

EC18: ICS Core Curriculum (Free) Nurse Lead Continence Care

Workshop Chair: Donna Bliss, United States, Wakako Satoh (co-chair), Japan

14 September 2016 13:00 - 14:30

Start	End	Topic	Speakers
13:00	13:05	Introduction from co-chairs	Donna Bliss Wakako Satoh (co-chair)
13:05	13:25	Management of Incontinence in Cognitively Impaired Elders	Wakako Satoh (co-chair)
13:25	13:30	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

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 Learning before workshop attendance

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

Suggested Reading

- Averbek MA, Altawheel W, Manu-Marin A, Madersbacher H. Management of LUTS in patients with dementia and associated disorders. *Neurourology and Urodynamics*, 2015, [Epub ahead of print].
- Brubaker L. An evidence-based approach to urodynamic testing. *BJOG: An International Journal of Obstetrics & Gynaecology*, 2013, 120(2): 127-129.
- Chiarelli P, Cockburn J. Promoting urinary continence in women after delivery: Randomised controlled trial. 2002, *BMJ*, 324: 1241-1244.
- Eustice S, Roe B, Paterson J. Prompted voiding for the management of urinary incontinence in adults. *Cochrane Database of Systematic Reviews* 2000, Issue 2. Art. No.: CD002113.
- Farrell SA, Allen VM, Baskett TF. Parturition and urinary incontinence in primiparas. *J Obstet Gynecol*, 2001, 97: 350-356.
- Logan K. An audit of advice provided on pelvic floor exercises. *Professional Nurse*, 2001, 16: 1369-1372.
- Logan K. Incontinence and the effects of childbirth on the pelvic floor. *British Journal of Midwifery*, 2005, 13: 374-376.
- Logan K, Procter S. Developing an integrated interdisciplinary integrated continence service. *Nursing Times*; 2003;99(21), 34-37.

- Ostaszkiwicz J, Satoh W. Global ageing and its implications for care providers. Nursing Forum, 43rd Annual Meeting of the International Continence society, Barcelona; August, 2013.
- Roe B, Flanagan L, Maden M. Systematic review of systematic reviews for the management of urinary incontinence and the promotion of continence using conservative behavioural approaches in older adults in care homes. Journal of Advanced Nursing, 2015, 71(7): 1464–1483.
- 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.
- Schafer W, Abrams P, Liao L, Mattiasson A, Pesce F, et al. Good Urodynamic Practices : Uroflowmetry, Filling Cystometry and Pressure-Flow studies. Neurourology and Urodynamics, 2002, 21: 261-274.

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.¹ 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.²

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.³ Their conclusion is consistent with the previous systematic review of Eustice et al.⁴ 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

1. Alzheimer's Disease International. "The global impact of dementia - World Alzheimer Report, 2015." <https://www.alz.co.uk/research/world-report>.
2. Averbeck MA, Altawheel W, Manu-Marin A, Madersbacher H. Management of LUTS in patients with dementia and associated disorders. *Neurourology and Urodynamics*, 2015, [Epub ahead of print].
3. Roe B, Flanagan L, Maden M. Systematic review of systematic reviews for the management of urinary incontinence and the promotion of continence using conservative behavioural approaches in older adults in care homes. *Journal of Advanced Nursing*, 2015, 71(7): 1464–1483.
4. Eustice S, Roe B, Paterson J. Prompted voiding for the management of urinary incontinence in adults. *Cochrane Database of Systematic Reviews* 2000; Issue 2. Art. No.: CD002113.

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.¹ 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.² 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 guidance³ 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

1. Chiarelli P, Cockburn J. Promoting urinary continence in women after delivery: Randomised controlled trial. 2002, *BMJ*, 324: 1241–1244.
2. Farrell SA, Allen VM, Baskett TF. Parturition and urinary incontinence in primiparas. *J Obstet Gynecol*, 2001, 97: 350–356.
3. NICE Guidelines. 2006 [CG37]. <https://www.nice.org.uk/guidance/cg37>

Jaclyn Lee

Interpretation and Application of Urodynamics in Nursing Practice

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

- Brubaker L. An evidence-based approach to urodynamic testing. *BJOG: An International Journal of Obstetrics & Gynaecology*, 2013, 120(2): 127-129.
- Schafer W, Abrams P, Liao L, Mattiasson A, Pesce F, et al. Good Urodynamic Practices : Uroflowmetry, Filling Cystometry and Pressure-Flow studies. *Neurourology and Urodynamics*, 2002, 21: 261-274.

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:

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 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高齢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)Over Active Bladder : 過活動膀胱

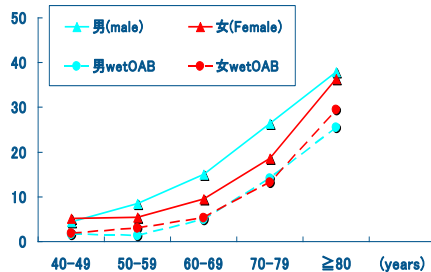
Frequency : 頻尿 + Urgency : 尿意切迫

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

2) Urinary Incontinence: 尿失禁

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

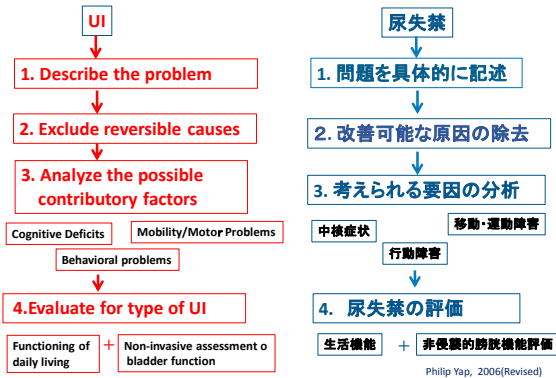
Over Active Bladder (過活動膀胱)



Y. Homma, H. Kakizaki, M. Gotoh, et al.:
Epidemiologic survey on lower urinary tract symptoms in Japan (in Japanese)
J Neurogenic Bladder Soc, 14 (2003), pp. 266-277

- Disorientation 見当識障害** → They don't know where the toilet room is
トイレの場所がわからない。
- Memory Problem 記憶障害** → They have impaired memory for everyday urinary voiding habit.
毎日の排尿習慣や行動の記憶がない。
- Agnosia 失認** → They can't recognize the toilet as the toilet.
トイレをトイレとして認識できない。
- Apraxia 失行** → They can't use correctly the toilet.
トイレを正しく使用できない。
- Executive Dysfunction 遂行機能障害** → They can't plan to execute voiding
排尿の一連の動作を順序立ててできない。

2. Approach to evaluate UI in dementia Patients
認知症者の尿失禁評価へのアプローチ



Philip Yap, 2006(Revised)

Perspective Management of UI for dementia Patient
認知症者の尿失禁の管理



Therapeutic intervention

- Behavioral Therapy
- Physiotherapy
- Medications
- Absorbent Pads

療法的介入

- ・行動療法
- ・理学療法
- ・薬物療法
- ・おむつ

Education

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

教育

- ・便秘予防
- ・栄養/水分飲用管理
- ・会陰部の衛生管理とケア
- ・行動療法の指導
- ・補助的療法指導
- ADL・アクティビティケア, etc.

Phillip Yap, 2006(Revised)

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



■ Toileting assistance (排尿誘導)

- Prompted voiding
- Habit training
- Scheduled toileting

- 排尿自覚刺激行動療法
- 排尿習慣化訓練
- 時間誘導

■ Bladder Retraining

膀胱訓練

■ Pelvic floor muscle rehabilitation

骨盤底筋訓練

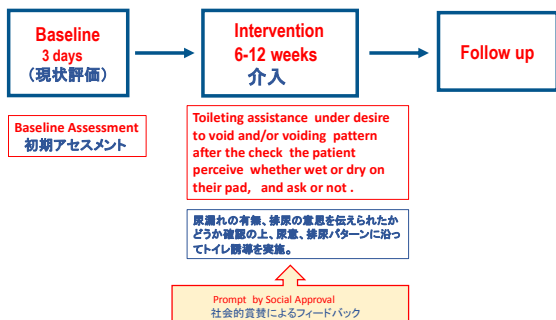
Prompted Voiding:PV
排尿自覚刺激療法(意識)



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。

PV Protocol (プロトコル)



What's mean "Prompted Voiding" ?
"排尿自覚刺激"の意味は?



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または社会的強化)

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.")

(意識)
教えて頂いた通りですよ。トイレに間に合いますね。(または、濡れていますね。)

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.")

(意識)
トイレをしっかりと成功して頂き、私もとても誇らしいです。

The criteria for PV adaptation: 適用の基準 ICS 2016 TOKYO

- (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 (by Ouslander, et al,1995)
Voiding Volume /time About 200mL 1回排尿量
RUV Less than 150mL 残尿量
UI rate About 20 (%) ≤ 尿失禁率



PV Baseline Assessment (PV初期アセスメント) ICS 2016 TOKYO

Comprehensive Geriatric Assessment
高齢者総合機能評価

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

- General Health status
健康状態全般
- ADL・IADL
ADL・手段的ADL
- Cognitive function
認知機能
- Environment
環境



Bladder Volume Chart(3days)
排尿量日誌(3日間)
Residual Urine Volume
残尿測定

Analysis Bladder Volume Chart 排尿量日誌の分析 ICS 2016 TOKYO

排尿量日誌 (Bladder Diary)							
Month	Day	Time	Desire to Void (○)	Voiding Volume (mL)	Urine loss (○)	RUV (mL)	Drink Water (mL)
1	5:30	x		350	40		
2	6:30	○		100	x	70	100
3	8:10	○		130	x		80
4	11:00	○		90	x		
5	14:20	x		160	80		100
...							
10	1:00	x		150	280		
11	4:30	○		100	300		
SUM (計)			8回	1,300	820		

Observation Index (観察指標)

Symptoms 症状

Frequency/daytime 日中の排尿回数

Nocturia/over night 夜間排尿回数

Voiding Pattern 排尿/オシンの形態

Max Voiding Volume/time 最大1回排尿量 _____ mL

Average Voiding Volume /time 平均1回排尿量 _____ mL

UI Rate 尿失禁率 (%) _____

RUV 残尿量 _____ mL

RUV Rate 残尿率 _____ %

Drink water amount 水分量 _____ mL

Sum total urine volume 1日合計尿量 _____ mL

Urinary Tract Infection 尿路感染 etc.

Evaluation of Bladder Function by Noninvasive Technology ICS 2016 TOKYO

Residual Urine Volume by Portable Ultrasound Device

Lilium α-200

Bladder Scan 6000

4. Case Study (事例検討) ICS 2016 TOKYO

Male(男性) 87 Years

Desire to Void Unclear 尿意不明
UI Rate 75% (尿失禁率)
RUV 59ml (残尿)
Functional UI (機能性尿失禁)
Absorbent pads 6 times/day(パッド交換 6回)
Mobility : Using walking car, Very slow (移動) 歩行器使用、ゆっくりしたペース
Cognition MMSE 18 (Cut off Point 22) (認知)

Change in UI rate by PV protocol (PVによる尿失禁率の変化)

Time	UI Rate (%)	Pads /day
Baseline	75	6
2weeks	45	4
3weeks	30	3
4weeks	35	3
5weeks	20	3
6weeks	18	3

Outcome (成果) ICS 2016 TOKYO

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
 尿失禁を有する認知症患者の看護実践と行動療法を推進するために



1) Evaluation of Comprehensive Geriatric Assessment including Cognitive Function
 認知機能を含めた包括的高齢者アセスメントの評価

2) Evaluation of Noninvasive Bladder Function
 非侵襲的膀胱機能の評価

3) Adaptation of Appropriate Behavioral therapy
 より適切な行動療法の適用

4) Effective Communication Skill
 効果的なコミュニケーション技法

5) Integrate with Advanced Dementia Nursing
 進展する認知症ケアとの統合



6. Future
 未来



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 文献



1. Y. Homma, H. Kakizaki, M. Gotoh, et al.:Epidemiologic survey on lower urinary tract symptoms in Japan(in Japanese), J Neurogenic Bladder Soc, 14 (2003), pp. 266-277.
2. W. Satoh: The comprehensive care management consultation manual Ver.2 for dementia elderly with urinary incontinence in Yamagata Prefecture., YAMAGTA University, 2014, p10. (in Japanese)
3. Philip Yap: Urinary incontinence in Dementia A practical approach, Australian Family Physician , 2016, Vol.35, No.4, pp237 - 240.
4. Aver beck, MA, Altawheel,W, Manu-Marin,A, Madersbacher, H. :Management of LUTS in patients with dementia and associated disorders. *Neurourology and Urodynamics* 2015.
5. Eustice, S, Roe, B, Paterson, J. Prompted voiding for the management of urinary incontinence in adults. *Cochrane Database of Systematic Reviews* 2000, Issue 2. Art. No.: CD002113.
6. Roe, B, Flanagan, L, Maden M. Systematic review of systematic reviews for the management of urinary incontinence and the promotion of continence using conservative behavioural approaches in older adults in care homes. *Journal of Advanced Nursing* 2015; 71(7): 1464-1483.
7. John F. Schenelle, et. al: Prompted Voiding Treatment of Urinary Incontinence in Nursing Home Patients a behavior Manegement Approach for Nursing Home Staff, *JAGA*, 37,1989, pp.1051-1057.
8. Ouslander JG, et. al: Predictors of Successful Prompted Voiding Among Icontinence Nursing Home Residents. *JAMA*, 273(17), 1995, pp.1366-1370
9. Adrian Waggs, William Gibson. et.al.: Urinary incontinence in frail elderly persons:report from the 5th International Consultation on Incontinence., *Neurourology and Urodynamics* 2015, 34:398-406.
10. Sandra Engberg, et al: Future directions for incontinence research with frail elders, *Nursing Research*, Vol.43, 6S, 2004, pp.s22-27.

ICS Core Curriculum

Nurse Lead Continence Care



Thank you for your attention!

Affiliations to disclose[†]:

† 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:

Postpartum Continence Care

Karen Logan RGN, MSc

Consultant Nurse

Head of Continence Services

Aneurin Bevan University Health Board UK

出産後のコンチネンスケア



Introduction

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

尿失禁は妊娠・出産にともなう重要な健康問題

- 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

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 ICS 2016 TOKYO

妊娠・出産に伴う排尿の問題



- Urinary Stress incontinence
腹圧性尿失禁
- Urgency, urge incontinence
切迫性尿失禁

Urinary problems associated with pregnancy ICS 2016 TOKYO

妊娠に伴う排尿の問題



- Multi-factorial physiological insult/injury
生理的に生じる多数の傷害
- Mode of Delivery
出産の様式
- Gravid uterus
妊娠した子宮

The injury complex ICS 2016 TOKYO

The injury complex

Pelvic Floor Injury 骨盤底の傷害

Muscles

筋肉

Endopelvic fascia

内骨盤筋膜

Nerves

神経

Sphincters

括約筋

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

骨盤底筋の結合織変化や除神経は出産後に回復する

Risk Factors for Perineal Trauma ICS 2016 TOKYO

会陰外傷の危険因子

- Vaginal Delivery
経陰分娩
- Instrumental Delivery
器械分娩
- Abnormal presentation/position
異常体位
- Induction of labour
誘発分娩

Risk Factors for Perineal Trauma ICS 2016 TOKYO

会陰外傷の危険因子

- Epidural anaesthesia
硬膜外麻酔
- Prolonged active 2nd stage
第2期遷延
- Birth Wt > 4Kg ,large head circumference
出生体重>4kg、大きな頭圍
- Episiotomy (may result in weakening of pelvic floor leading to Faecal Incontinence)
会陰切開(骨盤底を脆弱化し便失禁となりえる)

Risk Factors for Perineal Trauma ICS 2016 TOKYO

会陰外傷の危険因子

- First baby
第一子
- Higher maternal age
高齢出産

National Guidelines



ガイドラインでは

- Pelvic floor muscle training should be offered to women in their first pregnancy as a preventive strategy for urinary incontinence

骨盤底筋訓練は、初回の妊娠から、尿失禁の予防として提供されるべきである

- Postnatal period

出産後

National Guidelines



ガイドラインでは

- Full assessment bladder and bowel symptoms

膀胱と腸の症状を評価

- Symptom Screening (Stress urinary incontinence, Overactive bladder)

腹圧性尿失禁と過活動膀胱症状をスクリーニング

National Institute for Health and Clinical Excellence (2013) Urinary incontinence: The management of urinary incontinence in women.

Pelvic floor muscle training (PFMT)



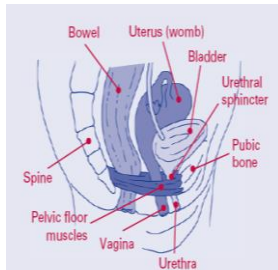
骨盤底筋訓練

- Popularized by Arnold Kegel 1948

ケーゲルにより普及

- PFMT is the principle treatment for stress and mixed urinary incontinence

腹圧性・混合性尿失禁の主要な治療方法



Pelvic floor muscle training (PFMT)



骨盤底筋訓練

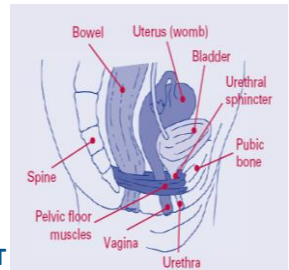
- To support the pelvic organs and contribution to the sphincter urethral closure mechanism

骨盤内臓器の支持
尿道括約機能の改善

- Aims postnatal PFMT

1. Prevention
2. Treatment

産後訓練の目的
予防と治療



General advice - Birth to one week



アドバイス: 出産後1週間まで

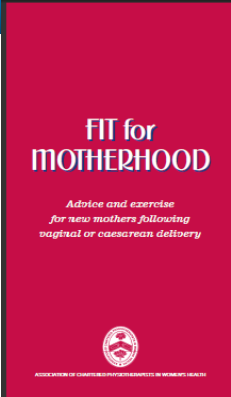
- Perineal tenderness- skin, muscle, ligament
会陰部の圧痛、皮膚、筋肉、靭帯
- Rest for 24 hrs
24時間の安静
- Start pelvic floor muscle exercises as early as possible
骨盤底訓練をなるべく早期から開始

General advice - Birth to one week




アドバイス: 出産後1週間まで

- Gentle exercise/contractions (even with sutures)
緩やかな運動や収縮(抜糸前でも)
- Pumping action enhances healing increasing blood circulation reduce swelling /bruising
上下運動は創傷治癒、血流、浮腫の改善を促す



FIT for MOTHERHOOD
Advice and exercise for new mothers following vaginal or caesarean delivery



Exercises
Pelvic floor muscles
The pelvic floor muscles are at the bottom of your pelvis, supporting your pelvic organs. These muscles have been stretched in pregnancy and during vaginal delivery, which may cause problems.
Pelvic floor muscle exercises are needed to:
• Improve muscle strength so that you can control your bladder and bowel
• Help prevent prolapse of the pelvic organs
• Increase sexual enjoyment for you and your partner

Remember to:

- use the pelvic floor muscle exercises as soon as possible after you have had your baby
- do the exercises in a regular routine but if you are unwell after your delivery, try to do them 3-4 times a day
- do gentle, rhythmic squeezing and relaxing of the muscles which will help with discomfort, pain and swelling, and will aid healing if you have a tear or laceration
- if you have a urinary catheter inserted make sure it is removed and you are passing urine normally before starting these exercises


How to exercise your pelvic floor muscles
Imagine that you are trying to stop yourself passing urine or stool. Try to squeeze and lift the pelvic floor muscles, clenching and drawing up the 2 packages. Don't gasp and hyperinflate. You can use the feet muscle if supporting it first but keep trying to lift the ligaments in a few seconds, and then hold for a few seconds, do not hold your breath.

- gradually increase the hold time and the number that you do until you can hold the ligaments for up to 10 seconds and repeat up to 10 times. You may find this abdominal following time page it takes place in the same place

PFMT Postnatal Considerations
産後の骨盤底筋訓練


Pelvic floor examination – Modified Oxford scale
骨盤底診察のための修正Oxfordスケール

- Teach Individualised programme of PFME
個人別に骨盤底筋訓練のプログラムを
- ‘The Knack’
ナック(腹圧上昇前に骨盤底筋を収縮させる)
- Perineal support during defecation
排便時の会陰保護
- Do not stop start flow the urine flow
排尿時に尿を止めない



PFMT Postnatal Considerations
産後の骨盤底筋訓練


- Avoid constipation/straining on defecation
便秘や排便時の息みを避ける
- Fluid advice
水分摂取のアドバイス
- Weight loss
体重を落とす
- Avoid high impact physical activities
力のかかる身体活動を避ける




How to Teach Pelvic Floor Exercises
骨盤底筋訓練の教え方

- Clear Explanation (where, what, why, how often)
はっきりと説明(どこをどうする)
- Muscle Awareness
- Visual aids
筋肉を意識、見えるように


- Model
- Diagrams
模型や図解を使う






How to Teach Pelvic Floor Exercises
骨盤底筋訓練の教え方


- Visual assessment
目で確認
- Verbal instruction
言葉で指示
- Prompts to remember
覚えてもらう





How to Teach Pelvic Floor Exercises
骨盤底筋訓練の教え方

- Position
姿勢・体位
- Watch for breath holding, accessory muscle
息止めと他の筋肉に注意
- Test Strength, Endurance
強さと持続力をみる
- Programme tailored to Individual
個人別にプログラムを作成



How to Teach Pelvic Floor Exercises



骨盤底筋訓練の教え方

- Advice on Progression and Maintenance

続けるようにアドバイス

- Frequency at least 3 times a day up to 6 times

1日3回以上、6回まで

- It can take several months for the muscles to return to previous strength

元に戻るに数か月かかることも

Case study - Postnatal incontinence



症例:産後の尿失禁

- 39 year old

39歳

- Forceps delivery - birth weight (3.75kg)

鉗子分娩、出生体重3.75kg

- 10 weeks post-childbirth (second child)

出産後10週(第2子)

- Presenting with mixed urinary incontinence since birth

出産後の混合性尿失禁で受診

Case study - Postnatal incontinence



症例:産後の尿失禁

- Regular stress incontinence – most bothersome

腹圧性尿失禁—これがいちばん嫌

- Urinary frequency, urgency

頻尿と尿意切迫感

- Reduced vaginal sensation during intercourse

性交時の膣の感覚の低下

Case study - Digital vaginal examination



症例:膣内診

- Mild laxity anterior and posterior vaginal walls

膣前壁・後壁の軽度の弛緩

- Pelvic floor Grade 3 on Modified Oxford Scale

Oxfordスケールで3度の骨盤底

- Reduced muscle endurance

筋の持続力の低下

- 5s hold for 5 repetitions

5秒間の維持を5回反復

Case study - Digital vaginal examination



症例:膣内診

- Non-optimal technique

上手くやれるとはいえず

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

始めは'ピクピク'した短い収縮
その後の指導で
収縮の間は完全に弛緩できるように

Case study -Treatment plan



症例:治療計画

- Specific PFME, Bladder retraining advice

骨盤底筋訓練にあわせて膀胱の再訓練

- Advice non-caffeinated beverages

カフェインのない飲み物を

- **Review** = Slow improvement in PFM strength - progressed exercises from lying to sitting to standing to squatting/activity dependent

骨盤底筋は徐々に強化
臥位→座位→立位→スクワットで訓練

Case study -Treatment plan



症例:治療計画

- Added in functional bracing (the knack) with exercise

訓練に機能的失禁予防(ナック)を加える

- Treatment duration 5 months

5か月間の治療

- Good Outcome** -Very rare SUI only with sneeze on a full bladder - Attending gym

良好な結果:腹圧性尿失禁はマレに膀胱がいっぱいの時のくしゃみだけジムに通う

Multidisciplinary postpartum care



多職種による産後ケア

- Increased awareness for midwives

助産師の意識を上げる

- Incorporate PFE into antenatal classes

骨盤底訓練を出産前教室に含める

- Input by midwives and physiotherapists on maternity ward to teach PFMT

助産師や理学療法士が、産科病棟に骨盤底訓練の教育をするよう働きかける

Multidisciplinary postpartum care



多職種による産後ケア

- Postnatal risk assessments-identify high risk women - refer to a special clinic

産後のリスク評価—高リスクの産婦は専門家へ

- Follow up by specialist clinicians

専門家の許でフォロー

- Gynaecologist/ Colorectal surgeons involved for severely symptomatic women

重症例には
婦人科医/大腸肛門外科医が関与

Issues to consider

考慮すべき点



- Pelvic floor muscle rehabilitation is widely advocated postpartum

出産後の骨盤底筋リハビリは広く推奨される

- Research evidence supports intensive **antenatal pelvic floor** training in primigravidae

初産婦に集中的な出産前の骨盤底訓練を推奨

- Evidence for **postpartum** PFMT is less clear (studies have methodological inconsistencies)

出産後の訓練は効果があいまい(方法が様々)

Issues to consider

考慮すべき点



- This may be the only instruction women receive regarding use of pelvic floor muscles

これは、女性が受ける
骨盤底筋の使い方に関する唯一の指導かも

- A good window of opportunity

良い機会となる

- Women are motivated to get back into shape- compliance ?

体型を戻すためにもやる気になる？

Conclusions

結論



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



出産後の傷害が防げずにそれが原因で尿失禁となったらその傷害を軽減すべき

Conclusions

結論



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

初産婦には、ルーチンに
排尿症状を把握
早期の骨盤底筋訓練
多職種チームが大切



References/Reading



Dolan L.M., Hosker G.L., Mallett, V.T., Allen R.E. & Smith A.R.B. (2003) Stress incontinence and pelvic floor neurophysiology 15 years after the first delivery. *British Journal of Obstetrics and Gynaecology*, 110, pp.1107-1114.

Harvey, M.A. (2003) Pelvic floor exercises during and after pregnancy; a systematic review of their role in preventing pelvic floor dysfunction. *Journal of Obstetrics and Gynaecology Canada*, 25(6), pp.451-453.

Hughes, P., Jackson, S., Smith, P. & Abrams, P. (2001) Can antenatal pelvic floor exercises prevent postnatal incontinence? *Neurourology and Urodynamics*, 20, pp.447-448.

Mason L., Glenn S., Walton I. & Hughes C. (2001) The relationship between ante-natal pelvic floor muscle exercises and post-partum stress incontinence. *Physiotherapy*, 87 (12), pp. 631-638.

Miller, J.M., Ashton-Miller, J.A. & DeLancey, J.O.L. (1998) A pelvic muscle precontraction can reduce cough-related urine loss in selected women with mild SUI. *Journal of the American Geriatrics Society*, 46, pp.870-874.

Morkved, S., Bo, K., Schei, B. & Salvesen, K.A. (2003) Pelvic floor muscle training during pregnancy to prevent urinary incontinence: A single-blind randomized controlled trial. *Obstetrics and Gynecology*, 101 (2), pp.313-319.

National Institute for Health and Clinical Excellence (2013) Urinary incontinence: The management of urinary incontinence in women. NICE Clinical Guideline 40.



Thank You



Interpretation and Application of Urodynamics in Nursing Practice

開業看護師によるウロダイ検査

Jaclyn Lee, Urology Clinical Nurse Specialist

BartsHealth NHS Trust – Whipps Cross University Hospital, London, UK

Jaclyn Lee



Affiliations to disclose[†]:

None

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

Funding for speaker to attend:

- Self-funded
- Institution (non-industry) funded
- Sponsored by: *Hollister; Fittleworth; Coloplast; Astella and Pfizer*

Aims

講演の目的

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

- ウロダイ検査の概説
- 結果の理解と膀胱訓練での活かし方

Urodynamics

尿流動態検査
(ウロダイ検査)

- Direct Assessment of storage and voiding function/dysfunction of the lower urinary tract
排尿・蓄尿の機能(障害)を直接的に評価する
- Reproduce patient's symptoms objectively in order to devise a treatment plan
患者の症状を再現して治療計画に活かす
- May either confirm a diagnosis or give a new specifically urodynamic diagnosis
診断を確定し、ウロダイ的な診断もつける

Schafer et al 2002; Townsend 2016

Types of Urodynamics

- Flow rates ウロダイ検査の種類
- Cystometry
- Pressure Flow Studies 尿流検査
膀胱内圧検査
内圧尿流検査
- Video Urodynamics ビデオウロダイ検査
- Ambulatory Urodynamics 携帯式ウロダイ検査
- Urethral Pressure Profiles 尿道内圧検査
括約筋筋電図
- Spincter EMG

Urodynamics

Assessment

状態の評価

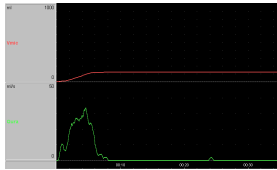
- History 病歴
身体所見
- Examination 尿検査
排尿記録
- Urinalysis/Urine culture
- Frequency – Volume Chart

Urodynamics

Procedure (1)

➤ Free Flow rate

尿流検査



Urodynamics

Procedure (2)

➤ Catheterise

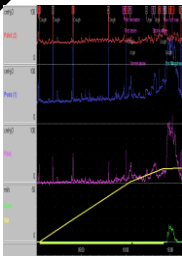
- Urethral (Pressure measurement & Bladder Filling)
- Rectal



➤ Measure Residual

・カテーテルをいれる
尿道内
(圧測定、水注入)
直腸内
・残尿測定

Standard Urodynamics



Urodynamics

Procedure (3)

➤ Filling Phase (+/- Provocation)

➤ Voiding Phase

注入相 (誘発あり/なし)
排出相
残尿測定

➤ Measure Residual

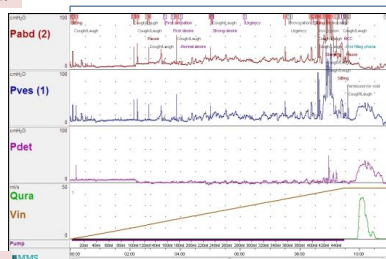
Urodynamics Measurements

腹圧 (直腸圧)

Event Markers

膀胱内圧
排尿筋圧

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



注入量 (黄)
尿流量 (緑)

Whipps Cross Urology Department

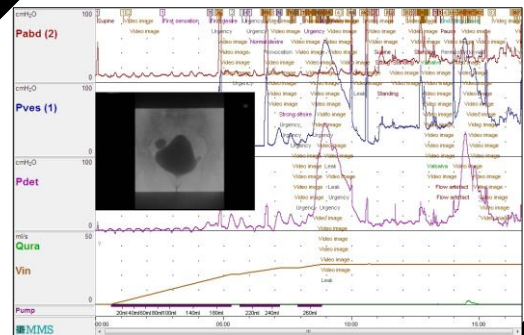
Video Urodynamics



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
失禁と膀胱頸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

VCMG



ビデオウロダイでは膀胱造影しながら検査する

Ambulatory Urodynamics

Useful when conventional urodynamics do not reproduce symptoms

携帯式ウロダイ検査

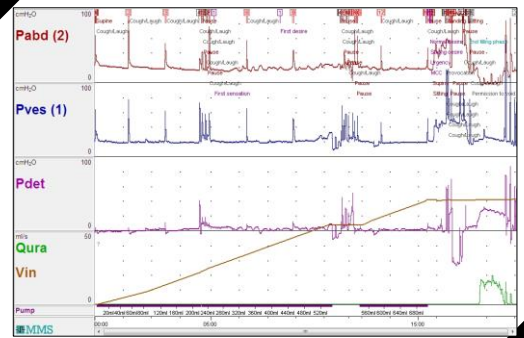
- Pads weighed to assess urine loss during investigation
- Patient keeps diary in addition to event buttons
- Patient moving around to reflect daily activities in order to reproduce symptoms



通常検査で再現不能な症状に有用

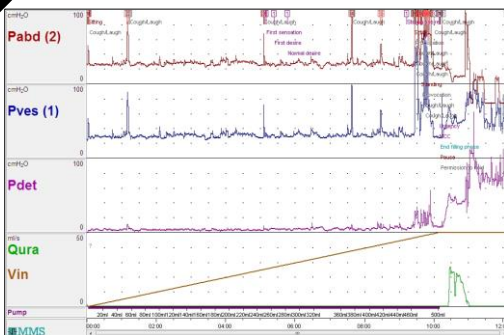
- 失禁量の測定
- 排尿日誌の同時記録
- 身体活動に伴う症状の再現

Urodynamics – Pitfalls (1)



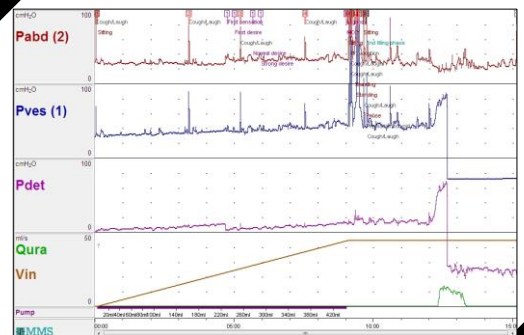
ウロダイ検査の注意点

Urodynamics – Pitfalls (2)

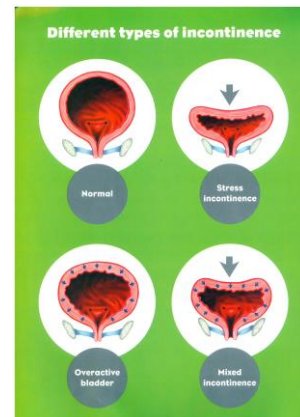
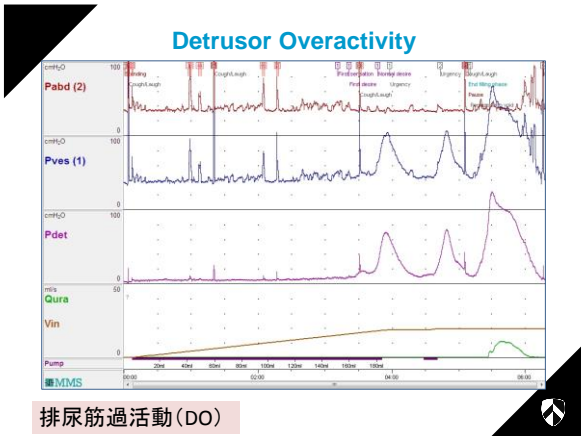
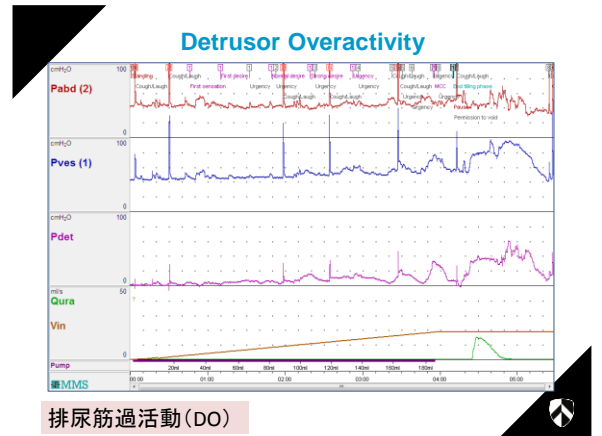
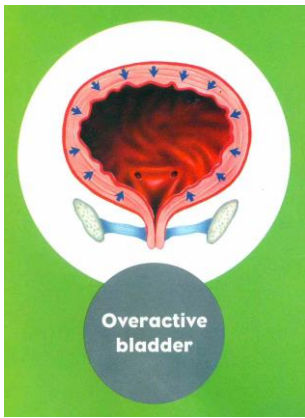
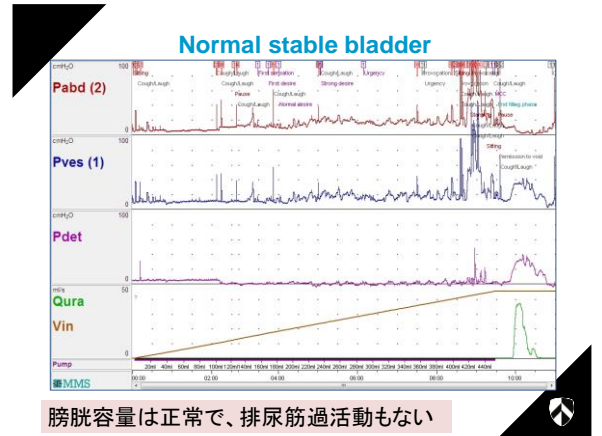
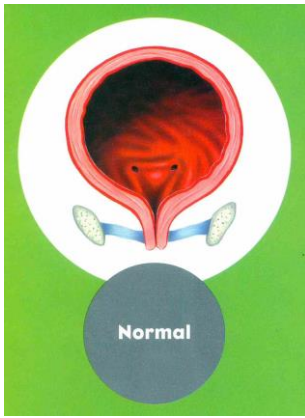


ウロダイ検査の注意点

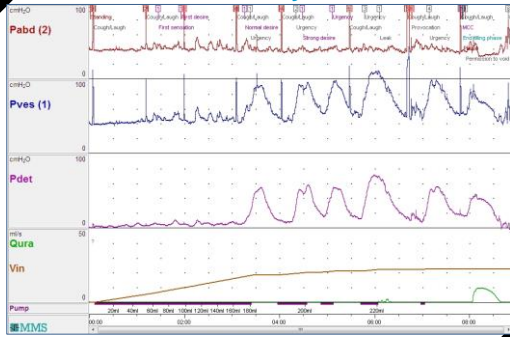
Urodynamics – Pitfalls (3)



ウロダイ検査の注意点



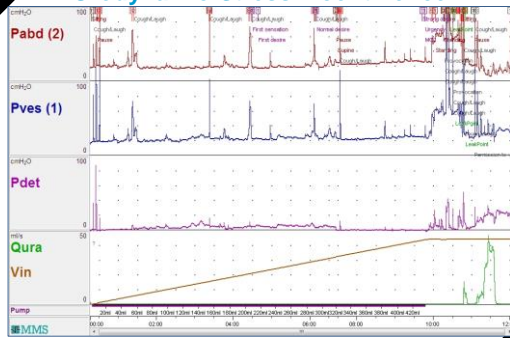
Detrusor Overactivity Incontinence



排尿筋過活動に伴う失禁



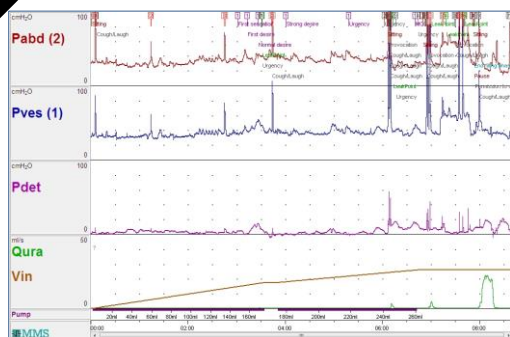
Urodynamic Stress Incontinence



腹圧性尿失禁



Mixed incontinence



混合性尿失禁

Case study

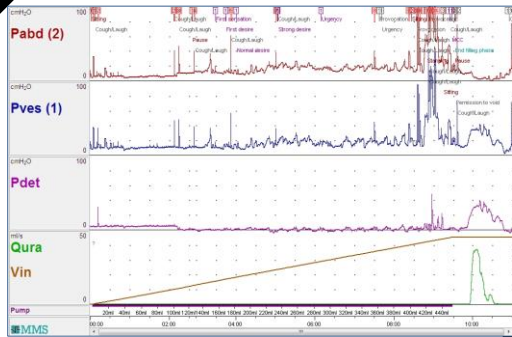
Female 49 years old
 PMH- Appendectomy 13 years of age
 3 Normal Vaginal Deliveries

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



膀胱容量は正常で、排尿筋過活動もない

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

Abrams P (1997)
Urodynamics 2nd edition
Springer

Brubaker L (2013)
BJOG: An international Journal of Obstetrics & Gynaecology
Vol.120/2 (127-129)

Schafer W, Abrams P, Liao L, Mattiasson A, Pesce F, et al (2002)
Good Urodynamic Practices: uroflowmetry, Filling Cystometry and Pressure-Flow
Studies
Neurology and Urodynamics 21: 261-274

Townsend J (2016)
Evaluation of a newly established nurse-led urodynamic clinic: Has it added
value?
International Journal of Urological Nursing Vol 10 No 2:78-87

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



Donna Bliss

Affiliations to disclose¹:

- 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

¹ All financial ties (over the last five years) that you may have with any business organization with respect to the subjects mentioned during your presentation.

Funding for speaker to attend:

- Self-funded
- Institution (non-industry) funded
- Sponsored by: ICI 6 (Committee Chair)

Agenda



Start	End	Management of Incontinence in Cognitively Impaired Elders	Wakako Satoh
13:05	13:25		
13:25	13:30	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

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:

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 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高齢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)Over Active Bladder : 過活動膀胱

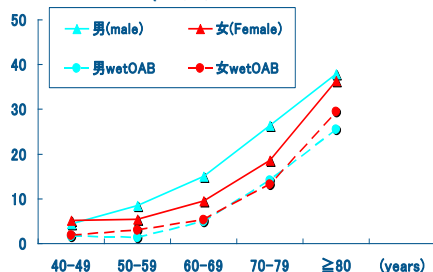
Frequency : 頻尿 + Urgency : 尿意切迫

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

2) Urinary Incontinence: 尿失禁

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

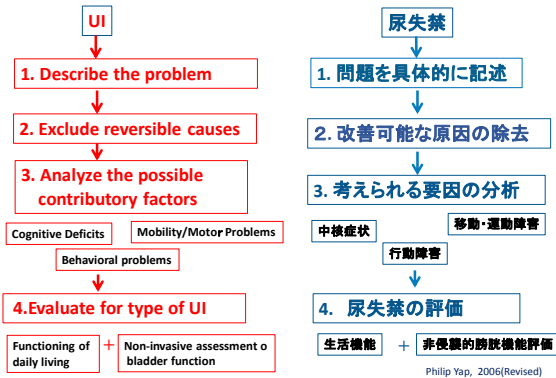
Over Active Bladder (過活動膀胱)



Y. Homma, H. Kakizaki, M. Gotoh, et al.:
Epidemiologic survey on lower urinary tract symptoms in Japan (in Japanese)
J Neurogenic Bladder Soc, 14 (2003), pp. 266-277

- Disorientation 見当識障害** → They don't know where the toilet room is
トイレの場所がわからない。
- Memory Problem 記憶障害** → They have impaired memory for everyday urinary voiding habit.
毎日の排尿習慣や行動の記憶がない。
- Agnosia 失認** → They can't recognize the toilet as the toilet.
トイレをトイレとして認識できない。
- Apraxia 失行** → They can't use correctly the toilet.
トイレを正しく使用できない。
- Executive Dysfunction 遂行機能障害** → They can't plan to execute voiding
排尿の一連の動作を順序立ててできない。

2. Approach to evaluate UI in dementia Patients
 認知症者の尿失禁評価へのアプローチ



Philip Yap, 2006(Revised)

Perspective Management of UI for dementia Patient
 認知症者の尿失禁の管理



Therapeutic intervention

- Behavioral Therapy
- Physiotherapy
- Medications
- Absorbent Pads

療法的介入

- ・行動療法
- ・理学療法
- ・薬物療法
- ・おむつ

Education

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

教育

- ・便秘予防
- ・栄養/水分飲用管理
- ・会陰部の衛生管理とケア
- ・行動療法の指導
- ・補助的療法指導
- ADL・アクティビティケア, etc.

Phillip Yap, 2006(Revised)

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



■ Toileting assistance (排尿誘導)

- Prompted voiding
- Habit training
- Scheduled toileting

- 排尿自覚刺激行動療法
- 排尿習慣化訓練
- 時間誘導

■ Bladder Retraining

膀胱訓練

■ Pelvic floor muscle rehabilitation

骨盤底筋訓練

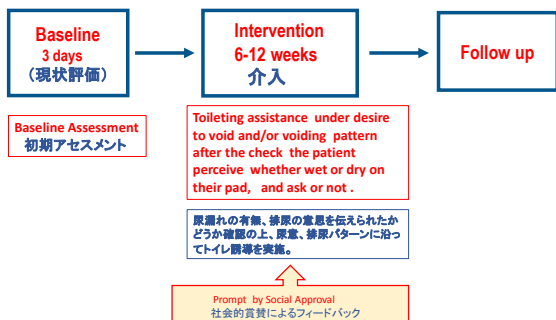
Prompted Voiding:PV
 排尿自覚刺激療法(意識)



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。

PV Protocol (プロトコル)



What's mean "Prompted Voiding" ?
 “排尿自覚刺激”の意味は？



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または社会的強化)

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.")

(意識)
 教えて頂いた通りですよ。トイレに間に合いますね。(または、濡れていますね。)

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.")

(意識)
 トイレをしっかりと成功して頂き、私もとても誇らしいです。

The criteria for PV adaptation: 適用の基準 ICS 2016 TOKYO

- (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 (by Ouslander, et al,1995)
- Voiding Volume /time About 200mL 1回排尿量
RUV Less than 150mL 残尿量
UI rate About 20 (%) ≤ 尿失禁率



PV Baseline Assessment (PV初期アセスメント) ICS 2016 TOKYO

Comprehensive Geriatric Assessment
高齢者総合機能評価

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

- General Health status
健康状態全般
- ADL・IADL
ADL・手段的ADL
- Cognitive function
認知機能
- Environment
環境



Bladder Volume Chart(3days)
排尿量日誌(3日間)
Residual Urine Volume
残尿測定

Analysis Bladder Volume Chart 排尿量日誌の分析 ICS 2016 TOKYO

排尿量日誌 (Bladder Diary)

Month Day ()

The time of rising (起床時間) 5:00
The time of sleeping(就寝時間) 20:00

Time	Desire to Void (○)	Voiding Volume (mL)	Urine Loss (○)	RUV (mL)	Drink Water (mL)
1 5:30	x	350	40		
2 6:30	○	100	x	70	100
3 8:10	○	130	x		80
4 11:00	○	90	x		
5 14:20	x	160	80		100
10 1:00	x	150	280		
11 4:30	○	100	300		
SUM (計)	8回	1,300	820		

Observation Index (観察指標)

Symptoms 症状

Frequency/daytime 日中の排尿回数

Frequency/over night 夜間排尿回数

Voiding Pattern 排尿/オシンの形態

Max Voiding Volume/time 最大1回排尿量 _____ mL

Average Voiding Volume /time 平均1回排尿量 _____ mL

UI Rate 尿失禁率 (%) _____

RUV 残尿量 _____ mL

RUV Rate 残尿率 _____ %

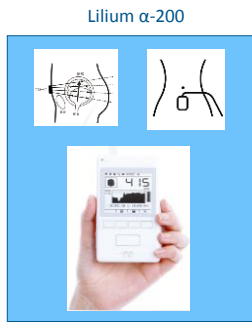
Drink water amount 水分量 _____ mL

Sum total urine volume 1日合計尿量 _____ mL

Urinary Tract Infection 尿路感染 etc.

Evaluation of Bladder Function by Noninvasive Technology ICS 2016 TOKYO

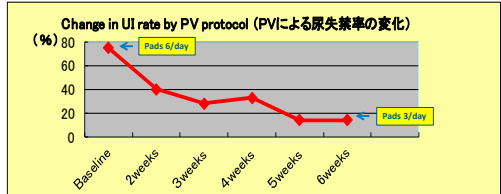
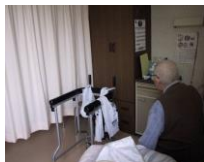
Residual Urine Volume by Portable Ultrasound Device



4. Case Study (事例検討) ICS 2016 TOKYO

Male(男性) 87 Years

Desire to Void Unclear 尿意不明
UI Rate 75% (尿失禁率)
RUV 59ml (残尿)
Functional UI (機能性尿失禁)
Absorbent pads 6 times/day(パッド交換 6回)
Mobility : Using walking car, Very slow
(移動) 歩行器使用、ゆっくりしたペース
Cognition MMSE 18 (Cut off Point 22) (認知)



Outcome (成果) ICS 2016 TOKYO

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 尿失禁を有する認知症患者の看護実践と行動療法を推進するために



1) Evaluation of Comprehensive Geriatric Assessment including Cognitive Function 認知機能を含めた包括的高齢者アセスメントの評価

2) Evaluation of Noninvasive Bladder Function 非侵襲的膀胱機能の評価

3) Adaptation of Appropriate Behavioral therapy より適切な行動療法の適用

4) Effective Communication Skill 効果的なコミュニケーション技法

5) Integrate with Advanced Dementia Nursing 進展する認知症ケアとの統合



6. Future 未来



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 文献



1. Y. Homma, H. Kakizaki, M. Gotoh, et al.: Epidemiologic survey on lower urinary tract symptoms in Japan (in Japanese), J Neurogenic Bladder Soc, 14 (2003), pp. 266-277.
2. W. Satoh: The comprehensive care management consultation manual Ver.2 for dementia elderly with urinary incontinence in Yamagata Prefecture, YAMAGATA University, 2014, p10. (in Japanese)
3. Philip Yap: Urinary incontinence in Dementia A practical approach, Australian Family Physician, 2016, Vol.35, No.4, pp237-240.
4. Averbeck, MA, Altawheel, W, Manu-Marin, A, Madersbacher, H.: Management of LUTS in patients with dementia and associated disorders. *Neurourology and Urodynamics* 2015.
5. Eustice, S, Roe, B, Paterson, J. Prompted voiding for the management of urinary incontinence in adults. *Cochrane Database of Systematic Reviews* 2000, Issue 2. Art. No.: CD002113.
6. Roe, B, Flanagan, L, Maden M. Systematic review of systematic reviews for the management of urinary incontinence and the promotion of continence using conservative behavioural approaches in older adults in care homes. *Journal of Advanced Nursing* 2015; 71(7): 1464-1483.
7. John F. Schenelle, et. al: Prompted Voiding Treatment of Urinary Incontinence in Nursing Home Patients a behavior Management Approach for Nursing Home Staff, JAGA, 37,1989, pp.1051-1057.
8. Ouslander JG, et. al: Predictors of Successful Prompted Voiding Among Incontinence Nursing Home Residents. *JAMA*, 273(17), 1995, pp.1366-1370
9. Adrian Wagg, William Gibson. et. al.: Urinary incontinence in frail elderly persons :report from the 5th International Consultation on Incontinence., *Neurourology and Urodynamics* 2015, 34:398-406.
10. Sandra Engberg, et al: Future directions for incontinence research with frail elders, *Nursing Research*, Vol.43, 6S, 2004, pp.s22-27.

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.

ICS Core Curriculum Nurse Lead Continece Care



Thank you for your attention!

Affiliations to disclose[†]:

† 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:

Postpartum Continence Care

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

出産後のコンチネンスケア



Introduction

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

尿失禁は妊娠・出産にともなう重要な健康問題

- 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

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 ICS 2016 TOKYO

妊娠・出産に伴う排尿の問題



- Urinary Stress incontinence
腹圧性尿失禁
- Urgency, urge incontinence
切迫性尿失禁

Urinary problems associated with pregnancy ICS 2016 TOKYO

妊娠に伴う排尿の問題



- Multi-factorial physiological insult/injury
生理的に生じる多数の傷害
- Mode of Delivery
出産の様式
- Gravid uterus
妊娠した子宮

The injury complex ICS 2016 TOKYO

The injury complex

Pelvic Floor Injury 骨盤底の傷害

Muscles

筋肉

Endopelvic fascia

内骨盤筋膜

Nerves

神経

Sphincters

括約筋

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

骨盤底筋の結合織変化や除神経は出産後に回復する

Risk Factors for Perineal Trauma ICS 2016 TOKYO

会陰外傷の危険因子

- Vaginal Delivery
経陰分娩
- Instrumental Delivery
器械分娩
- Abnormal presentation/position
異常体位
- Induction of labour
誘発分娩

Risk Factors for Perineal Trauma ICS 2016 TOKYO

会陰外傷の危険因子

- Epidural anaesthesia
硬膜外麻酔
- Prolonged active 2nd stage
第2期遷延
- Birth Wt > 4Kg, large head circumference
出生体重>4kg、大きな頭圍
- Episiotomy (may result in weakening of pelvic floor leading to Faecal Incontinence)
会陰切開(骨盤底を脆弱化し便失禁となりえる)

Risk Factors for Perineal Trauma ICS 2016 TOKYO

会陰外傷の危険因子

- First baby
第一子
- Higher maternal age
高齢出産

National Guidelines



ガイドラインでは

- Pelvic floor muscle training should be offered to women in their first pregnancy as a preventive strategy for urinary incontinence

骨盤底筋訓練は、初回の妊娠から、尿失禁の予防として提供されるべきである

- Postnatal period

出産後

National Guidelines



ガイドラインでは

- Full assessment bladder and bowel symptoms

膀胱と腸の症状を評価

- Symptom Screening (Stress urinary incontinence, Overactive bladder)

腹圧性尿失禁と過活動膀胱症状をスクリーニング

National Institute for Health and Clinical Excellence (2013) Urinary incontinence: The management of urinary incontinence in women.

Pelvic floor muscle training (PFMT)



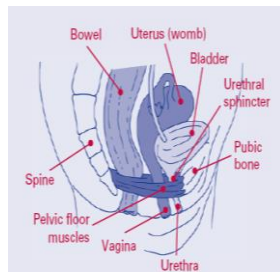
骨盤底筋訓練

- Popularized by Arnold Kegel 1948

ケーゲルにより普及

- PFMT is the principle treatment for stress and mixed urinary incontinence

腹圧性・混合性尿失禁の主要な治療方法



Pelvic floor muscle training (PFMT)



骨盤底筋訓練

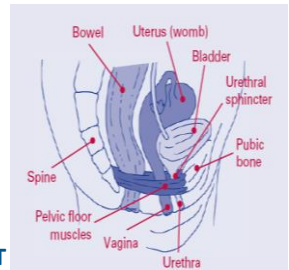
- To support the pelvic organs and contribution to the sphincter urethral closure mechanism

骨盤内臓器の支持
尿道括約機能の改善

- Aims postnatal PFMT

1. Prevention
2. Treatment

産後訓練の目的
予防と治療



General advice - Birth to one week



アドバイス: 出産後1週間まで

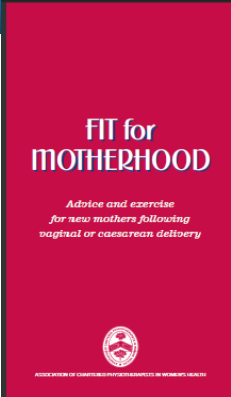
- Perineal tenderness- skin, muscle, ligament
会陰部の圧痛、皮膚、筋肉、靭帯
- Rest for 24 hrs
24時間の安静
- Start pelvic floor muscle exercises as early as possible
骨盤底訓練をなるべく早期から開始

General advice - Birth to one week



アドバイス: 出産後1週間まで

- Gentle exercise/contractions (even with sutures)
緩やかな運動や収縮(抜糸前でも)
- Pumping action enhances healing increasing blood circulation reduce swelling /bruising
上下運動は創傷治癒、血流、浮腫の改善を促す



Advised and exercise for new mothers following vaginal or caesarean delivery

Exercises

Pelvic floor muscles

The pelvic floor muscles are at the bottom of your pelvis, supporting your pelvic organs. These muscles have been stretched in pregnancy and during vaginal delivery, which may cause weakness.

Pelvic floor muscle exercises are needed to:

- Improve muscle strength so that you can control your bladder and bowel
- Help prevent prolapse of the pelvic organs
- Increase sexual enjoyment for you and your partner


Remember to:

- Treat the pelvic floor muscles exercises as soon as possible after you have had your baby
- Do the exercises in a regular routine but if you are unable after your delivery, try to do them 1-2 times a day
- Do gentle, rhythmic squeezing and relaxing of the muscles which will help with discomfort, pain and swelling, and will aid healing if you have a tear or laceration
- If you have a urinary catheter inserted make sure it is removed and you are passing urine normally before starting these exercises

How to exercise your pelvic floor muscles

Imagine that you are trying to stop yourself passing urine or stool. Try to squeeze and lift the pelvic floor muscles, clenching and drawing up the 2 buttocks. Don't gasp and hyperinflate. You can use the feet muscle if supporting it first but keep trying to lift the ligaments a few seconds, and then hold for a few seconds, do not hold your breath.

- Gradually increase the hold time and the number that you do until you can hold the ligaments for up to 10 seconds and repeat up to 10 times. You may find this abdominal following time page it takes place in the same place




PFMT Postnatal Considerations

産後の骨盤底筋訓練

Pelvic floor examination – Modified Oxford scale

骨盤底診察のための修正Oxfordスケール


- Teach Individualised programme of PFME
個人別に骨盤底筋訓練のプログラムを
- ‘The Knack’
ナック(腹圧上昇前に骨盤底筋を収縮させる)
- Perineal support during defecation
排便時の会陰保護
- Do not stop start flow the urine flow
排尿時に尿を止めない



PFMT Postnatal Considerations

産後の骨盤底筋訓練

- Avoid constipation/straining on defecation
便秘や排便時の息みを避ける
- Fluid advice
水分摂取のアドバイス
- Weight loss
体重を落とす
- Avoid high impact physical activities
力のかかる身体活動を避ける





How to Teach Pelvic Floor Exercises

骨盤底筋訓練の教え方

- Clear Explanation (where, what, why, how often)
はっきりと説明(どこをどうする)
- Muscle Awareness
- Visual aids
筋肉を意識、見えるように

- Model
- Diagrams
模型や図解を使う







How to Teach Pelvic Floor Exercises

骨盤底筋訓練の教え方

- Visual assessment
目で確認
- Verbal instruction
言葉で指示
- Prompts to remember
覚えてもらう






How to Teach Pelvic Floor Exercises

骨盤底筋訓練の教え方

- Position
姿勢・体位
- Watch for breath holding, accessory muscle
息止めと他の筋肉に注意
- Test Strength, Endurance
強さと持続力をみる
- Programme tailored to Individual
個人別にプログラムを作成



How to Teach Pelvic Floor Exercises



骨盤底筋訓練の教え方

- Advice on Progression and Maintenance

続けるようにアドバイス

- Frequency at least 3 times a day up to 6 times

1日3回以上、6回まで

- It can take several months for the muscles to return to previous strength

元に戻るに数か月かかることも

Case study - Postnatal incontinence



症例:産後の尿失禁

- 39 year old

39歳

- Forceps delivery - birth weight (3.75kg)

鉗子分娩、出生体重3.75kg

- 10 weeks post-childbirth (second child)

出産後10週(第2子)

- Presenting with mixed urinary incontinence since birth

出産後の混合性尿失禁で受診

Case study - Postnatal incontinence



症例:産後の尿失禁

- Regular stress incontinence – most bothersome

腹圧性尿失禁—これがいちばん嫌

- Urinary frequency, urgency

頻尿と尿意切迫感

- Reduced vaginal sensation during intercourse

性交時の膣の感覚の低下

Case study - Digital vaginal examination



症例:膣内診

- Mild laxity anterior and posterior vaginal walls

膣前壁・後壁の軽度の弛緩

- Pelvic floor Grade 3 on Modified Oxford Scale

Oxfordスケールで3度の骨盤底

- Reduced muscle endurance

筋の持続力の低下

- 5s hold for 5 repetitions

5秒間の維持を5回反復

Case study - Digital vaginal examination



症例:膣内診

- Non-optimal technique

上手くやれるとはいえず

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

始めは'ピクピク'した短い収縮
その後の指導で
収縮の間は完全に弛緩できるように

Case study -Treatment plan



症例:治療計画

- Specific PFME, Bladder retraining advice

骨盤底筋訓練にあわせて膀胱の再訓練

- Advice non-caffeinated beverages

カフェインのない飲み物を

- **Review** = Slow improvement in PFM strength - progressed exercises from lying to sitting to standing to squatting/activity dependent

骨盤底筋は徐々に強化
臥位→座位→立位→スクワットで訓練

Case study -Treatment plan



症例:治療計画

- Added in functional bracing (the knack) with exercise

訓練に機能的失禁予防(ナック)を加える

- Treatment duration 5 months

5か月間の治療

- Good Outcome** -Very rare SUI only with sneeze on a full bladder - Attending gym

良好な結果:腹圧性尿失禁はマレに膀胱がいっぱいの時のくしゃみだけジムに通う

Multidisciplinary postpartum care



多職種による産後ケア

- Increased awareness for midwives

助産師の意識を上げる

- Incorporate PFE into antenatal classes

骨盤底訓練を出産前教室に含める

- Input by midwives and physiotherapists on maternity ward to teach PFMT

助産師や理学療法士が、産科病棟に骨盤底訓練の教育をするよう働きかける

Multidisciplinary postpartum care



多職種による産後ケア

- Postnatal risk assessments-identify high risk women - refer to a special clinic

産後のリスク評価—高リスクの産婦は専門家へ

- Follow up by specialist clinicians

専門家の許でフォロー

- Gynaecologist/ Colorectal surgeons involved for severely symptomatic women

重症例には
婦人科医/大腸肛門外科医が関与

Issues to consider

考慮すべき点



- Pelvic floor muscle rehabilitation is widely advocated postpartum

出産後の骨盤底筋リハビリは広く推奨される

- Research evidence supports intensive **antenatal pelvic floor** training in primigravidae

初産婦に集中的な出産前の骨盤底訓練を推奨

- Evidence for **postpartum** PFMT is less clear (studies have methodological inconsistencies)

出産後の訓練は効果があいまい(方法が様々)

Issues to consider

考慮すべき点



- This may be the only instruction women receive regarding use of pelvic floor muscles

これは、女性が受ける
骨盤底筋の使い方に関する唯一の指導かも

- A good window of opportunity

良い機会となる

- Women are motivated to get back into shape- compliance ?

体型を戻すためにもやる気になる？

Conclusions

結論



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



出産後の傷害が防げずにそれが原因で尿失禁となったらその傷害を軽減すべき

Conclusions

結論



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

初産婦には、ルーチンに
排尿症状を把握
早期の骨盤底筋訓練
多職種チームが大切



References/Reading



Dolan L.M., Hosker G.L., Mallett, V.T., Allen R.E. & Smith A.R.B. (2003) Stress incontinence and pelvic floor neurophysiology 15 years after the first delivery. *British Journal of Obstetrics and Gynaecology*, 110, pp.1107-1114.

Harvey, M.A. (2003) Pelvic floor exercises during and after pregnancy; a systematic review of their role in preventing pelvic floor dysfunction. *Journal of Obstetrics and Gynaecology Canada*, 25(6), pp.451-453.

Hughes, P., Jackson, S., Smith, P. & Abrams, P. (2001) Can antenatal pelvic floor exercises prevent postnatal incontinence? *Neurourology and Urodynamics*, 20, pp.447-448.

Mason L., Glenn S., Walton I. & Hughes C. (2001) The relationship between ante-natal pelvic floor muscle exercises and post-partum stress incontinence. *Physiotherapy*, 87 (12), pp. 631-638.

Miller, J.M., Ashton-Miller, J.A. & DeLancey, J.O.L. (1998) A pelvic muscle precontraction can reduce cough-related urine loss in selected women with mild SUI. *Journal of the American Geriatrics Society*, 46, pp.870-874.

Morkved, S., Bo, K., Schei, B. & Salvesen, K.A. (2003) Pelvic floor muscle training during pregnancy to prevent urinary incontinence: A single-blind randomized controlled trial. *Obstetrics and Gynecology*, 101 (2), pp.313-319.

National Institute for Health and Clinical Excellence (2013) Urinary incontinence: The management of urinary incontinence in women. Nice Clinical Guideline 40.



Thank You



Interpretation and Application of Urodynamics in Nursing Practice

開業看護師によるウロダイ検査

Jaclyn Lee, Urology Clinical Nurse Specialist

BartsHealth NHS Trust – Whipps Cross University Hospital, London, UK

Jaclyn Lee



Affiliations to disclose[†]:

None

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

Funding for speaker to attend:

- Self-funded
- Institution (non-industry) funded
- Sponsored by: *Hollister; Fittleworth; Coloplast; Astella and Pfizer*

Aims

講演の目的

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

- ウロダイ検査の概説
- 結果の理解と膀胱訓練での活かし方

Urodynamics

尿流動態検査 (ウロダイ検査)

- Direct Assessment of storage and voiding function/dysfunction of the lower urinary tract
排尿・蓄尿の機能(障害)を直接的に評価する
- Reproduce patient's symptoms objectively in order to devise a treatment plan
患者の症状を再現して治療計画に活かす
- May either confirm a diagnosis or give a new specifically urodynamic diagnosis
診断を確定し、ウロダイ的な診断もつける

Schafer et al 2002; Townsend 2016

Types of Urodynamics

- Flow rates ウロダイ検査の種類
- Cystometry
- Pressure Flow Studies 尿流検査
膀胱内圧検査
内圧尿流検査
- Video Urodynamics ビデオウロダイ検査
- Ambulatory Urodynamics 携帯式ウロダイ検査
- Urethral Pressure Profiles 尿道内圧検査
括約筋筋電図
- Spincter EMG

Urodynamics

Assessment

状態の評価

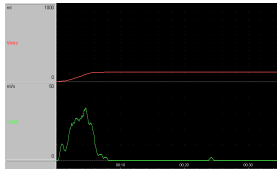
- History 病歴
身体所見
- Examination 尿検査
排尿記録
- Urinalysis/Urine culture
- Frequency – Volume Chart

Urodynamics

Procedure (1)

➤ Free Flow rate

尿流検査



Urodynamics

Procedure (2)

➤ Catheterise

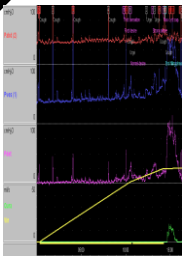
- Urethral (Pressure measurement & Bladder Filling)
- Rectal



➤ Measure Residual

・カテーテルをいれる
尿道内
(圧測定、水注入)
直腸内
・残尿測定

Standard Urodynamics



Urodynamics

Procedure (3)

➤ Filling Phase (+/- Provocation)

➤ Voiding Phase

注入相 (誘発あり/なし)
排出相
残尿測定

➤ Measure Residual

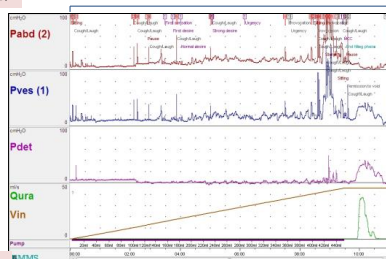
Urodynamics Measurements

腹圧 (直腸圧)

Event Markers

膀胱内圧
排尿筋圧

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



注入量 (黄)
尿流量 (緑)

Whipps Cross Urology Department

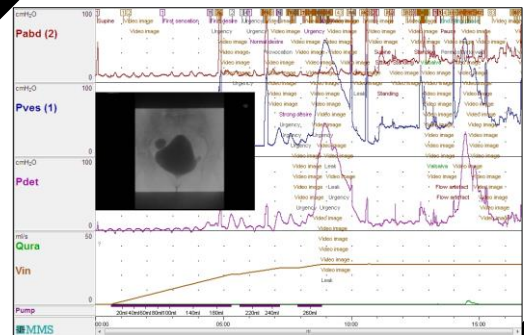
Video Urodynamics



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
失禁と膀胱頸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

VCMG



ビデオウロダイでは膀胱造影しながら検査する

Ambulatory Urodynamics

Useful when conventional urodynamics do not reproduce symptoms

携帯式ウロダイ検査

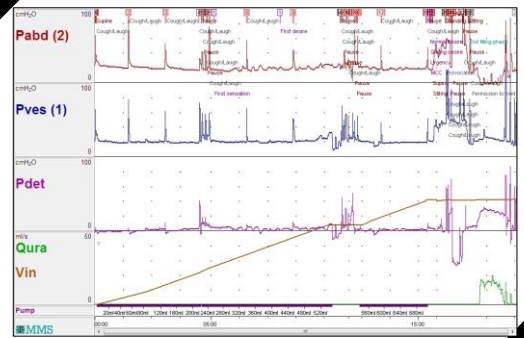
- Pads weighed to assess urine loss during investigation
- Patient keeps diary in addition to event buttons
- Patient moving around to reflect daily activities in order to reproduce symptoms



通常検査で再現不能な症状に有用

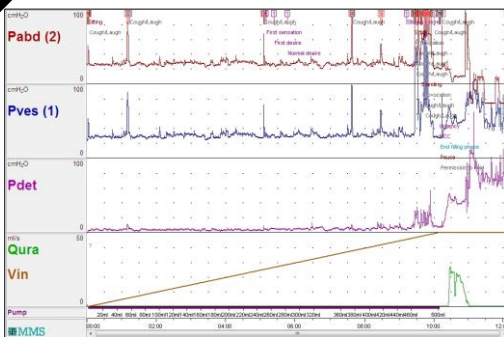
- 失禁量の測定
- 排尿日誌の同時記録
- 身体活動に伴う症状の再現

Urodynamics – Pitfalls (1)



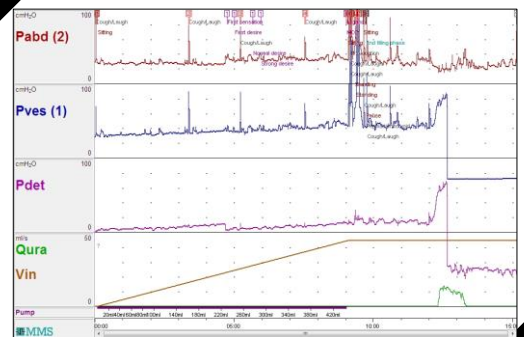
ウロダイ検査の注意点

Urodynamics – Pitfalls (2)

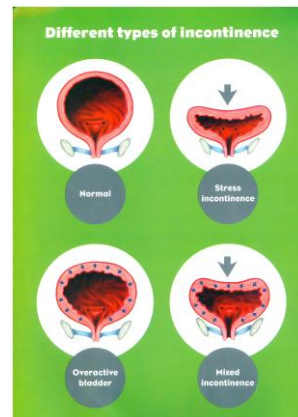
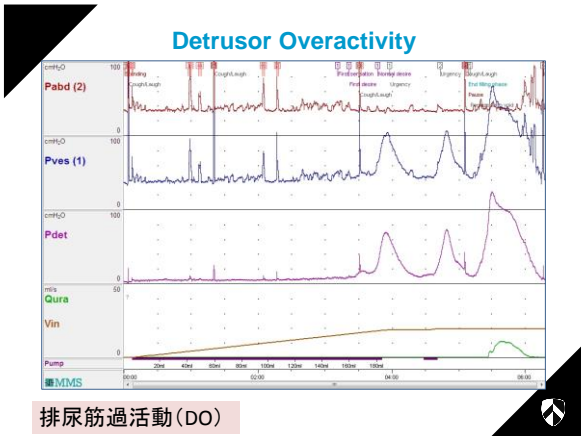
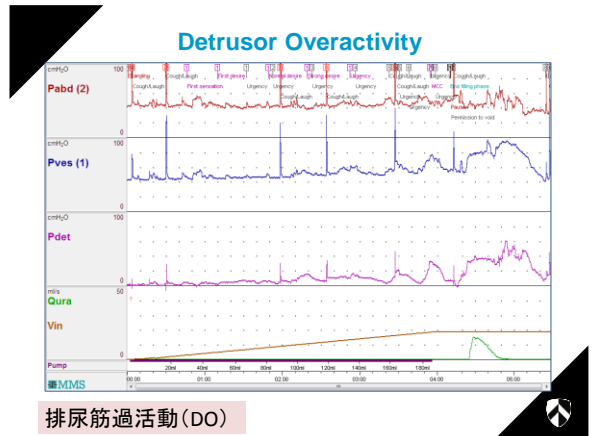
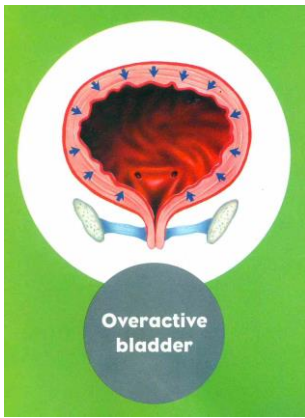
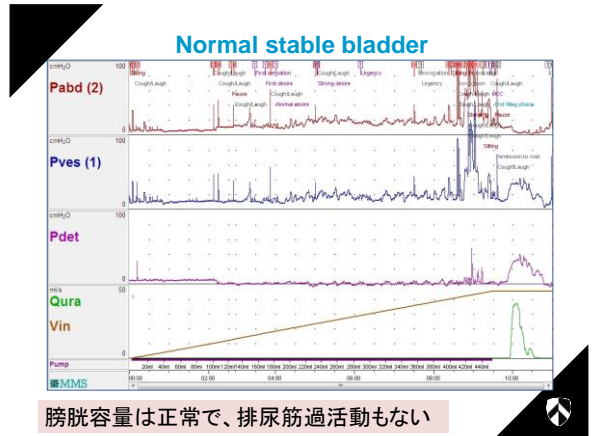
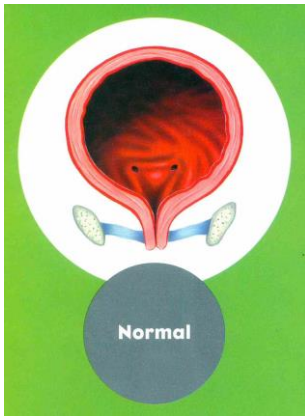


ウロダイ検査の注意点

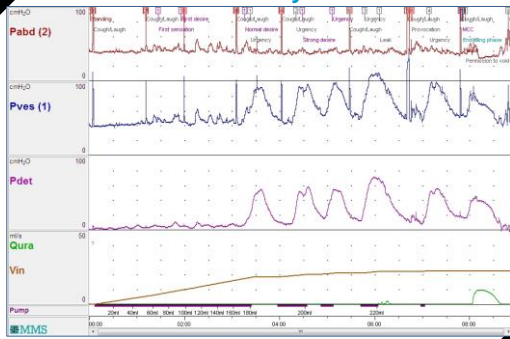
Urodynamics – Pitfalls (3)



ウロダイ検査の注意点



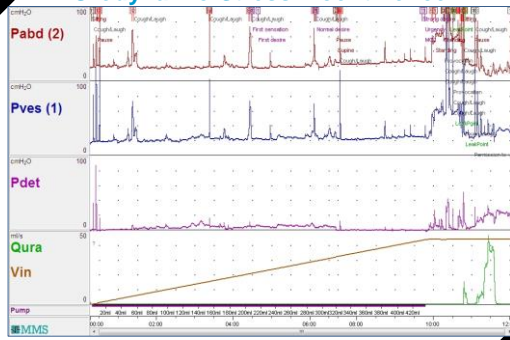
Detrusor Overactivity Incontinence



排尿筋過活動に伴う失禁



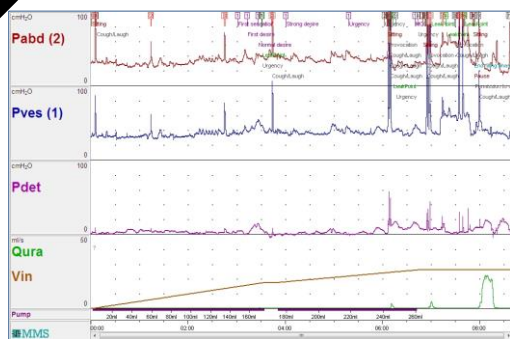
Urodynamic Stress Incontinence



腹圧性尿失禁



Mixed incontinence



混合性尿失禁

Case study

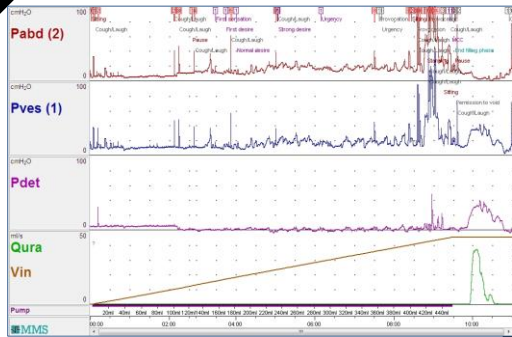
Female 49 years old
 PMH- Appendectomy 13 years of age
 3 Normal Vaginal Deliveries

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



膀胱容量は正常で、排尿筋過活動もない

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

Abrams P (1997)
Urodynamics 2nd edition
Springer

Brubaker L (2013)
BJOG: An international Journal of Obstetrics & Gynaecology
Vol.13. 120/2 (127-129)

Schafer W, Abrams P, Liao L, Mattiasson A, Pesce F, et al (2002)
Good Urodynamic Practices: uroflowmetry, Filling Cystometry and Pressure-Flow
Studies
Neurology and Urodynamics 21: 261-274

Townsend J (2016)
Evaluation of a newly established nurse-led urodynamic clinic: Has it added
value?
International Journal of Urological Nursing Vol 10 No 2:78-87

Questions ?