



**Arab School of Urology (ASU)**

**Functional and Female Urology Program**

Fawzy Farag MD, PhD

Sohag University Hospital Egypt.

Wally Mahfouz MD, PhD

Alexandria University, Egypt.



ASU Functional Urology group will be providing a comprehensive teaching and training program for Arab urologists.

It consists of 9 modules as follows:

<b>Teaching module 1: Urodynamics</b>	Page 3
<b>Teaching module 2: Neurourology</b>	Page 7
<b>Teaching module 3: Female Urology</b>	Page 10
<b>Teaching module 4: Men with LUTS/BPE</b>	Page 14
<b>Teaching module 5: Overactive Bladder syndrome</b>	Page 17
<b>Teaching module 6: Female Sexual Functioning and Dysnfunctions</b>	Page 20
<b>Teaching module 7: Painful Bladder Syndrome/Interstitial cystitis (PBS/IC)</b>	Page 23
<b>Teaching module 8: Genitourinary Fistulae</b>	Page 26
<b>Teaching module 9: Urinary tract infections (UTIs) in females</b>	Page 28



## Teaching module 1

### Urodynamics

#### Objectives

By completing the teaching module, candidate is expected to:

- Learn the lower urinary tract symptoms (LUTS)
- Be familiar with the urodynamic setup and armamentarium
- Learn the indication for urodynamics in various patients' groups including female urology, neurourology, male LUTS/benign prostatic enlargement (BPE)
- Learn the basic principles of objective testing of lower urinary tract function
- Be able to prescribe with certainty the most suitable urodynamic study for every patient
- Be able to write proper urodynamic reports using standardized terminology
- Learn the ICS terminology for Lower urinary tract dysfunction (LUTD)
- Know how to assess a urodynamics trace and rule out technical artefacts
- Correlate urodynamic findings to clinical presentation

#### Target candidate

Junior urologist in training or recently graduated seeking for developing his/her career.

#### Number of candidates

20 participants (4-5 candidates per urodynamic machine)

#### Assumptions





No pre-required level of experience in functional urology/Urodynamics for target candidate.

### **Module construction**

The teaching module consists of the following parts:

#### **Part 1: Theoretical background of lower urinary tract function, and LUTS in:**

- Neurourology
- Female urology
- Male LUTS/BPE

#### *Method of delivery*

- Live/e-course
- Orientation tour will be demonstrated to the trainees regarding the urodynamics machines, urodynamic catheters utilized and good urodynamic practices

#### **Part 2: Basic principles of Urodynamics**

- Filling/voiding cycle
- Physics of urodynamics
- Flow test
- Filling cystometry
- Pressure flow study

#### *Method of delivery*

- Live/e-course
- Hands-on-training



### **Part 3: Urodynamic interpretation per patient category including**

- Neurourology
- Female urology
- Male LUTS/BPE

#### *Method of delivery*

- Live interactive course.

### **Accreditation**

- 6hrs

### **Instructors**

- An instructor is expected to show high level of experience in voiding dysfunction and technical and clinical aspects of urodynamics and be able to solve technical issues raised during the teaching course and is expected to devote time and efforts to complete the module.

### **Feedback**

- Candidates will be required to complete a feedback form to enable the faculty members of functional urology directorate of ASU to improve the quality of the teaching module.

### **Method of Assessment**

- Candidate are required to complete a checklist of expected learning items after completing the module
- Candidate will be required to do an MCQ test to assess their knowledge pre- and



post-attending the module

Course lectures.

- 1- Urodynamics armamentarium and setup
- 2- ICS terminology for LUTS
- 3- Non-invasive urodynamics (Voiding diary, Uroflowmetry, Pad test)
- 4- Invasive urodynamics (cystometry and pressure flow studies)
- 5- Good practice UDS
- 6- Hands-on orientation tour
- 7- Running a test and interpreting the results (case video presentation)
- 8- Running a test and interpreting the results (case video presentation)
- 9- Basic urodynamic report

**Validation of Module**

- Functional urology directorate is expected to collaborate with International Continence Society in delivering, reviewing, and approving the teaching module.



## Teaching module 2

### Neurourology

#### Objectives

By completing the teaching module, candidates are expected to be able to:

- Recognise various urological clinical aspect on patients with neurological disorders including spinal cord injury (SCI), multiple sclerosis (MS), Parkinson's disease, cerebrovascular accident (CVA), and cerebral palsy.
- Carry out and interpret urodynamics and videourodynamics on patients with neurogenic bladder
- Learn about various treatment modalities to patients with neurogenic LUTD including clean intermittent catheterisation (CIC), Botox intravesical injection, surgical correction of neurogenic stress urinary incontinence (SUI).

#### Target candidate

- Senior urologist with special interest in functional urology subspecialty.
- Recently graduated seeking for developing his/her career.

#### Assumptions

- No pre-required level of experience in functional urology/Urodynamics for target candidate.

#### Module construction

- The teaching module consists of the following parts:

#### Part 1: Pathophysiology of LUTD in patients with neurological disorders.

*Method of delivery*

Live/e-course





**Part 2: Urodynamics and videourodynamics in patients with neurological disorders.**

- Filling/voiding cycle
- Flow test
- Filling cystometry, abdominal and detrusor leak point pressures.
- Pressure flow study

*Method of delivery*

- Live/e-course
- Hands-on-training

**Part 3: Guidelines on management and followup of patients with neurological disorders.**

*Method of delivery*

- Live/e-course

**Part 4: surgical treatment modalities for patients with neurological disorders.**

- Botox intravesical injection
- Bulking agents
- Slings
- Artificial urinary sphincter (AUS)
- CIC and urinary diversions

*Method of delivery*





- Live/e-course
- Hands-on-training

### **Accreditation**

- 6hrs

### **Instructors**

An instructor is expected to show high level of experience in voiding dysfunction and technical and clinical aspects of urodynamics , and be able to solve technical issues raised during the teaching course and is expected to devote time and efforts to complete the module.

### **Feedback**

Candidates will be required to complete a feedback form to enable the faculty members of functional urology directorate of ASU to improve the quality of the teaching module.

### **Method of Assessment**

- Candidate are required to complete a checklist of expected learning items after completing the module
- Candidate will be required to do an MCQ test to assess their knowledge pre- and post-attending the module

### **Validation of Module**

- Functional urology directorate of ASU is expected to collaborate with International Continence Society and EAU section Neurological LUTD and EAU Guidelines on Neurological LUTD office in delivering, reviewing, and approving the teaching module.



## Teaching module 3

### Female Urology

#### Objectives

By completing the teaching module, candidates are expected to be able to:

- Recognise various urological clinical aspect of female patients with LUTD including SUI, urge urinary incontinence (UII), Vesico-vaginal fistulae (VVF), and both obstructive and non-obstructive urinary retention
- Understand the pathophysiology of different types of urinary incontinence and its association with pelvic organ prolapse (POP)
- Carry out and interpret urodynamics in female patients with LUTD
- Learn about various treatment modalities for female patients with LUTD including SUI, UII, VVF, and obstructive and non-obstructive urinary retention
- Understand the types of different treatment options available for stress urinary incontinence
- Understand the types of different treatment options available for pelvic organ prolapse
- Know the evidence-based medicine and current guidelines for the management of SUI and pelvic organ prolapse
- Gain knowledge in better understanding the vaginal route versus abdominal route for SUI and POP from the urological point of view

#### Target candidate

Senior urologist with special interest in functional urology and Recently graduated seeking for developing his/her career.

#### Assumptions

No pre-required level of experience in functional urology/Urodynamics for target candidate.



## Module construction

The teaching module consists of the following parts:

### Part 1: Definitions and Pathophysiology of LUTD in women (SUI and POP)

- SUI/pelvic organ prolapse (POP)
- UUI
- VVF
- Non-obstructive chronic urinary retention

*Method of delivery*

Live/e-course

### Part 2: Urodynamics in female patients with LUTD

- Filling/voiding cycle
- Physics of urodynamics
- Flow test
- Filling cystometry and leak point pressure
- Pressure flow study
- Urethral pressure profile

*Method of delivery*

- Live/e-course
- Hands-on-training



**Part 3: Guidelines on management of female LUTD including**

- SUI/POP
- UUI
- VVF
- Non-obstructive chronic urinary retention. *Method of delivery*
- Live/e-course

**Part 4: surgical treatment modalities for female patients with LUTD**

- Botox intravesical injection
- Bulking agents
- Slings
- CIC and urinary diversions

*Method of delivery*

- Live/e-course
- Hands-on-training

**Accreditation**

- 6hrs

### Workshop lectures.

1. Vaginal surgery for the urologist
2. SUI: Definition, etiology and types
3. POP: Definition, etiology and types
4. SUI & POP: Management schemes
5. Guidelines on tapes and meshes
6. Video surgeries: SUI
7. Video surgery: POP

**Instructors** An instructor is expected to show high level of experience in voiding dysfunction and technical and clinical aspects of urodynamics , and be able to solve technical issues raised during the teaching course and is expected to devote time and efforts to complete the module.

### **Feedback**

- Candidates will be required to complete a feedback form to enable the faculty members of functional urology directorate of ASU to improve the quality of the teaching module.

### **Method of Assessment**

- Candidate are required to complete a checklist of expected learning items after completing the module
- Candidate will be required to do an MCQ test to assess their knowledge pre- and post-attending the module

**Validation of Module** Functional urology directorate is expected to collaborate with International Continence Society, Arab Continence Society and EAU section of Female and Functional Urology in delivering, reviewing, and approving the teaching module.



## Teaching module 4

### Men with LUTS/BPE

#### Objectives

By completing the teaching module, candidate is expected to learn:

- LUTS in men with BPE
- Indication for urodynamics and how to read traces and BOO/Bladder contractility nomograms in men with LUTS/BPE
- Guidelines on management of men with LUTS/BPE
- Various treatment modalities of LUTS/BPE in men.

**Target candidate** Junior urologist in training or recently graduated seeking for developing his/her career.

**Assumptions** No pre-required level of experience in functional urology/Urodynamics for target candidate.

#### Module construction

The teaching module consists of the following parts:

**Part 1: Theoretical background of lower urinary tract function, and LUTS/BPE in men.**

*Method of delivery*

Live/e-course



## **Part 2: Urodynamics in men with LUTS/BPE**

- Flow test
- Filling cystometry
- Pressure flow study
- Interpretation of urodynamics traces and BOO/Contractility nomograms.

### *Method of delivery*

- Live/e-course
- Hands-on-training and interactive sessions.

## **Part 3: Guidelines on management of Male LUTS/BPE.**

### *Method of delivery*

- Live/e-course

## **Part 4: pharmacological and surgical modalities for Male LUTS/BPE.**

- Pharmacotherapy
- Minimally invasive techniques
- TURP/TUVP

### *Method of delivery*

- Live/e-course
- Hands-on-training on TURP simulators.

## **Accreditation**

- 6hrs



### **Instructors**

- An instructor is expected to show high level of experience in voiding dysfunction and technical and clinical aspects of urodynamics, and be able to solve technical issues raised during the teaching course and is expected to devote time and efforts to complete the module.

### **Feedback**

- Candidates will be required to complete a feedback form to enable the faculty members of functional urology directorate of ASU to improve the quality of the teaching module.

### **Method of Assessment**

- Candidate are required to complete a checklist of expected learning items after completing the module
- Candidate will be required to do an MCQ test to assess their knowledge pre- and post-attending the module

### **Validation of Module**

- Functional urology directorate of ASU is expected to collaborate with International Continence Society and EAU Guidelines office and section of Male LUTS in delivering, reviewing, and approving the teaching module.





## Teaching module 5

### Overactive Bladder syndrome

#### Objectives

By completing the teaching module, candidates are expected to be able to:

- Learn the ICS definitions of OAB and LUTS
- Understand the diagnostic work-up of OAB and algorithm for treatment of OAB
- Choose the appropriate treatment option, best drug therapy and tips on how to prescribe medical treatment for OAB
- Learn the definition of refractory OAB, with role of botulinum toxin, sacral neuromodulation and percutaneous tibial nerve stimulation in OAB
- Carry out and interpret urodynamics and videourodynamics on patients with overactive bladder

#### Target candidate

- Senior urologist with special interest in functional urology subspecialty.
- Recently graduated seeking for developing his/her career.

#### Assumptions

- No pre-required level of experience in functional urology/Urodynamics for target candidate.

#### Module construction

- The teaching module consists of the following parts:

#### Part 1: Pathophysiology of OAB.

*Method of delivery*

Live/e-course



**Part 2: Urodynamics and videourodynamics in patients with OAB.**

- Filling/voiding cycle
- Flow test
- Filling cystometry, abdominal and detrusor leak point pressures.
- Pressure flow study

*Method of delivery*

- Live/e-course
- Hands-on-training

**Part 3: Guidelines on management and followup of patients with OAB.**

*Method of delivery*

- Live/e-course

**Part 4: surgical treatment modalities for patients with OAB.**

- Botox intravesical injection
- Sacral neuromodulation
- PTNS
- CIC and urinary diversions

*Method of delivery*

- Live/e-course
- Hands-on-training

Workshop lectures.

- 1- OAB: prevalence and diagnosis
- 2- Urodynamics: When and how to interpret?



- 3- How to prescribe anticholinergics and beta-agonists?
- 4- Refractory OAB: Is there a solution?
- 5- Guidelines on OAB
- 6- Case scenarios
- 7- Tips and tricks on botox injection in the bladder
- 8- Live Intradetrusor botox injection simulation (bladder simulators)

### **Accreditation**

- 6hrs

### **Instructors**

An instructor is expected to show high level of experience in voiding dysfunction and technical and clinical aspects of urodynamics , and be able to solve technical issues raised during the teaching course and is expected to devote time and efforts to complete the module.

### **Feedback**

Candidates will be required to complete a feedback form to enable the faculty members of functional urology directorate of ASU to improve the quality of the teaching module.

### **Method of Assessment**

- Candidate are required to complete a checklist of expected learning items after completing the module
- Candidate will be required to do an MCQ test to assess their knowledge pre- and post-attending the module

### **Validation of Module**

Functional urology directorate of ASU is expected to collaborate with International Continence Society and EAU section Neurological LUTD and EAU Guidelines on Neurological LUTD office in delivering, reviewing, and approving the teaching module



## Teaching module 6

### Female Sexual Functioning and Dysnfunctions: Pandora Box

#### Objectives

By completing the teaching module, candidates are expected to be able to:

- Learn the normal female sexual functioning and anatomy
- Learn the normal female sexual cycle
- Understand the prevalence and classification of female sexual dysfunctions (FSD)
- Have an insight on the psychological barriers to female sexual functioning
- Learn the how to diagnose and manage the different FSD disorders
- Have an emphasis on female sexual mutilation and its different types

#### Target candidate

Senior urologist with special interest in functional urology subspecialty. Recently graduated seeking for developing his/her career.

#### Assumptions

No pre-required level of experience in functional urology/Urodynamics for target candidate.

#### Module construction

The teaching module consists of the following parts:

##### Part 1: Normal female sexual functioning and anatomy

*Method of delivery*



Live/e-course

**Part 2: FSD: Classification and types.**

*Method of delivery*

- Live/e-course

**Part 3: Diagnosis and treatment of FSD**

*Method of delivery*

- Live/e-course

Workshop lectures.

- 1- Female sexual anatomy and function
- 2- Prevalence and classification of FSD
- 3- Psychological barriers to normal female sexual functioning
- 4- FSD: How to diagnose?
- 5- FSD: How to treat?
- 6- Female sexual mutilation: When to stop practicing?

**Accreditation**

- 6hrs

**Instructors** An instructor is expected to show high level of experience in female sexual functioning and dysfunctions , and be able to solve various FSD issues raised during the teaching course and is expected to devote time and efforts to complete the module

**Feedback**

- Candidates will be required to complete a feedback form to enable the faculty members of functional urology directorate of ASU to improve the quality of the teaching module.



### **Method of Assessment**

- Candidate are required to complete a checklist of expected learning items after completing the module
- Candidate will be required to do an MCQ test to assess their knowledge pre- and post-attending the module

### **Validation of Module**

Functional urology directorate is expected to collaborate with International Continence Society, Arab Continence Society and EAU section of Female and Functional Urology in delivering, reviewing, and approving the teaching module.



## Teaching module 7

### Painful Bladder Syndrome/Interstitial cystitis (PBS/IC)

#### Objectives

By completing the teaching module, candidates are expected to be able to:

- Recognise various definitions of PBS/IC and nomenclatures used
- Take an insight on the epidemiology and pathogenesis of PBS/IC
- Learn about phenotypes of PBS/IC
- Learn how to evaluate patients of PBS/IC, questionnaires utilized and diagnostic algorithm
- Recognize the differential diagnosis of PBS/IC
- Know the different treatment modalities of PBS/IC

#### Target candidate

- Senior urologist with special interest in functional urology subspecialty.
- Recently graduated seeking for developing his/her career.

#### Assumptions

- No pre-required level of experience in functional urology/Urodynamics for target candidate.

#### Module construction

- The teaching module consists of the following parts:

#### Part 1: Definitions, Etiology and Pathogenesis of PBS/IC.

*Method of delivery*



Live/e-course

## **Part 2: Diagnosis and treatment of PBS/IC.**

- Diagnostic algorithm of PBS/IC
- Treatment of PBS/IC including:
  1. Lifestyle modifications
  2. Behavioural therapy
  3. Oral treatment
  4. Intravesical instillations
  5. Intravesical injections of Botulinum toxin
  6. Endoscopic/Surgical management

### *Method of delivery*

- Live/e-course
- Hands-on-training

### **Accreditation**

- 6hrs

### **Instructors**

An instructor is expected to show high level of experience in voiding dysfunction and technical and clinical aspects of urodynamics , and be able to solve technical issues raised during the teaching course and is expected to devote time and efforts to complete the module.

### **Feedback**

Candidates will be required to complete a feedback form to enable the faculty members of functional urology directorate of ASU to improve the quality of the teaching module.

### **Method of Assessment**

- Candidate are required to complete a checklist of expected learning items after completing the module





- Candidate will be required to do an MCQ test to assess their knowledge pre- and post-attending the module

### **Validation of Module**

- Functional urology directorate of ASU is expected to collaborate with International Continence Society and EAU section Neurological LUTD and EAU Guidelines on Neurological LUTD office in delivering, reviewing, and approving the teaching module.



## Teaching module 8

### Genitourinary Fistulae

#### Objectives

By completing the teaching module, candidates are expected to be able to:

- Recognise epidemiology, various aetiologies and risk factors for the development of different types of genitourinary fistulae
- Carry out diagnostic algorithm of genitourinary fistulae
- Learn about anatomical considerations for the management of genitourinary fistulae
- Learn about timing of repair of genitourinary fistulae
- Learn about key points and principles for successful repair of genitourinary fistulae
- Learn about abdominal repair of genitourinary fistulae
- Learn about vaginal repair of genitourinary fistulae
- Learn how to deal with complications encountered during the vaginal and/or abdominal repair of genitourinary fistulae

#### Target candidate

- Senior urologist with special interest in female urology subspecialty.

#### Assumptions

- No pre-required level of experience in functional urology/female urology for target candidate.

#### Module construction

- The teaching module consists of the following parts:

#### Part 1: Epidemiology and Pathophysiology of genitourinary fistulae

*Method of delivery*

Live/e-course



## **Part 2: Diagnosis of various types of genitourinary fistulae**

*Method of delivery*

- Live/e-course

## **Part 3: Guidelines on management and followup of patients with genitourinary fistulae.**

*Method of delivery*

- Live/e-course

### **Accreditation**

- 6hrs

### **Instructors**

An instructor is expected to show high level of experience in voiding dysfunction and technical and clinical aspects of female urology, and be able to solve technical issues raised during the teaching course and is expected to devote time and efforts to complete the module.

### **Feedback**

Candidates will be required to complete a feedback form to enable the faculty members of functional urology directorate of ASU to improve the quality of the teaching module.

### **Method of Assessment**

- Candidate are required to complete a checklist of expected learning items after completing the module
- Candidate will be required to do an MCQ test to assess their knowledge pre- and post-attending the module

### **Validation of Module**

- Functional urology directorate of ASU is expected to collaborate with International Continence Society and EAU section Neurological LUTD and EAU Guidelines on Neurological LUTD office in delivering, reviewing, and approving the teaching module.



## Teaching module 9

### Urinary tract infections (UTIs) in females: Not that simple!

#### Objectives

By completing the teaching module, candidates are expected to be able to:

- Recognise etiology, diagnosis and treatment of acute uncomplicated UTIs in females
- Recognise etiology, diagnosis and treatment of complicated UTIs in females
- Learn about honeymoon cystitis, its etiology and risk factors, preventive measures and treatment options available
- Recognise etiology, diagnosis and treatment of recurrent UTIs in females
- Learn about asymptomatic bacteriuria in elderly females and pregnant females, its prevention and when to treat
- Recognise etiology, prevention, diagnosis and treatment of UTI in pregnancy i

#### Target candidate

- Senior urologist with special interest in functional and female urology subspecialty.
- Recently graduated seeking for developing his/her career.

#### Assumptions

- No pre-required level of experience in functional urology/female urology for target candidate.

#### Module construction

- The teaching module consists of the following parts:

#### Part 1: Pathophysiology and management of acute uncomplicated and



**complicated UTIs in females.**

*Method of delivery*

Live/e-course

**Part 2: Pathophysiology and management of certain clinical scenarios in the female population**

- Honeymoon cystitis
- Recurrent UTIs
- Asymptomatic bacteriuria in elderly females and pregnant females
- UTIs in pregnancy

*Method of delivery*

- Live/e-course

**Accreditation**

- 6hrs

**Instructors**

An instructor is expected to show high level of experience in voiding dysfunction and technical and clinical aspects of female urology , and be able to solve technical issues raised during the teaching course and is expected to devote time and efforts to complete the module.

**Feedback**

Candidates will be required to complete a feedback form to enable the faculty members of functional urology directorate of ASU to improve the quality of the teaching module.

**Method of Assessment**

- Candidate are required to complete a checklist of expected learning items after completing the module



- Candidate will be required to do an MCQ test to assess their knowledge pre- and post-attending the module

### **Validation of Module**

- Functional urology directorate of ASU is expected to collaborate with International Continence Society and EAU section Neurological LUTD and EAU Guidelines on Neurological LUTD office in delivering, reviewing, and approving the teaching module.