

### W31: ICS Core Curriculum (Free): Wiki What? - Be A Part of The Future of ICS and Urology Terms

Workshop Chair: Beth Shelly, United States 15 September 2017 09:30 - 11:00

Start	End	Topic	Speakers
09:30	09:45	Introduction to Wiki Posting	Beth Shelly
09:45	10:00	Importance of Unambiguous Terminology	Luis Monteiro
10:00	10:15	Underactive Bladder, Really a Problem? Or the New Disease	Kevin Rademakers
		Created By Industry?	
10:15	10:30	Muscle tone - how do you measure - multidimensional	Melanie Morin
10:30	10:50	Reconciling Social Media and Medical Evidence - Down The	Roger Dmochowski
		Yellow Brick Road	Tom Marcelissen
10:50	11:00	Your Turn to Post	Sajjad Rahnamai

### **Speaker Powerpoint Slides**

Please note that where authorised by the speaker all PowerPoint slides presented at the workshop will be made available after the meeting via the ICS website <a href="www.ics.org/2017/programme">www.ics.org/2017/programme</a> Please do not film or photograph the slides during the workshop as this is distracting for the speakers.

### Aims of Workshop

ICS experts establish terms and definitions used in research, education, and publication. Good definitions require input from all disciplines; MD, PT, RN, OT, basic science, patients, and industry; urology, gynecology, gastroenterology - experienced and newly qualified - and many different languages. This workshop is intended to introduce participants to the importance of active debate on standard terms. It will include live posting on the wiki with opportunities to influence terms and definitions. Bring your mobile device and participate in real time. Be the change, influence the future of ICS and urology publications.

### **Learning Objectives**

- Recognise the important of standard terms and how they affect medical practice and patient care.
- Learn how ICS standard terms and definitions are created, discussed and refined.
- Understand the differences between evidence, facts and hear-say as differentiated by founded medical evidence and internet / social media based information.
- Create a wiki log in and post a comment on ICS standard terms.
- Live debate of the definitions of "PFM tone" and "underactive bladder".

### **Learning Outcomes**

Participants will be able to:

- Recognise the important of standard terms and how they affect medical practice and patient care.
- Understand the differences between evidence, facts and hear-say as differentiated by founded medical evidence and internet / social media based information.
- Create a wiki log in and post a comment on ICS standard terms.

### **Target Audience**

ICS members from all disciplines and languages including MD, PT, RN, basic science, patients, and industry working together to establish standard terms and definitions.

### Advanced/Basic

Basic

### **Conditions for Learning**

This is an interactive workshop as we will be live posting on the wiki. No limit on number of participants.

### **Suggested Learning before Workshop Attendance**

A review of the ICS wiki will helpful but not necessary. wiki https://wiki.ics.org

### Other Supporting Documents, Teaching Tools, Patient Education etc

Hand out will include instructions on how to sign into the wiki and how to post a comment.

### Physical Therapist - Editor in Chief of the ICS Wiki United States

What is a WIKI? - A wiki is a web application which allows people to comment and collaboration with others.

ICS WIKI - wiki.ics.org - Awareness of continence terms and your place for comments

This Wiki is a resource for all people interested in urinary tract and bowel function and dysfunction. It draws together terminology and other resources, giving current agreed definitions. It also provides a perspective and enables all stakeholders to provide comment and participate in debate

The process of creating standard terms and definitions involves formation of a working group. An open call is given and applications submitted. Those with appropriate skills are invited and elected to participate. This terminology working group includes a multidisciplinary team representing different countries, disciplines and clinical practices. These authors research and debate and ultimately agree on the terms and definitions presented in the paper. This paper is then reviewed by the ICS Standardization Steering Committee and put up for review and comment by all ICS members. The final draft is reviewed and approved by the ICS Executive Committee and finally submitted for publication in Neurourology and Urodynamics. The initial process is expected to take 18 to 24 months.

But the process does not end there. After peer reviewed publication, key terms are chosen for further review and discussion on the ICS Wiki. Here further input is solicited and opinions collected which will be provided information to future working groups. We want your input. You can influence these terms and definitions.

ICS WIKI is on Social media - The ICS Wiki committee has launched a social media campaign including ICS enews, tweets, Facebook and LinkedIn posts. Join in and comment.

How to join the ICS Wiki

- Go to wiki.ics.org
- Top right hand corner click "join"
- Enter a user name no spaces, case sensitive. This is the name that will be visible to others.
- Create a password
- Enter your email
- Click "no" under Make a wiki
- Click "Join"

Posting Comments on the ICS Terminology Wiki - Participation required

- · Log into the wiki
- Open the wiki term page you would like to comment on
- After reading the text, scroll down to the bottom and click "add discussion"
- Type in your comment and include a subject
- Click small green square on the bottom right of the discussion box "monitor replies". This will send an email to you each time another comment or edit is posted on this term.
- Click "post" on the bottom left of the discussion box.

### Dr Luis Monteiro Urologist Portugal

The importance of clear and unambiguous terminology
The impact on the patient of new or changed terminology/definitions,
in a positive or negative sense, along all links of the healthcare chain.

"If names be not correct, language is not in accordance with the truth of things." (Confucius)

What do we mean by the healthcare chain possibly being influenced by terminology ambiguities?

- 1. Consumer/patient information
- 2. Patient-doctor communication
- 3. Diagnostic and pathology reports, coding
- 4. Drug approvals and indications (licensing)
- 5. Reimbursement, disability benefits, insurance
- 6. Scientific communication and Research

### Patient information

- Ambiguous language can change completely the significance
- A big problem in new consumer "knowledge" technology
- Also in LUTS
  - Urgency
    - Too many situations can be confused
  - Stress incontinence
    - Different concepts of "stress"

### Patient-doctor communication

- Terms widely accepted by doctors may not be understood by patients
  - · Desire to void
    - Is it a sensitive event or a will or intention? Patients would feel a "need" to void.
  - BPS or PBS since the name implies that there must be pain, whereas many patients have no true pain and will deny it because they do not consider symptoms such as discomfort, irritation, pressure etc to be pain. -> diagnosed as OAB? -> wrong treatment
  - Sensation of incomplete bladder emptying
    - Is it a true sensory experience or a logical interpretation? "Since I voided twice in a short period of time,
       I have the sensation or impression that my bladder was not completely emptied"

### Diagnostic and pathology reports

Although absolute diagnostic certainty in all cases is not attainable, nevertheless, unbridled use of unclear or ambiguous terminology may lead to additional, sometimes unnecessary tests and/or procedures directly or indirectly leading to increase in health care costs, as well as patient and clinician dissatisfaction.

There is significant difference in the interpretation of the degree of certainty between pathology and medicine in terms of "not excluded" (P=0.007) and "cannot exclude" (P=0.03).

Diagnostic and pathology reports

Legal issues

Drug approvals and indications

- Nocturia
- Urgency and OAB
  - Multiple causes and mechanisms, artificially grouped in a symptom and a condition with specific medication approvals

Reimbursement, disability certificates, coding and insurance

- Diabetes insipidus
  - In some countries, chronic therapy for Diabetes (mellitus) is fully reimbursed
  - Desmopressin, as a drug for Diabetes (insipidus) benefits from this mis...conception
- Interstitial cystitis
  - when IC (a disease) was changed to BPS (a syndrome) some authorities refused to reimburse treatments licensed specifically for IC!

### Scientific Communication and Research

- · Without agreement on terminology, Meta-analyses are pointless
- BPS again:
  - Without "pain" patients are not eligible to be included in BPS trials?

### Wrap-up

- 1-Words, terms and definitions became more important to patients than we anticipated
- 2- ICS took the lead on defining symptoms, signs and conditions and influenced society in many ways
- 3- The scientific community recognizes some limitations and is always ready to improve terms lead by knowledge but...
- 4- Some definitions have resulted in unintended changes which can influence patients greatly
- 5- Modifications and improvements must be used with caution
- 6- ICS wiki can be THE forum for wide discussion among all stakeholders before significant changes are proposed

### Dr Kevin Rademakers Trainee Netherlands

Underactive bladder – Really a problem or the new disease created by the industry?

Lower urinary tract symptoms (LUTS) can be caused by various conditions. Amongst this heterogeneous group of conditions, detrusor underactivity is one of the causes for voiding LUTS<sup>4</sup>. DU is often hidden behind other clinical phenotypes such as bladder outlet obstruction (BOO) or dysfunctional voiding; it may also coincide with the presence of urinary tract infections (UTIs) or urinary incontinence. Symptomatology includes prolonged voiding time, altered bladder filling sensation, (feeling of) post-void residual urine and/or slow urinary stream. Acute urinary retention (AUR) - as an extreme clinical presentation of DU - has a low

incidence in young men with an incidence of 0.2 per 1000 man-years<sup>6</sup>. However, the incidence increases with age and the debilitating effect of catheterisation may impact a patient's quality of life<sup>6-10</sup>.

The original definition on detrusor underactivity (DU) was written in the year 2002<sup>1</sup>. In addition to the ICS definition of DU, an ICS working group has proposed in the year 2015 a working definition for a more clinical approach of the topic in order to enable screening of patients based on symptoms and signs rather than pressure-flow measurement. This Underactive Bladder (UAB) working hypothesis includes: 'A symptom complex suggestive of detrusor underactivity and is usually characterised by prolonged urination time with or without a sensation of incomplete bladder emptying, usually with hesitancy, reduced sensation on filling and a slow stream'<sup>18</sup>. Theoretically, a partial overlap between UAB, DU and BOO is considered but the purpose of the working hypothesis is to clinically identify patients who are suspicious of having DU (in pressure-flow analysis)<sup>18,19</sup>. However, there is a lack of scientific data particularly on the clinical symptom complex and its relation to urodynamically defined DU. The absence of robust data makes it impossible to accept the above mentioned clinical hypothesis already as a definition. A recent study of Gammie et al. exposed that the use of only LUTS in the diagnostic route might not have enough discriminative power to differentiate UAB from other causes of voiding dysfunction<sup>20</sup>.

The exact prevalence of the DU/UAB is difficult to define due to the ongoing debate of the definitions. The reader has to keep in mind that the occurrence of the condition(s) is dependent on the definition and the used threshold values as well as on the available assessment tools for identification and differentiation. Therefore, researchers are currently only able to make a rough estimation of the prevalence of DU and UAB.

Patients with PVR due to DU are often difficult to identify because symptoms and signs are often masked behind identical or similar symptoms or signs of voiding dysfunction presented in **Figure 1**. To complicate matter, men or women with DU may even be without PVR or LUTS. Based on current literature, the prevalence of DU in men has been estimated to be 9-23% and as high as 48% in men aged <50 years and >65 years, respectively (**Table 1**). In women, prevalence of DU is estimated to be between 4% and 45%. However, more recent studies suggested prevalence rates between 10 and 20%

Until now, DU has only been characterised by the presence of PVR in the absence of BOO. Therefore, the previously published studies on the epidemiology of DU have not considered the coexistence of DU and BOO. Though, urologists frequently see men with LUTS and PVR after unsuccessful treatment of BOO (for example after transurethral resection of the prostate, TURP) or female patients with LUTS complaints or PVR after urinary incontinence surgery. DU is known to have an unfavourable influence on the outcome of both TURP<sup>37-39</sup> and mid-urethral slings<sup>40</sup>.

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### Dr Melanie Morin Physiotherapist, Associate Professor and Researcher Canada

Topic: Muscle tone - how do you measure - multidimensional

### Aims of this topic:

- 1. To present the physiology behind muscle tone;
- 2. To present the current terminology related to pelvic muscle tone;
- 3. To discuss the current assessment tools and their advantages and limitations.

Pelvic floor muscle (PFM) tone plays a crucial role in several pelvic floor disorders as both increase and decrease in tone are related to differential conditions. Adequate terminology and assessment of tone in light of muscle physiology are thus an essential prerequisite to better understand the ongoing pathophysiological processes and hence orient treatment accordingly.

The ICS/IUGA standardization and terminology committee has recently proposed to define tone as "state of the muscle, usually defined by its resting tension, clinically determined by resistance to passive movement" [1]. Muscle tone is composed of a passive and an active component [2]. The <u>passive component</u> consists of the viscoelastic properties of the muscle tissue related to several structures [3]: 1- the extensibility of actin-myosin cross-bridges; 2- non-contractile cytoskeleton proteins and 3- conjunctive tissues surrounding the muscle. The <u>active component</u>, consists of physiological contracture (i.e. trigger points (TP)), electrogenic spasms (includes unintentional muscle contraction that can be brought to voluntary control), and normal electrogenic contraction

(involves resting activity in normally relaxed muscle and myotatic reflex). Other terms related to tone such as 'stiffness', 'tension', 'spasm' will be discussed.

The available assessment tools present different advantages and limitations. Each method measures different tone components and parameters [27, 28].

The <u>digital palpation</u> is contested for research purposes because of its subjectivity. This tool provides insight into PFM tone, flexibility, relaxation abilities [4-9] by assessing the summative contribution of muscle tone components (i.e., cannot distinguish between specific sources of muscle tone). The ability to detect specific zones of tenderness and TP represents an advantage over the other techniques.

<u>Electromyography</u> (EMG) is the recording of electrical potentials generated by the depolarization of muscle fibers [1]. Viscoelastic properties and physiological contractures are not detectable using EMG. Hence, only one component of muscle tone is assessed (i.e. electrogenic contraction and spasm). Some confounding factors (e.g. artifact, cross-talk and non-linearity with forces) should be taken into account as they are known to interfere with the signal amplitude [10].

<u>Transperineal ultrasound</u> assesses the summative contribution of muscle tone components. However, it is not a direct measure of tone as it corresponds to the visualization of the pelvic structures and does not assess the muscle's resistance to stretch. The main advantage is related to the fact that it is a pain-free procedure (no vaginal insertion is required).[11].

The available <u>intravaginal PFM dynamometers</u> differ in terms of technical issues such as the size/shape and the force vector recorded (anteroposterior, latero-lateral) [12-23]. One main advantage is that they provide direct force assessment. They mainly evaluate tone as the summative contribution of the active and passive components. Some can evaluate tone during a dynamic stretch therefore enabling the assessment at different muscle lengths and the calculation of compliance, stiffness and hysteresis. A methodology combining dynamometry and EMG allowed to discriminate the relative contribution of the passive and active components of tone [24].

The <u>MyotonPro</u>™, an instrument assessing tone in the skeletal muscles [25], has been used recently for PFM assessment by applying pressure externally on the perineum [26]. Its use for assessing the summative contribution of muscle tone components is promising.

There is no gold standard for assessing PFM tone. Most of the tools available measure summative contribution of active and passive components. Given the various advantages and limitations of each tool, a combination of tools is probably the most suitable approach to investigate PFM tone.

This presentation will draw upon these references:

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### Dr Roger Dmochowski, MD, MMHC, FACS

### Urologist - editorial board for Neurourology and Urodynamics, and International Journal of Urogynecology United States

Considerations for Electronic Communications and the Imparting of Information Electronically

In an era of increasingly eased electronic communication, medical practice is heavily impacted by the availability of data streams and informational inputs to those seeking care that may or may not be within the standard streams of organized medical communication. Perhaps one of the greatest challenges we face in modern medicine is the horizontalization of data such that not only, raw and relatively uninterpreted data is generally present electronically through the internet, but also the impressions and self-teachings of individuals who have either experienced care or who would espouse themselves to be knowledgeable related to conditions.

These trends are omnipresent and will only continue to progress given the ease of access to electronic media and the inherent free speech of Western society.

Incumbent upon medical education is a consideration of these trends in light of knowledge deficits and linguistic and comprehensional limitations associated with peripheral or transitional exposure to medicine and medical concepts without a firm basis of understanding of those concepts.

Therefore, it is critical that medical care and treatment be founded on establishing a colloquium such patients are exposed to evidence based data which is prefaced by establishment of a knowledge base which is consonant with the individual's literacy

foundations. Therefore, medical communications must establish, not only a definitional lexicon but also an elucidation of underlying physiology and pathophysiology in a manner that is easily and fairly rapidly comprehensible. Given that the essence of adult learning is repetitional exposure, it is critical that this knowledge be separated spacially in time and also in sequence such that the individual considering care or treatment is re-exposed to new concepts on a progressive basis. Electronic education, therefore, must also consider the fact that individuals learn and acquire knowledge in different circumstances as adults, specifically connoting the importance of visual as well as written explanation and elucidation.

Critically important is an establishment of health literacy early in the communication stream with the channeling of informational support based upon that early establishment of health literacy. It does little good to provide complicated solutions without some knowledge of the individual's ability to comprehend same.

The importance of spaced learning, literacy acquisition, and the use of alternative methods of information transmittal will be emphasized.

Dr Tom Marcelissen Trainee Netherlands

The use of social media in healthcare

Social Media (SoMe) are computer-mediated technologies that facilitate the creation and sharing of information, ideas, career interests and other forms of expression via virtual communities and networks. It consists of user-generated content on the internet and is usually presented on a website or app, although text posts, digital photos or videos can also be included. The applications of SoMe in healthcare and its role in scientific communication represents a growing area of interest. SoMe differ from traditional media (e.g., scientific journals or textbooks) in many ways, including quality, reach, frequency, usability, immediacy, and permanence.

In recent years, we have witnessed an explosion in the development and dissemination of information. We live in a connected world where news, events and information crosses the borders of any country in a matter of a seconds. Internet users continue to spend more time on social media sites than on any other type of site. In addition, there has been a rapid transition from desktop computers to mobile use of social media, which users are accessing when they are "on the go" via tablet computer or smartphone.

Currently thanks to SoMe, healthcare providers are able to share information, stay up-to-date and expand their networks in a faster and easier way. Loeb et al. reported that almost 74% of urologists use some form of the SoMe platform. Facebook is the most used by 89% of urologists. Nowadays Twitter is probably the most appealing platform with more applications for use in a professional way, consisting of the broadest possible opportunities for interesting news, knowledge sharing and networking amongst health professionals.

The most important advantages of SoMe in healthcare include:

- 1. Dissemination of scientific content
- 2. Patient education
- 3. Networking
- 4. Professional online presence
- 5. Job opportunities

However, using SoMe in healthcare also imposes certain risks. For example, incorrect or unprofessional content on SoMe could represent a risk to the reputation of professional careers or hospitals. Therefore, it is important that healthcare providers are aware of the appropriate use of SoMe. For these reasons professional organizations, including the European Association of Urology (EAU), have developed guidelines or recommendations on the appropriate use of SoMe.

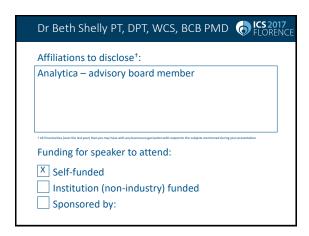
To summarize, participants of this workshop session will learn about the various uses of SoMe in healthcare and how to use them effectively. Furthermore, the various advantages and pitfalls of SoMe will be discussed.

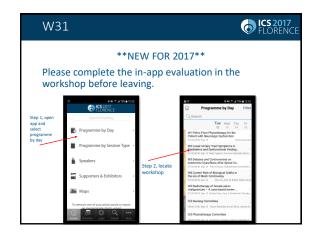
Dr Sajjad Rahnamai Trainee Netherlands

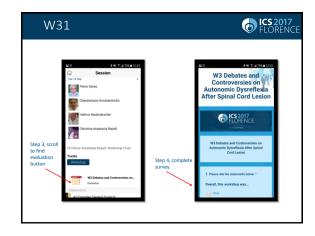
Your turn to post.

Challenge questions will be provided in the meeting for response by participants.









A shortened version of the handout has been provided on entrance to the hall
 A full handout for all workshops is available via the ICS website.
 Please silence all mobile phones
 Please refrain from taking video and pictures of the speakers and their slides. PDF versions of the slides (where approved) will be made available after the meeting via the ICS website.
 Let me know if the room is too cold or hot
 And please ask questions at the microphone with your name and country

•Recognize the important of standard terms and how they affect medical practice and patient care
•Learn how ICS standard terms and definitions are created, discussed and refined
•Understand the differences between evidence, facts and hear say as differentiated by founded medical evidence and internet / social media based information
•Create a wiki log in and post a comment on ICS standard terms

### Wiki Workshop Speakers



Dr Beth Shelly (chair) - USA

Dr Luis Monteiro - Portugal

Dr Kevin Rademakers - Netherlands

Dr Melanie Morin - Canada

Dr Roger Dmochowski - USA

Dr Tom Marcelissen - Netherlands

Dr Sajjad Rahnamai - Netherlands

### Schedule



- •Introduction to wiki posting
- •Importance of unambiguous terminology / The impact of new or changed terminology/definitions – for better or for worse - on the patient along all links of the healthcare chain
- •Underactive bladder, really a problem? or the new disease created by industry?
- •Muscle tone how do you measure multidimensional
- •Reconciling social media and medical evidence down the yellow brick road The effect of real time publications (via social media and other platforms) Vs online journal publications. Which are more effective? How can they interrelate?
- Your turn to post

### What is a WIKI?



A wiki is a web application which allows people to comment and collaboration with others.

### www.wiki.ics.org



### The Process of Creating Standard Terms



Working group formation

Research and debate

Consensus on terms and definitions

Review and comment by

- ICS SSC
- Entire ICS
- ICS EC

Publication by Neurourology and Urodynamics

18 to 24 months

### But the process does not end there



- •Key terms are chosen for further review and discussion on the ICS Wiki.
- •Further input is solicited and opinions collected
- •Provided information to future working groups.
- •We want your input.
- •You can influence these terms and definitions.

### ICS WIKI on Social Media



ICS enews

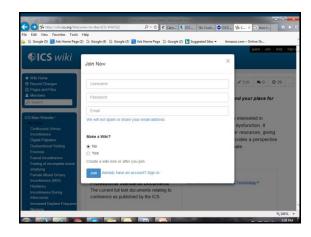
Tweets - #icswiki

Facebook

LinkedIn

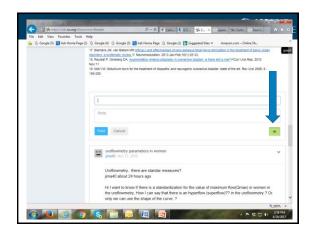
### Join the wiki and comment





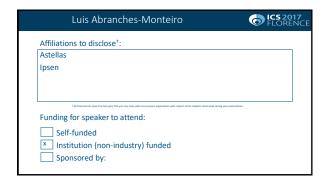


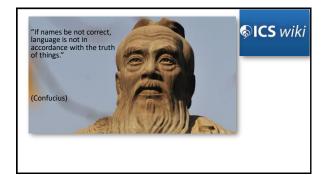






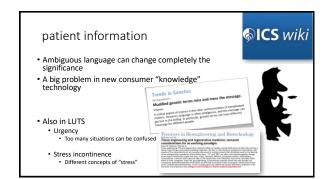


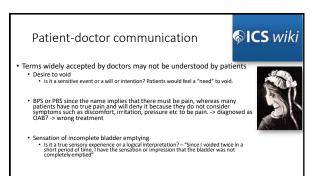




What do we mean by healthcare chain, (possibly being infuenced by terminology ambiguities)?

1- Consumer-patient-information
2- Patient-doctor communication
3- Diagnostic and pathology reports and coding
4- Drug approvals and licensing
5- Reimbursement, disability benefits, insurance
6 - Scientific communication and Research





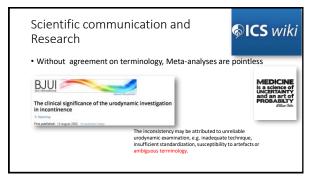












### Scientific communication and **©ICS** wiki Research • BPS again: • Without "pain" patients are not eligible to be included in BPS trials?

### Wrap-up

- **&ICS** wiki
- 1-Words, terms and definitions became more important to patients than we anticipated
- 2- ICS took the lead on defining symptoms, signs and conditions and influenced society in many ways
- 3- The scientific community recognize some limitations and is ready to always improve terms lead by knowledge but...
- · 4- Some definitions have resulted in unintended changes which can influence patients greatly
- 5- Modifications and improvements must be used with caution
- 6- ICSwiki can be THE forum for wide discussion among all stakeholders before significant changes are proposed





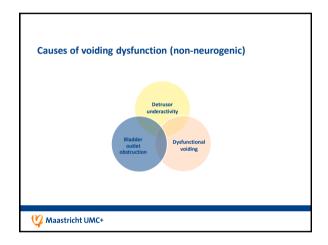




### Is incomplete bladder emptying dangerous?

- Upper UT complications?
- · Mortality?
- · Morbidity!!!
- Complaints
  - Bothersome (voiding) LUTS
- Recurrent UTIs
  - Urinary retention
- Quality of Life
- Health-Care Related costs



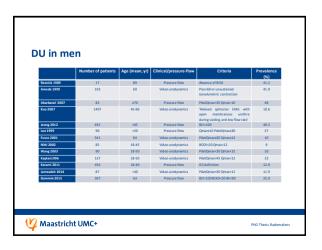


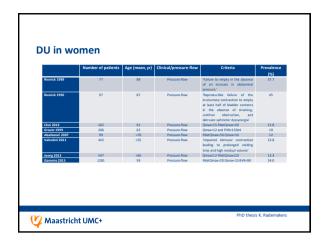
### **DU or UAB**

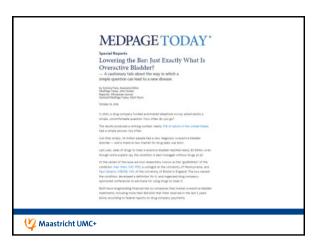
- DU = ICS definition
  - 'contraction of <u>reduced strength and/or duration</u>, resulting in <u>prolonged bladder emptying</u> and/or a <u>failure to achieve</u> <u>complete bladder emptying</u> within a <u>normal time span</u>'
- UAB = heated debate



Abrams et al. Neurourol Urodyn 2002







Question 1

Who believes UAB is a disease created by the industry?

Index patients

Male 40 yr. infrequent voiding since puberty. Urinary retention 1.7 L after knee surgery, after which inability to empty the bladder. CISC.

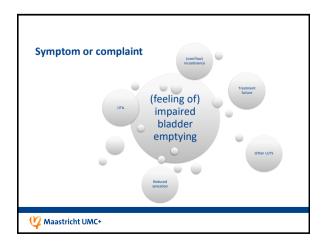
Female 42 yr. incomplete bladder emptying after TVT. Straining. No detrusor contraction on conventional-UDS. CISC.

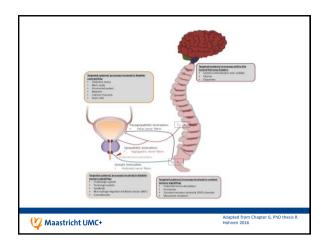
Male 63 yr. No improved of micturition complaints after TURP. Open prostatic urethra. No contractility on conventional-UDS. CISC.

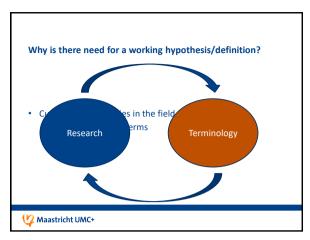
Female 74 r, DM, rec-UTIs, history of OAB. Peripheral neuropathy, inability to catheterise and has a suprapublic catheter.

Question 2

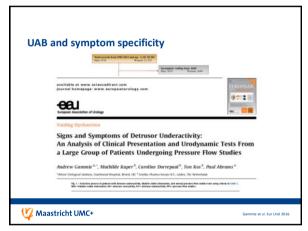
Who recognises the index patients when comparing them to your own daily clinical practice?

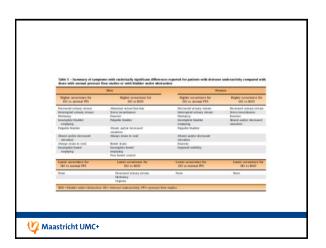


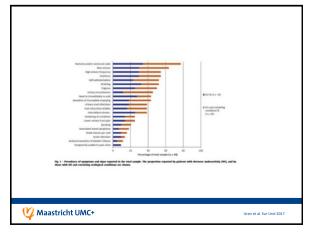








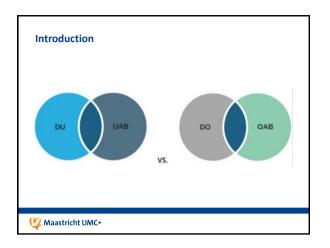


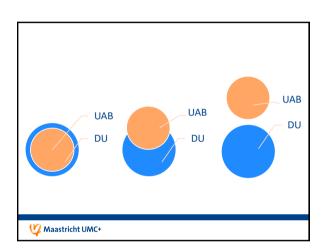


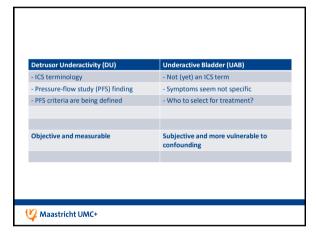
### **UAB** working hypothesis • DU = ICS definition - 'contraction of <u>reduced strength and/or duration</u>, resulting in

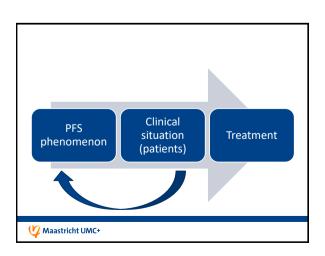
- prolonged bladder emptying and/or a failure to achieve complete bladder emptying within a normal time span'
- UAB working hypothesis:
  - A symptom complex suggestive of detrusor underactivity and is usually characterised by prolonged urination time with or without a sensation of incomplete bladder emptying, usually with hesitancy, reduced sensation on filling and a slow stream

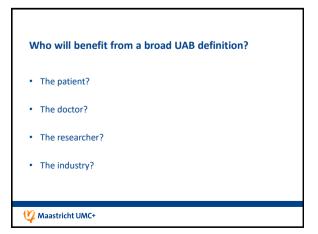
Maastricht UMC+





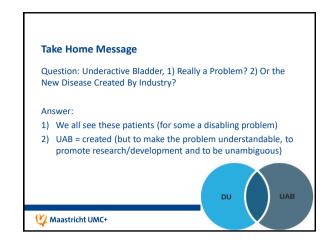


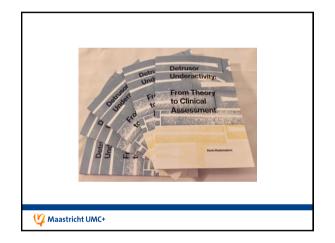




### Who will benifit from a strict definition • Long-term: — The patient! — The doctor! — The researcher! — The industry!

Maastricht UMC+







## Pelvic floor muscle tone How should we define and measure it? Mélanie Morin, PT, Ph.D Associate Professor and Researcher Research Center of the Centre hospitalier universitaire de Sherbrooke Faculty Medicine and Health Sciences University of Sherbrooke, CANADA Melanie.m.morin@usherbrooke.ca



### OBJECTIVES To present and discuss the current terminology related to pelvic muscle tone; To present the physiology behind muscle tone; To discuss the current assessment tools and their

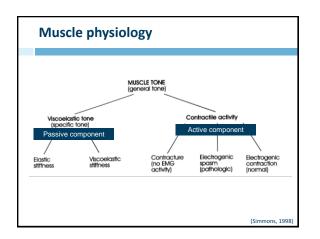
advantages and limitations.

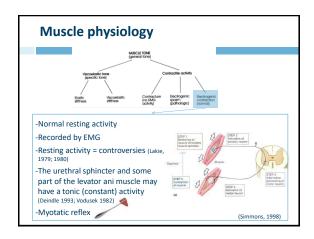
http://wiki.ics.org/Muscle+Tone

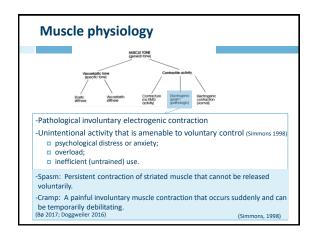
# PFM tone plays a crucial role in various pelvic floor disorders ↑ tone: bladder/ bowel elimination disorders, pelvic pain (Morin 2014; 2017; Viscardi 2012) ↓ tone: incontinence and pelvic organ prolapse (Morin 2004; Braekken 2009)

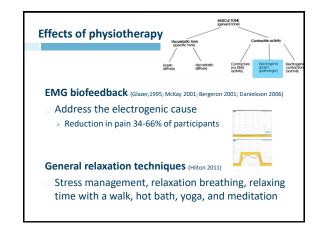
## "State of the muscle", usually defined by its resting tension. Bo K et al. An IUGA/ICS joint report on the terminology for the conservative and nonpharmacological management of female pelvic floor dysfunction. Int Urogynecol J. 2017. 28(2): p. 191-213. Doggweiler et al. A standard for terminology in chronic pelvic pain syndromes: A report from the chronic pelvic pain working group of the international continence society. Neurourol Urodyn. 2017 Apr;36(4):984-1008.

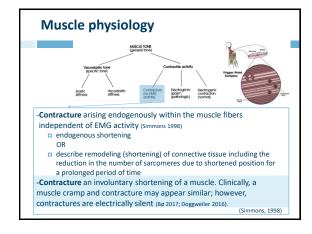
## "State of the muscle", usually defined by its resting tension. Muscle tone is evaluated clinically as the resistance provided by a muscle when a pressure/deformation or a stretch is applied to it. Muscle tone has two components: (i) contractile (active) component; (ii) the viscoelastic (passive) component.

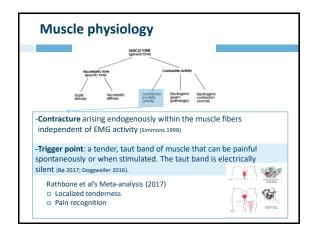


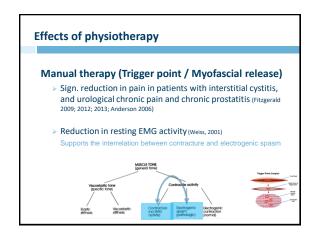


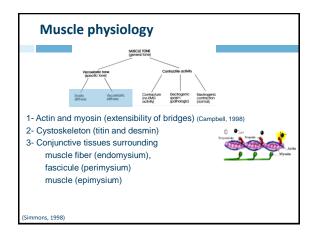


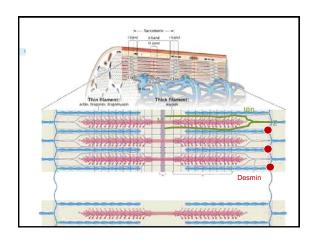


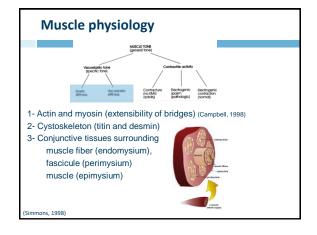


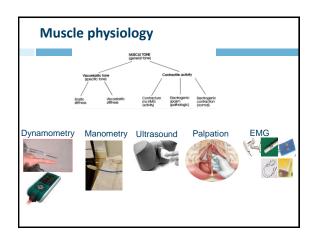


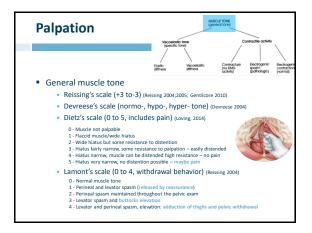


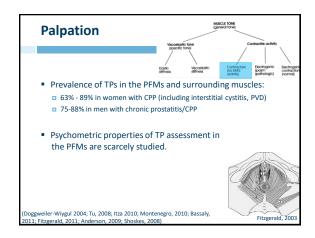


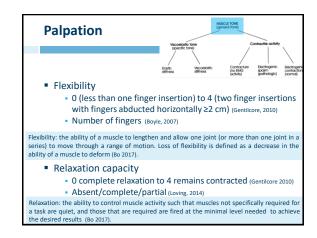


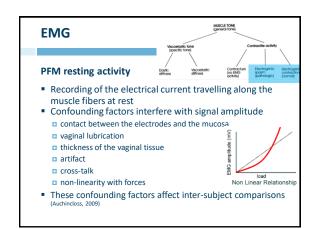


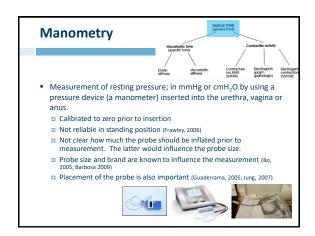


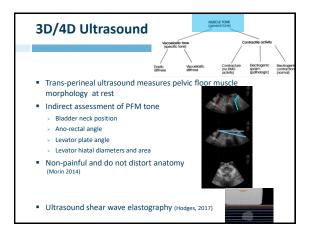


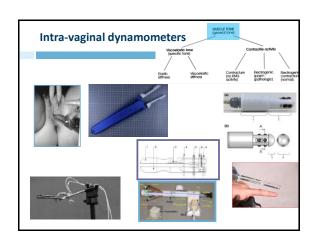


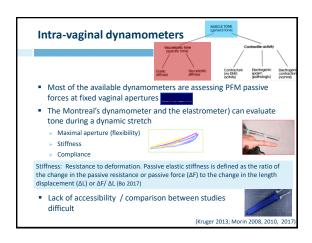


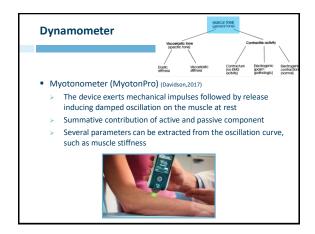












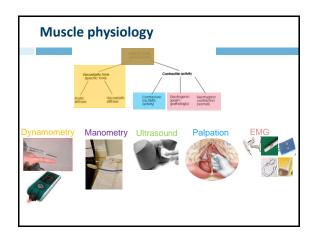
### Summary – assessment tools

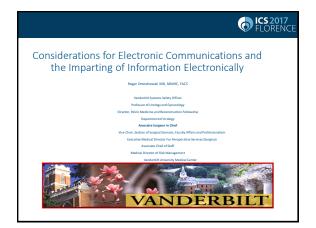
- There are no gold standard for assessing PFM tone
- There are no normative data available
- Most of the tools available measure global PFM tone (i.e., summative contribution of active and passive components)
- A combination of tools is probably the most suitable approach to investigate PFM tone

### Terminology

- Muscle tone
- Hypertonicity: is a general increase in muscle tone that can be associated with either elevated contractile activity and/or passive stiffness in the muscle, and may exist in the absence of muscle activity altogether. "Increased tone" is preferred when the cause is non-neurogenic.
- Hypotonicity: general decrease in muscle tone that can be associated with either reduced contractile activity and/or passive stiffness in the muscle. "Decreased tone" is suggested
- Spasm / Cramp
- Contracture
- Trigger point
- Stiffness
- Flexibility
- Tension: may have a similar meaning to tone and stiffness
  (Bø 2017; Doggweiler 2017)

### **THANK YOU! GRAZIE!**

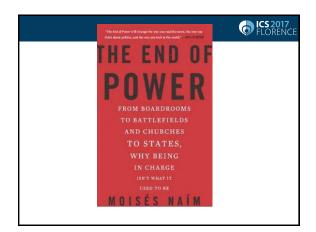


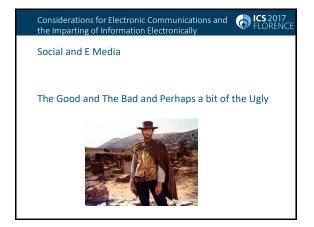












Considerations for Electronic Communications and the Imparting of Information Electronically

Data "Horizontalization"

Medicine perhaps last bastion of privileged knowledge

Increasing and improved access to materials related to any and all topics

Provenance of data in public domain is subject to question

Often data heavily biased or influenced by Perceptions
Prior experience
Folkloric beliefs

Considerations for Electronic Communications and the Imparting of Information Electronically

Informed consent critical to medical care delivery

Legalistic sense
Patient approbation of care

Need for knowledge transfer and also knowledge redirection

Knowledge must be presented in easily accessible and generally comprehensible fashion

Knowledge transfer often must be done repetititively

Considerations for Electronic Communications and the Imparting of Information Electronically

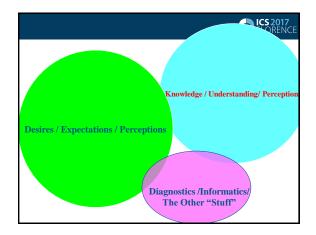
"The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions."

Considerations for Electronic Communications and the Imparting of Information Electronically

Major source of economic inefficiency healthcare system

Magnitude to the U.S. economy \$106 billion to \$238 billion USD annually.

7 - 17 percent of all personal healthcare expenditures
Enough saving to fund all health care cost in the US



Considerations for Electronic Communications and the Imparting of Information Electronically

Role of electronic media in adult (patient) education

Ability to improve data assimilation
 At most 30% retained during consultation for care

Media can be tailored to patient

Available on demand

Reproducibility of messaging

Value of engagement

Considerations for Electronic Communications and the Imparting of Information Electronically



Social media gone bad

Blog posting and defamatory websites
Easy to create
Open to any one with key word search
Modifiable

Not "dark web" per se but as nefarious

Ability to identify and react to same Recent You Tube polcy change Considerations for Electronic Communications and the Imparting of Information Electronically



Electronic media provides a challenge

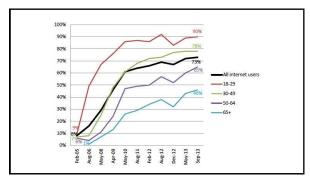
Ability to leverage discussion in manner which Facilitates transfer of knowledge Optimizes interaction Leaves care episode open ended

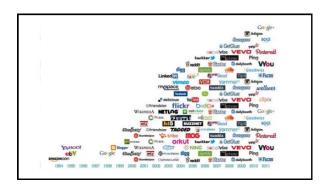
Must react to and change knowledge perceptions

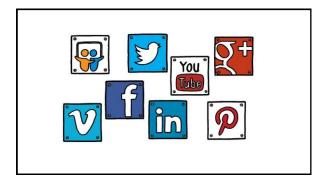
Cognizance of E media as communication and self – expression outlet  $\,$ 

People with anonymously write what would never be verbalized

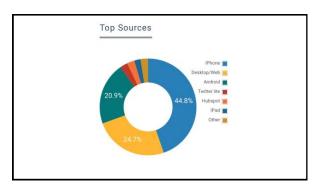


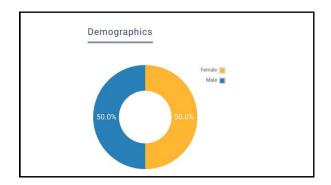


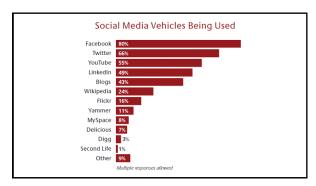






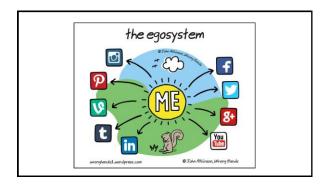






### Why use Social Media?

- Easy accessible
- Very fast
- Selectivity
- interactive nature
- Networking opportunities



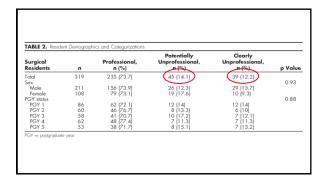


An Assessment of Unprofessional Behavior Among Surgical Residents on Facebook: A Warning of the Dangers of Social Media

Sean J. Langenfeld, MD, Gates Cook, BA, Craig Sudbeck, BA, Thomas Luers, BA and Paul J. Schenarts, MD

Department of Surgery, University of Nebraska Medical Center, Omaha, Nebraska

Professional
Professional
Potentially
unprofessional
Clearly
Unprofessional
Unpro





### Unprofessional content on Facebook accounts of US urology residency graduates

Kevin Koo, Zita Ficko and E. Ann Gormley

Section of Uralogy, Department of Surgery, Dartmouth-Hilchcock Medical Center, Lebanon, NH, USA

Table 2 Unprofessional or potentially objectionable content on unologists' public Facebook accounts (n = 201).

Content category\*

Unprofessional content

Any unprofessional content

27

134

135

References to alcobel introductation (T)

13 6.5

Appearing intoxicated (I)

Unprofessional behaviour at work or in a professional capacity (I)

5 2.5

Protected health information (UT)

5 2.5

Unlawfull behaviour (UT)

3 1.5

Offensive comments about colleagues at own hospital (T)

3 1.5

Offensive comments about a specific patient (T)

1 0.5

Offensive comments about a specific patient (T)

1 0.5













