



## Chronic Medical Conditions and LUTS, Assessment and Management

W21, 29 August 2011 14:00 - 18:00

Start	End	Topic	Speakers
14:00	14:05	Introduction	<ul style="list-style-type: none"> <li>Abdalla Fayyad</li> </ul>
14:05	14:45	Managing LUTS in the elderly. Can we do better?	<ul style="list-style-type: none"> <li>Adrian Wagg</li> </ul>
14:45	15:15	Managing LUTS following stroke	<ul style="list-style-type: none"> <li>Jalesh Panicker</li> </ul>
15:15	15:30	Questions	All
15:30	16:00	Break	None
16:00	16:40	Management of LUTS in Multiple Sclerosis	<ul style="list-style-type: none"> <li>Jalesh Panicker</li> </ul>
16:40	16:45	Questions	All
16:45	17:15	LUTS and Diabetes, past, present and future	<ul style="list-style-type: none"> <li>Abdalla Fayyad</li> </ul>
17:15	17:45	LUTS in Parkinsons disease. Assessment and Management	<ul style="list-style-type: none"> <li>Jalesh Panicker</li> </ul>
17:45	18:00	Questions	All

### **Aims of course/workshop**

This workshop provides delegates with update on the management of LUTS in patients with chronic medical conditions. Bladder care in medical conditions is generally ignored and mismanaged. Many doctors and nurses managing LUTS find it difficult to understand the relation between coexisting medical conditions and LUTS. Experts in the field will cover the effect of ageing, dementia and polypharmacy on the bladder. The workshop will also cover the management of LUTS in patients with stroke, Parkinson's disease, multiple sclerosis and diabetes mellitus.

### **Educational Objectives**

The workshop will cover the important topic of management of LUTS in chronic medical conditions. For many doctors, nurses and physiotherapist, the relationship between LUTS and co-existing chronic medical conditions is poorly understood and LUTS are either ignored or the effect of disease or medications on bladder function is not appreciated. The aim of this workshop is to provide the delegates with update on the presentation, investigation and management of bladder dysfunction following stroke, and in patients with diabetes mellitus, multiple sclerosis and Parkinson's disease. The workshop will also cover the effect of ageing, dementia and polypharmacy on bladder dysfunction, and the optimum management strategies. We ran a similar workshop in the joint ICS-IUGA meeting in Toronto, where we had delegates from all over the world with very positive feedback.

## Diabetes Mellitus and LUTS Past, Present and Future

Abdalla M Fayyad MD MRCOG  
Consultant Urogynaecologist  
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United Kingdom


## LUTS in DM

- Scope of the problem
- Help seeking behaviour
- Patient centred outcomes
- Aetiology
- Treatment
- Future

## Received Wisdoms

- **Not putting the clocks back 'could reduce accidents and cut carbon emissions'**
- **Diabetic Cystopathy**
- Floppy atonic bladder
- Recurrent UTI's

Mail on Line 29th October 2010



Frimodt-Muller

## Scope of the problem

- Increasing
- Under reported
- Mismanaged

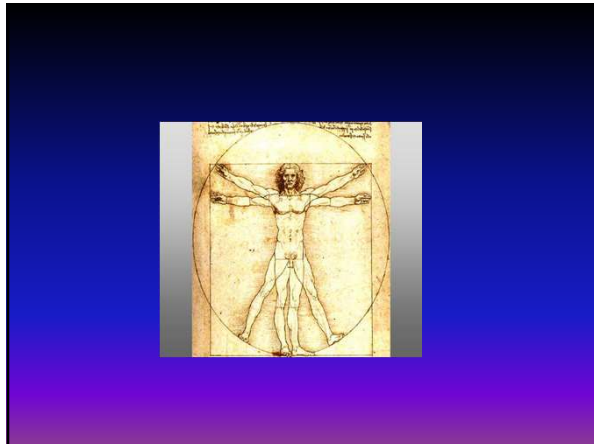


## Expectations

**Positive proof of global warming.**



18th Century 1900 1950 1970 1980 1990 2006

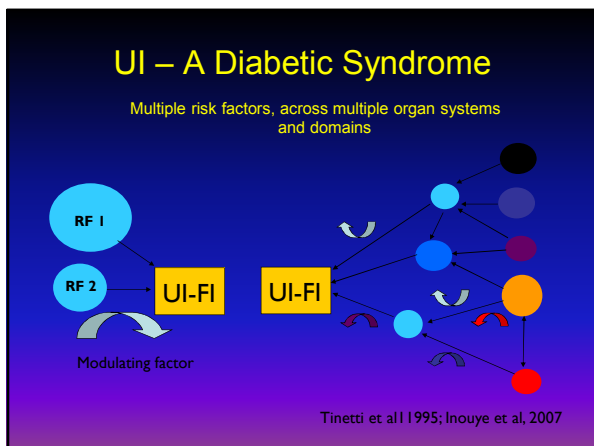


- Help seeking behaviour:
  - Incontinence was a normal part of ageing
  - Incontinence is normal after childbirth
  - There was no treatment
  - Treatment does not fix the problem
  - Treatment is risky or harmful

Doshi et al 2010 *J Urol*

### Diabetes and LUTS

- Prevalence
- Urine Production
- Voiding Dysfunction
- Decisions on treatment



- 42% prevalence of bothersome LUTS in DM
- Help Seeking behaviour

## Bothersome Symptoms

- Urgency Incontinence
- Urgency
- Nocturia
- Stress incontinence
- Voiding dysfunction!!

Fayyad et al *Int Urogynecol J* 2009

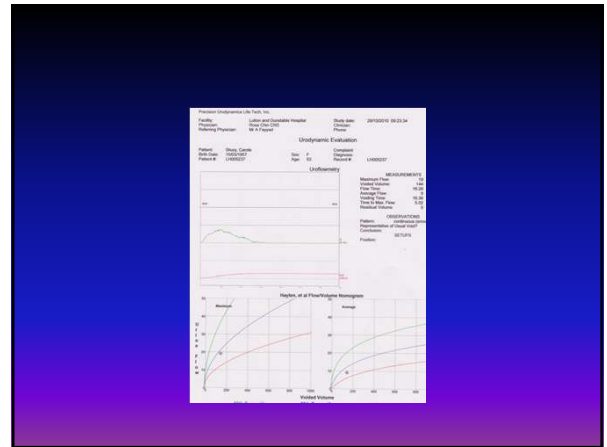
## Urine Production

- 24 hour urine output
- Nocturnal urine output
- Max bladder capacity
- Average voided volume
- Incontinence episodes

Fayyad et al *Neurourology and Urodynamics* 2010

Urodynamic Study Report Table

Phase	Volume (ml)	Pressure (cm H <sub>2</sub> O)	Time (s)	Flow (ml/s)	Other Parameters
1	100	10	10	10	
2	200	15	20	10	
3	300	20	30	10	
4	400	25	40	10	
5	500	30	50	10	
6	600	35	60	10	
7	700	40	70	10	
8	800	45	80	10	
9	900	50	90	10	
10	1000	55	100	10	



## Voiding Dysfunction

- Frimodt Muller
- Increased 33%
- Degree of bother
- Neuropathy
- UTI
- Bladder wall thickness



## Treatments

- Who?
- How?
- Counselling?

## EGGS for Patient Centred Outcomes

- Patient centred outcomes:
  - E: Expectations
  - G: Goals
  - G: Goal Setting
  - S: Satisfaction

## Urinary Incontinence

- Stress urinary incontinence
- Overactive bladder

## Evidence based actions

- History
  - Comorbidity
  - Medications
- Examination and investigation
  - Functional assessment
  - Cognitive assessment
  - Depression screen
  - Urinalysis
  - Clinical stress test
  - Rectal examination for impaction/loading

- PVR - compelling clinical experience for use in targeted patients
- recurrent UTIs
- medications that impair bladder emptying,
- chronic constipation
- previous high PVR
- Poor emptying and/or outlet obstruction Bladder diary
- Nocturia
- wet checks in long-term care residents

## Biopsychosocial model of disease

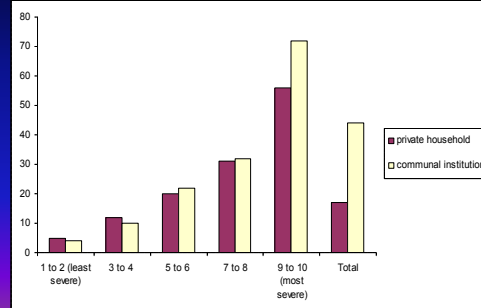
- The kind of person that you are, the way you think about the world and the immediate environment influences the perception of your symptoms.



## Environment

- Unfamiliar environment exacerbates incontinence e.g. home to hospital
- Sensory impairment, finding toilet, walking
- Toilet mapping in unfamiliar surroundings.
- Assistance of carers and carer availability.
- Availability of suitable aids and adaptations.

## Prevalence of incontinence in adults with disabilities by place of residence and overall severity of disability



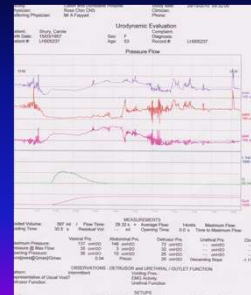
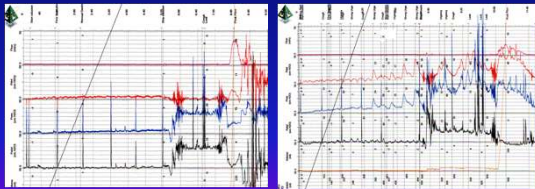
## The brain

- Motivation to stay dry and bother reduced in Alzheimer and Lewy Body dementia
- Evidence of new incontinence in severe stroke (frontal lobe)
- Bladder drill is a behavioural activation (CBT) technique. Effects mediated as much centrally as on LUT.



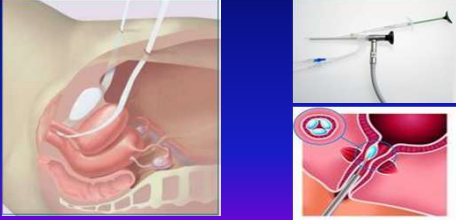
## Urodynamic studies

- Urodynamic stress incontinence
- Detrusor overactivity incontinence



### Surgery

- TVT
- Bulking agents



The image contains two anatomical diagrams. The left diagram shows a transvaginal approach for a tension-free vaginal tape (TVT) procedure, with a white tape being inserted into the pelvic floor. The right diagram shows the injection of bulking agents into the urethral area, with a needle and syringe shown above and a cross-section of the urethra below.

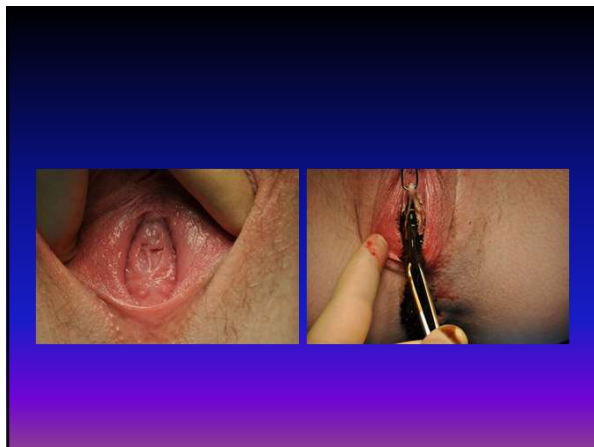
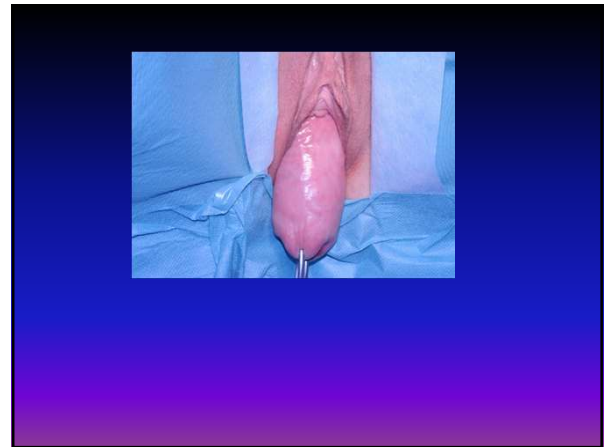
### Botox



The image shows a woman receiving a Botox injection in the forehead area. To the right, there are four circular endoscopic views of the urethra, showing the internal structure and the application of Botox to the urethral sphincter.

### Decisions on treatments

- Diabetes Control
- Surgery
- Anticholinergics??
- Voiding dysfunction



### Conclusion

- Diabetic cystopathy
- Bothersome symptoms: OAB wet
- Voiding Dysfunction
- Appropriate care package part of treatment
- A uncured patient may be perfectly satisfied.
- A clinically improved patient isn't always a satisfied patient

## The Future?

- Prevalence in primary care?
- Help seeking behaviour
- Diabetes physicians?

## Management

- Sugar control, short and long term?
- Anti-muscarinics? Gabapentin
- Botox, Neuromodulation
- Surgery for stress incontinence

## Ultra structural changes

