantageous in most cases but not all as some women will remain symptomatic following treatment. However, there are still imperatives for new mothers to be offered information about healthy bladder habits and pelvic floor muscle training.

The screening of women at postnatal contact is considered best practice and guidance recommends the following questioning to ascertain:
- Whether women have any concerns about the healing of any perineal wound (healthcare professional should offer to assess the perineum if the woman has pain or discomfort).
- Whether urinary incontinence symptoms exist, asking questions about bladder emptying and bowel function.
- Whether they have opened their bowels within 3 days of the birth. (women who are constipated and uncomfortable should have their diet and fluid intake assessed and offered advice on how to improve their diet) A gentle laxative may be recommended if dietary measures are not effective.
- Whether faecal incontinence is present and they should be assessed for severity, duration and frequency of symptoms. If symptoms do not resolve, evaluate further.

**Take home message**
Pelvic floor muscle training should be offered after child birth to prevent and treat incontinence. Pelvic floor muscle exercises should be commenced as soon as possible after the delivery.

**References**
This session will give an overview of the different types of urodynamic testing, i.e., standard, video, and ambulatory and their indications. It is designed to assist nurses and allied health professionals who might have limited knowledge or experience in this technology gain insight and confidence in interpreting urodynamic tracings and applying the findings in their clinical practice.

Performing and interpreting tracings of urodynamic testing can be daunting. Brubaker1 pointed out that for many decades performance and interpretation of urodynamics was a sign of expertise in lower urinary tract dysfunction. It requires a high level of knowledge of lower urinary tract function and the technical aspects of proper testing as well as keen and insightful clinical interpretation of findings. Most of the literature on this topic has been published by urologists or medical professionals with very little published by nurses despite the fact that many urodynamic clinics are run by nurses. Understanding how to interpret the tracings could help nurses and allied health professionals gain confidence in evaluating patients’ symptoms when implementing and promoting bladder management programs.

Using urodynamic findings in clinical practice relies on the ability to identify and recognise normal urodynamic tracings versus abnormal tracings. It also requires the ability to identify tracing findings indicative of detrusor over-activity and differentiate types of urinary incontinence and bladder outflow obstruction. This session will include discussion on how to identify the pitfalls in interpreting tracings and artefacts recorded during the test and how to detect a good quality urodynamic results in accordance with the Good Urodynamics Practices advocated by ICS standards. Samples of artefacts of real cases tracing will be used for these purposes.

Understanding the tracings can assist continence nurse advisors to more fully appreciate the difficulty that patients encounter and increase confidence in tailoring a bladder management plan, especially when a patient has small functional bladder capacity with huge detrusor contractions and symptoms of incontinence. The result of urodynamic testing can assist nurses and allied health professional team members to answer patients’ questions about their symptoms during and following the procedure. Schafer et al.2 explains that the aim of urodynamic is to reproduce patients’ symptoms whilst making precise measurements in order to identify the underlying causes for their symptoms. This is especially important when conservative treatment has failed or there is a need to change the management approach. It is also paramount that nurses and allied health professional are able to understand the urodynamic report presented to them and whether it is of high quality in accordance to the ICS Good Urodynamic Practice.

Take home message
Understanding urodynamic testing and its indications and being able to interpret its results will assist nurses and allied health professionals to implement and promote optimal bladder management programs.

References
Wakako SATOH, RN, Ph.D

Affiliations to disclose†:

Nothing

† All financial ties (over the last year) that you may have with any business organisation with respect to the subjects mentioned during your presentation.

Funding for speaker to attend:

☐ Self-funded
☐ Institution (non-industry) funded
☐ Sponsored by:

ICS Core Curriculum
Nurse Lead Continence Care

Management of Urinary Incontinence in Cognitively Impaired Elderly
認知症高齢者の尿失禁マネジメント

14th, Sept, 2016

Wakako SATOH, RN, Ph.D
Division of Clinical Nursing, School of Nursing, Yamagata University Faculty of Medicine

Contents
内容

1. Characteristics of Lower Urinary tract symptoms: LUTS and Urinary Incontinence: UI
認知症高齢者の下部尿路症状と尿失禁の特徴

2. Approach to evaluate UI and Management
認知症者の尿失禁評価へのアプローチとマネジメント

3. Behavioral Therapy
尿失禁を有する認知症者のための行動療法

4. Case Study and Outcome
事例検討とPVの成果

5. To promote Nursing Practice and Behavioral Therapy for Cognitive impaired patient with UI
尿失禁を有する認知症高齢者の看護と行動療法の推進に向けて

6. Future
未来

1. Characteristics of LUTS and UI in patient with Dementia
認知症高齢者の下部尿路症状と尿失禁の特徴

1) Over Active Bladder
過活動膀胱

Frequency: 頻尿 + Urgency: 尿意切迫

Causes (原因): Ageing (加齢), Disease (疾患), Memory deficit (記憶障害), etc.

2) Urinary Incontinence: 原失禁

(1) Functional urinary incontinence
機能性尿失禁
(2) Urgent urinary incontinence
切迫性尿失禁

Executive Dysfunction → They can't plan to execute voiding
遂行機能障害

Cognitive Impaired Symptoms and Disabled Toilet ADL
認知症状とトイレ動作の障害

Disorientation → They don't know where the toilet room is
見当識障害

Memory Problem → They have impaired memory for everyday urinary voiding habit.
記憶障害

Agnosia → They can't recognize the toilet as the toilet.
失認

Apraxia → They can't use correctly the toilet.
失行

Executive Dysfunction → They can't plan to execute voiding
遂行機能障害

LUTS trend to increase with aging.
下部尿路症状は、加齢に伴い増加する。

2. Approach to evaluate UI in dementia Patients

UI

1. Describe the problem
2. Exclude reversible causes
3. Analyze the possible contributory factors

Cognitive Deficits
Mobility/Motor Problems
Behavioral problems

4. Evaluate for type of UI

Functioning of daily living
Non-invasive assessment of bladder function

Perspective Management of UI for dementia Patient

Therapeutic intervention
- Behavioral Therapy
- Physiotherapy
- Medications
- Absorbent Pads

Education
- Constipation Protocol
- Dietary/Fluid Advice
- Perineal hygiene and care
- Teaching behavioral intervention
- Teaching supportive intervention

3. Behavioral Therapy for UI

尿失禁のための行動療法

Toileting assistance (排尿指導)

Prompted voiding
Habit training
Scheduled toileting

Bladder Retraining
Pelvic floor muscle rehabilitation

Promoted Voiding: PV

Promoted voiding (PV) is a behavioral therapy in which patients are given social approval for requesting toileting assistance, either spontaneously or in response to a verbal.

PV は、患者が自発的、または言葉がけに応じてトイレを依頼し成功した時に、「社会的賞賛」の言葉がけを行っていく行動療法。

PV Protocol (プロトコール)

Baseline Assessment (現状評価)

Baseline 3 days

Intervention 6-12 weeks
介入

Follow up

Social Approval and/or Social reinforcement

by verbal or non-verbal communication!
（コミュニケーションによる社会的賞賛）

Example: social approval conversation

After asking if the patient was wet or dry, immediately give feedback as to accuracy.
(e.g., “That’s right Ms. X, you are dry.”)

If dry, the patient was given social reinforcement.
(e.g., “You are doing such as good job keeping dry. I am so proud of you.”)
The criteria for PV adaptation:

1. Cognitive impairment level unknown
   認知機能不全
   (1) Cognitive impairment level unknown

2. Mobility: Not bed bound
   席位以上
   (2) Mobility: Not bed bound

3. Communication: Nonverbal Communication is available at least.
   何らかの意思疎通が可能
   (3) Communication: Nonverbal Communication is available at least.

4. Bladder Function
   膀胱機能
   (4) Bladder Function
   \( \text{Bladder Function} \) by Ouslander et al., 1995
   \( \text{Voiding Volume/time} \) About 200mL
   \( \text{RUV} \) Less than 150mL
   \( \text{UI rate} \) About 20% ≤

General Health status
   健康状態全般
   (5) General Health status

ADL + IADL
   ADL・手段的ADL
   (6) ADL + IADL

Cognitive function
   認知機能
   (7) Cognitive function

Environment
   環境
   (8) Environment

PV Baseline Assessment (PV初期アセスメント)

Comprehensive Geriatric Assessment
   高齢者総合機能評価
   (9) Comprehensive Geriatric Assessment

Non-invasive Bladder function
   非侵襲的膀胱機能
   (10) Non-invasive Bladder function

Residual Urine Volume by Portable Ultrasound Device
   Lilium α-200

Analysis Bladder Volume Chart
   排尿量日誌の分析

Observation Index
   観察指標

Symptoms
   症状

Frequency/Adaptation
   頻度・適応

Nocturia/overnight
   夜間排尿

Voiding Pattern
   排尿パターン

Max Voiding Volume/time
   最大1回排尿量

UI Rate
   尿失禁率

RUV
   残尿量

Drink water amount
   飲水量

Outcome (成果)

1. Improved UI 尿失禁の改善
2. Improved ADL & morbility ADLと移動能力の改善
3. Improved behavioral problem 行動障害の改善
4. Decreased number of absorbent pads おむつ枚数の減少
5. Decreased costs for continence care キャストの削減

Increase of Quality of Life in Dementia Patients and their Family
   認知症患者と家族のQOLの向上
5. To Promote Nursing Practice and Behavioral Therapy for Cognitive Impaired patient with UI

1) Evaluation of Comprehensive Geriatric Assessment including Cognitive Function

2) Evaluation of Noninvasive Bladder Function

3) Adaptation of Appropriate Behavioral Therapy

4) Effective Communication Skill

5) Integrate with Advanced Dementia Nursing

We need to provide effective nursing interventions and behavioral therapy for frail and/or dementia patients with UI in all health care settings.

References

Affiliations to discloseootnote{All financial ties (over the last year) that you may have with any business organisation with respect to the subjects mentioned in your presentation}:

Funding for speaker to attend:
- Self-funded
- Institution (non-industry) funded
- Sponsored by:

Postpartum Continence Care

Karen Logan RGN, MSc
Consultant Nurse
Head of Continence Services
Aneurin Bevan University Health Board UK

Introduction

- Urinary Incontinence is a significant health problem for women associated with pregnancy and childbirth (Rortveit 2003, Wilson 1996)

出産後・妊娠・出産による重要な健康問題

- Pregnancy and the postpartum period is often the first time many women experience urinary leakage

妊娠中・出産後に多くの女性が初めて尿失禁を経験する

- Approx up to 38 % (Morkved 1999) of postnatal women have urinary incontinence 3 months after pregnancy

出産後の女性の38%は妊娠3か月後に失禁を有する

WARNING
Giving Birth May Damage Your Health

警告：出産はあなたの健康を害するかもしない

Introduction

- New mothers benefit from postpartum screening for incontinence National Guidance (NICE 2015)

英国のガイドライン：初産婦には出産後の失禁評価が有用

- In France all women offered 10 sessions with a physiotherapist after childbirth

フランスでは出産後に10回のPTの治療が受けられる

- Health professionals - postpartum continence care

医療関係者が出産後のコンチネンスケアに係わる
Urinary problems associated with pregnancy and childbirth

- Urinary Stress incontinence
- Urgency, urge incontinence

Risk Factors for Perineal Trauma

- Vaginal Delivery
- Instrumental Delivery
- Abnormal presentation/position
- Induction of labour
- First baby
- Higher maternal age

The injury complex

- Pelvic Floor Injury
- Muscles
- Endopelvic fascia
- Nerves
- Sphincters

Risk Factors for Perineal Trauma

- Epidural anaesthesia
- Prolonged active 2nd stage
- Birth Wt > 4Kg, large head circumference
- Episiotomy (may result in weakening of pelvic floor leading to Faecal Incontinence)
Pelvic floor muscle training should be offered to women in their first pregnancy as a preventive strategy for urinary incontinence.

Postnatal period

Pelvic floor muscle training (PFMT)

- Popularized by Arnold Kegel 1948
- PFMT is the principle treatment for stress and mixed urinary incontinence

To support the pelvic organs and contribution to the sphincter urethral closure mechanism

Aims postnatal PFMT
1. Prevention
2. Treatment

General advice - Birth to one week

- Perineal tenderness - skin, muscle, ligament
- Rest for 24 hrs
- Start pelvic floor muscle exercises as early as possible

Guideline is:
- Full assessment bladder and bowel symptoms
- Symptom Screening (Stress urinary incontinence, Overactive bladder)

General advice - Birth to one week

- Gentle exercise/contractions (even with sutures)
- Pumping action enhances healing increasing blood circulation reduce swelling /bruising

**PFMT Postnatal Considerations**

- Pelvic floor examination – Modified Oxford scale
  - Teach Individualised programme of PFME
  - ‘The Knack’
  - Perineal support during defecation
  - Do not stop start flow the urine flow

- Avoid constipation/straining on defecation
- Fluid advice
- Weight loss
- Avoid high impact physical activities

**How to Teach Pelvic Floor Exercises**

- Clear Explanation
  - (where, what, why, how often)
- Muscle Awareness
  - Visual aids

- Position
  - Watch for breath holding, accessory muscle
  - Test Strength, Endurance

- Programme tailored to Individual
  - Prompts to remember
  - What? Where? How?
Case study - Postnatal incontinence

- 39 year old
- Forceps delivery - birth weight (3.75kg)
- 10 weeks post-childbirth (second child)
- Presenting with mixed urinary incontinence since birth

Case study - Digital vaginal examination

- Mild laxity anterior and posterior vaginal walls
- Pelvic floor Grade 3 on Modified Oxford Scale
- Reduced muscle endurance
- 5s hold for 5 repetitions

Case study - Treatment plan

- Specific PFME, Bladder retraining advice
- Advice non-cafèinated beverages
- Review = Slow improvement in PFM strength - progressed exercises from lying to sitting to standing to squatting/activity dependent

Case study - Postnatal incontinence

- Regular stress incontinence – most bothersome
- Urinary frequency, urgency
- Reduced vaginal sensation during intercourse

Case study - Digital vaginal examination

- Non-optimal technique
- Initially 'pulsing' but corrected with instruction to release completely between contractions

How to Teach Pelvic Floor Exercises

- Advice on Progression and Maintenance
- Frequency at least 3 times a day up to 6 times
- It can take several months for the muscles to return to previous strength
Case study - Treatment plan

- Added in functional bracing (the knack) with exercise
- Treatment duration 5 months
- Good Outcome - Very rare SUI only with sneeze on a full bladder - Attending gym

Multidisciplinary postpartum care

- Increased awareness for midwives
- Incorporate PFE into antenatal classes
- Good Outcome - Very rare SUI only with sneeze on a full bladder - Attending gym

Issues to consider

- Pelvic floor muscle rehabilitation is widely advocated postpartum
- Research evidence supports intensive antenatal pelvic floor training in primigravidae
- Evidence for postpartum PFMT is less clear (studies have methodological inconsistencies)

Conclusions

- If the damage that causes postpartum urinary incontinence cannot be prevented - we must mitigate the damage

Issues to consider

- This may be the only instruction women receive regarding use of pelvic floor muscles
- A good window of opportunity
- Women are motivated to get back into shape - compliance?

Multidisciplinary postpartum care
Conclusions

- Offer routine screening of urinary symptoms for new mothers
- Early PFMT
- The multidisciplinary team has an important role

References/Reading


Thank You
Interpretation and Application of Urodynamics in Nursing Practice

Jaclyn Lee, Urology Clinical Nurse Specialist
BartsHealth NHS Trust – Whipps Cross University Hospital, London, UK

Aims
- Brief overview of Urodynamics
- Understand Urodynamics tracings to help to tailor bladder rehabilitation

Types of Urodynamics
- Flow rates
- Cystometry
- Pressure Flow Studies
- Video Urodynamics
- Ambulatory Urodynamics
- Urethral Pressure Profiles
- Sphincter EMG

Urodynamics Assessment
- History
- Examination
- Urinalysis/Urine culture
- Frequency – Volume Chart

Urodynamics
- Direct Assessment of storage and voiding function/dysfunction of the lower urinary tract
- Reproduce patient’s symptoms objectively in order to devise a treatment plan
- May either confirm a diagnosis or give a new specifically urodynamic diagnosis

Schafer et al 2002; Townsend 2016

Affiliations to disclose*:
None

Funding for speaker to attend:
- Self-funded
- Institution (non-industry) funded

Sponsored by: Hollister; Fittleworth; Coloplast; Astella and Pfizer

*All financial ties (over the last year) that you may have with any business organisation with respect to the subject matter discussed during your presentation.
Urodynamics

Procedure (1)
- Free Flow rate

Procedure (2)
- Catheterise
  - Urethral (Pressure measurement & Bladder Filling)
  - Rectal
- Measure Residual

Standard Urodynamics

Procedure (3)
- Filling Phase (+/- Provocation)
- Voiding Phase
- Measure Residual

Urodynamics Measurements

Video Urodynamics
Video Urodynamics

- Complex Bladder Outflow Obstruction to identify level of obstruction
  
  膀胱出口閉塞で閉塞部位を同定する

- Evaluation of incontinence and bladder neck hypermobility
  
  失禁と膀胱頚部の過動性を評価する

- Neurogenic Bladder Dysfunction to Identify dysynergia
  
  神経原性の排尿筋・括約筋協調不全を確認する

Ambulatory Urodynamics

Useful when conventional urodynamics do not reproduce symptoms

- Pads weighed to assess urine loss during investigation

- Patient keeps diary in addition to event buttons

- Patient moving around to reflect daily activities in order to reproduce symptoms

Urodynamics – Pitfalls (1)

- ウロダイ検査の注意点

Urodynamics – Pitfalls (2)

- ウロダイ検査の注意点

Urodynamics – Pitfalls (3)

- ウロダイ検査の注意点
膀胱容量は正常で、排尿筋過活動もない

排尿筋過活動（DO）
Case study

Female 49 years old
PMH- Appendectomy 13 years of age
3 Normal Vaginal Deliveries

3 years symptoms:
- Frequency - hourly
- Urgency
- Leaks on coughing, sneezing and exercise
- Leaks associated with urgency
- Does not need to wear pads
- No medication prescribed

Frequency Chart not completed –
Patient admits drinking 6 cups of tea/coffee a day

Examination: small cystocele but this does not bother patient
Stable bladder with no evidence of DO/leak

Acknowledgment of thanks

With permission some slides from Mr Simon Holden, Associate Specialist Urology, BartsHealth NHS Trust - Whipps Cross University Hospital

Assistance from Mr Simon Holden with Photographs and IT assistance

Thank You

References

Springer


Questions?
WELCOME/ようこそ
ICS Nursing Workshop
Tokyo 2016
Donna Z. Bliss, PhD, RN, FAAN, FGSA
Workshop and Nursing Committee Chair
Wakako Satoh, PhD, RN, Co-Chair of Workshop and Nursing Committee Chair

Agenda

Start | End | Management of Incontinence in Cognitively Impaired Elders | Wakako Satoh
--- | --- | --- | ---
13:05 | 13:25 | Discussion | All
13:30 | 13:50 | Postpartum Continence Care | Karen Logan
13:50 | 14:00 | Discussion | All
14:00 | 14:25 | Interpretation and Application of Urodynamics in Nursing Practice | Jaclyn (Seok) Lee
14:25 | 14:30 | Discussion | All

Donna Bliss

Affiliations to disclose:
- Research grant from Hartmann for study to measure skin pH in nursing home residents
- Subcontract from Vital Sims for developing a educational e-training about assessing IASD in nursing home residents

Funding for speaker to attend:
- Self-funded
- Institution (non-industry) funded
- Sponsored by: ICI 6 (Committee Chair)
Management of Urinary Incontinence in Cognitively Impaired Elderly
認知症高齢者の尿失禁マネジメント

14th, Sept, 2016

Wakako SATOH, RN, Ph.D
Division of Clinical Nursing, School of Nursing, Yamagata University Faculty of Medicine

1. Characteristics of LUTS and UI in patient with Dementia 認知症高齢者の下部尿路症状と尿失禁の特徴

1) Over Active Bladder: 通活動膀胱
Frequency: 頻尿 + Urgency: 尿意切迫

Causes (原因): Ageing (加齢), Disease (疾患), Memory deficit (記憶障害), etc.

2) Urinary Incontinence: 尿失禁

(1) Functional urinary incontinence 機能性尿失禁
(2) Urgent urinary incontinence 切迫性尿失禁

Disorientation → They don’t know where the toilet room is
見当識障害 トイレの場所がわからない。

Memory Problem → They have impaired memory for everyday
記憶問題 毎日の排尿習慣や行動の記憶がない。

Agnosia → They can’t recognize the toilet as the toilet.
失認 トイレをトイレとして認識できない。

Apraxia → They can’t use correctly the toilet.
失行 トイレを正しく使用できない。

Executive Dysfunction → They can’t plan to execute voiding
遂行機能障害 排尿の一連の動作を順序立ててできない。

Over Active Bladder (通活動膀胱)

LUTS tend to increase with aging. 下部尿路症状は、加齢に伴い上昇する。

2. Approach to evaluate UI in dementia Patients

1. Describe the problem
2. Exclude reversible causes
3. Analyze the possible contributory factors
4. Evaluate for type of UI

Cognitive Deficits
Behavioral problems
Mobility/Motor problems

3. Behavioral Therapy for UI

promoted voiding (PV)
habit training
scheduled toileting
bladder retraining
pelvic floor muscle rehabilitation

Educational intervention
- Constipation protocol
- Dietary/Fluid advice
- Perineal hygiene and care
- Teaching behavioural intervention
- Teaching supportive intervention

Perspective Management of UI for dementia Patient

Therapeutic intervention
- Behavioral Therapy
- Physiotherapy
- Medications
- Absorbent Pads

Phil Yap, 2006 (Revised)

3.  Behavioral Therapy for UI
尿失禁のための行動療法

Prompted voiding (PV)

Prompted voiding (PV) is a behavioral therapy in which patients are given social approval for requesting toileting assistance, either spontaneously or in response to a verbal.

PVは、患者が自発的、または言葉がけに応じてトイレを依頼し成功した時に、「社会的賞賛」の言葉がけを行っていく行動療法。

What's mean "Prompted Voiding"?

Social Approval and/or Social reinforcement by verbal or non-verbal communication!

Example: social approval conversation

1. After asking if the patient was wet or dry, immediately give feedback as to accuracy.
   (e.g., “That’s right Ms. X, you are dry.”)

2. If dry, the patient was given social reinforcement.
   (e.g., “You are doing such as good job keeping dry. I am so proud of you.”)

PV Protocol (プロトコール)

Baseline
3 days (現状評価)

Intervention
6-12 weeks (介護)

Follow up

Baseline Assessment 初期アセスメント

Prompt by Social Approval 社会的賞賛によるフィードバック
The criteria for PV adaptation: 適用の基準

1. Cognitive impairment level unknown
認知機能 未知
2. Mobility: Not bed bound
座位以上
3. Communication: Nonverbal Communication is available at least.
何らかの意思疎通が可能
4. Bladder Function:膀胱機能

PV Baseline Assessment (PV初期アセスメント)

- General Health status
- ADL - IADL
- Cognitive function
- Environment

Analysis Bladder Volume Chart
排尿量日誌の分析

Evaluation of Bladder Function by Noninvasive Technology
非侵襲的膀胱機能評価

Outcome (成果)

1. Improved UI 尿失禁の改善
2. Improved ADL & morbidity ADLと移動能力の改善
3. Improved behavioral problem 行動障害の改善
4. Decreased number of absorbent pads おむつ枚数の減少
5. Decreased costs for continence care コストの削減

Increase of Quality of Life in Dementia Patients and their Family
認知症患者と家族のQOLの向上
5. To Promote Nursing Practice and Behavioral Therapy for Cognitive Impaired patient with UI

1) Evaluation of Comprehensive Geriatric Assessment including Cognitive Function

2) Evaluation of Noninvasive Bladder Function

3) Adaptation of Appropriate Behavioral Therapy

4) Effective Communication Skill

5) Integrate with Advanced Dementia Nursing

Advanced communication skill for PV

Najimino kankei + Social Approval

We need to provide effective nursing interventions and behavioral therapy for frail and/or dementia patients with UI in all health care settings.

尿失禁のある虚弱および認知症高齢者に対し、施設でも在宅でもどこでも、効果的な看護実践と行動療法を提供することが必要である。

References


Acknowledgment

Chair of Nursing Committee: Donna Bliss
Nursing Committee member: Sandra Engberg
All of members

Chair of ICS TOKYO 2016: Homma Yukio
ICS TOKYO Local Committee: Kaoru Nishimura
The Director of Urology, Tokyo teishin Hospital: Motofumi Suzuki

University of Alberta: Katherine Moore
Yamagata University: Kansuke Kawaguchi, all of colleagues
All of members, Project team of Toileting assistance Guideline
My family and freinds.

Thank you for your attention!
Introduction

- Urinary Incontinence is a significant health problem for women associated with pregnancy and childbirth (Rortveit 2003, Wilson 1996)

- Pregnancy and the postpartum period is often the first time many women experience urinary leakage

- Approx up to 38% (Morkved 1999) of postnatal women have urinary incontinence 3 months after pregnancy

Postpartum Continence Care

Karen Logan RGN, MSc
Consultant Nurse
Head of Continence Services
Aneurin Bevan University Health Board UK

WARNING
Giving Birth May Damage Your Health

出産後のコンチネンスケア
警告: 出産はあなたの健康を害するかもしない

Introduction

- New mothers benefit from postpartum screening for incontinence National Guidance (NICE 2015)

- In France all women offered 10 sessions with a physiotherapist after childbirth

- Health professionals - postpartum continence care

英国のガイドライン: 初産婦には出産後の失禁評価が有用

フランスでは出産後に10回のPTの治療が受けられる

医療関係者が出産後のコンチネンスケアに係わる
Urinary problems associated with pregnancy and childbirth

- Urinary Stress incontinence
- Urgency, urge incontinence

The injury complex
Pelvic Floor Injury

- Muscles
  - Endopelvic fascia
- Nerves
  - Sphincters

The PFMs undergoes changes in connective tissue composition, it gradually regains innervations of muscle groups damaged during delivery.

Risk Factors for Perineal Trauma

- Vaginal Delivery
- Instrumental Delivery
- Abnormal presentation/position
- Induction of labour

- Epidural anaesthesia
- Prolonged active 2nd stage
- Birth Wt > 4Kg, large head circumference
- Episiotomy (may result in weakening of pelvic floor leading to Faecal Incontinence)
Pelvic floor muscle training should be offered to women in their first pregnancy as a preventive strategy for urinary incontinence.

*Postnatal period

Full assessment bladder and bowel symptoms

Symptom Screening (Stress urinary incontinence, Overactive bladder)

Pelvic floor muscle training (PFMT)

Popularized by Arnold Kegel 1948

PFMT is the principle treatment for stress and mixed urinary incontinence

Pelvic floor muscle training (PFMT)

To support the pelvic organs and contribution to the sphincter urethral closure mechanism

Aims postnatal PFMT

1. Prevention
2. Treatment

General advice - Birth to one week

Perineal tenderness - skin, muscle, ligament

Rest for 24 hrs

Start pelvic floor muscle exercises as early as possible

General advice - Birth to one week

Gentle exercise/contractions (even with sutures)

Pumping action enhances healing increasing blood circulation reduce swelling /bruising
PFMT Postnatal Considerations

Pelvic floor examination – Modified Oxford scale

- Teach Individualised programme of PFME
- ‘The Knack’
- Perineal support during defecation
- Do not stop start flow the urine flow

How to Teach Pelvic Floor Exercises

- Clear Explanation (where, what, why, how often)
- Muscle Awareness
- Visual aids

- Position
- Watch for breath holding, accessory muscle
- Test Strength, Endurance
- Programme tailored to Individual

PFMT Postnatal Considerations

- Avoid constipation/straining on defecation
- Fluid advice
- Weight loss
- Avoid high impact physical activities

How to Teach Pelvic Floor Exercises

- Visual assessment
- Verbal instruction
- Prompts to remember

The Knack (abdominal pressure increase before pelvic floor contraction)
How to Teach Pelvic Floor Exercises

- Advice on Progression and Maintenance
  - Frequency at least 3 times a day up to 6 times
  - It can take several months for the muscles to return to previous strength

Case study - Postnatal incontinence

- 39 year old
- Forceps delivery - birth weight (3.75kg)
- 10 weeks post-childbirth (second child)
- Presenting with mixed urinary incontinence since birth

Case study - Postnatal incontinence

- Regular stress incontinence – most bothersome
- Urinary frequency, urgency
- Reduced vaginal sensation during intercourse

Case study - Digital vaginal examination

- Mild laxity anterior and posterior vaginal walls
- Pelvic floor Grade 3 on Modified Oxford Scale
- Reduced muscle endurance
- 5s hold for 5 repetitions

Case study - Digital vaginal examination

- Non-optimal technique
- Initially 'pulsing' but corrected with instruction to release completely between contractions

Case study - Treatment plan

- Specific PFME, Bladder retraining advice
- Advice non-cafeinated beverages
- Review = Slow improvement in PFM strength - progressed exercises from lying to sitting to standing to squatting/activity dependent

- Bone research is increasingly emphasized
- Treatment plans evolve with awareness of clinical significance
- Case studies show variability in response
Case study - Treatment plan

- Added in functional bracing (the knack) with exercise
- Treatment duration 5 months
- Good Outcome - Very rare SUI only with sneeze on a full bladder - Attending gym

Multidisciplinary postpartum care

- Increased awareness for midwives
- Incorporate PFE into antenatal classes
- Good Outcome - Very rare SUI only with sneeze on a full bladder - Attending gym

Issues to consider

- Pelvic floor muscle rehabilitation is widely advocated postpartum
- Research evidence supports intensive antenatal pelvic floor training in primigravidae
- Evidence for postpartum PFMT is less clear (studies have methodological inconsistencies)

Conclusions

- If the damage that causes postpartum urinary incontinence cannot be prevented - we must mitigate the damage
Conclusions

• Offer routine screening of urinary symptoms for new mothers

• Early PFMT

• The multidisciplinary team has an important role

References/Reading


Thank You
Interpretation and Application of Urodynamics in Nursing Practice

Jaclyn Lee, Urology Clinical Nurse Specialist
BartsHealth NHS Trust – Whipps Cross University Hospital, London, UK

Aims

- Brief overview of Urodynamics
- Understand Urodynamics tracings to help to tailor bladder rehabilitation

Types of Urodynamics

- Flow rates
- Cystometry
- Pressure Flow Studies
- Video Urodynamics
- Ambulatory Urodynamics
- Urethral Pressure Profiles
- Sphincter EMG

Urodynamics Assessment

- History
- Examination
- Urinalysis/Urine culture
- Frequency – Volume Chart

Urodynamics

- Direct Assessment of storage and voiding function/dysfunction of the lower urinary tract
- Reproduce patient’s symptoms objectively in order to devise a treatment plan
- May either confirm a diagnosis or give a new specifically urodynamic diagnosis

Schafer et al 2002; Townsend 2016
**Urodynamics**

**Procedure (1)**
- Free Flow rate

**Urodynamics**

**Procedure (2)**
- Catheterise
  - Urethral (Pressure measurement & Bladder Filling)
  - Rectal
- Measure Residual

**Standard Urodynamics**

**Procedure (3)**
- Filling Phase (+/- Provocation)
- Voiding Phase
- Measure Residual

**Urodynamics Measurements**

Abdominal (rectal) pressure  |  Vesical Pressure  |  Calculated Detrusor Pressure  |  Volume Infused (yellow) & Flow Rate (green)

**Video Urodynamics**
Video Urodynamics

- Complex Bladder Outflow Obstruction to identify level of obstruction
  膀胱出口閉塞で閉塞部位を同定する
- Evaluation of incontinence and bladder neck hypermobility
  失禁と膀胱頚部の過動性を評価する
- Neurogenic Bladder Dysfunction to Identify dysynergia
  神経原性の排尿筋・括約筋協調不全を確認する

Ambulatory Urodynamics

Useful when conventional urodynamics do not reproduce symptoms

- Pads weighed to assess urine loss during investigation
- Patient keeps diary in addition to event buttons
- Patient moving around to reflect daily activities in order to reproduce symptoms

通常検査で再現不能な症状に有用
  • 失禁量の測定
  • 排尿日誌の同時記録
  • 身体活動に伴う症状の再現

Urodynamics – Pitfalls (1)

Urodynamics – Pitfalls (2)

Urodynamics – Pitfalls (3)
膀胱容量は正常で、排尿筋過活動もない

排尿筋過活動（DO）

Different types of incontinence

排尿筋過活動（DO）
Case study

Female 49 years old
PMH - Appendectomy 13 years of age
3 Normal Vaginal Deliveries

3 years symptoms:
Frequency - hourly
Urgency
Leaks on coughing, sneezing and exercise
Leaks associated with urgency
Does not need to wear pads
No medication prescribed

Frequency Chart not completed –
Patient admits drinking 6 cups of tea/coffee a day

Examination: small cystocele
but this does not bother patient
Stable bladder with no evidence of DO/leak

Acknowledgment of thanks

With permission some slides from Mr Simon Holden, Associate Specialist Urology, BartsHealth NHS Trust - Whipps Cross University Hospital

Assistance from Mr Simon Holden with Photographs and IT assistance

Thank You

References


Questions?