

Start	End	Topic	Speakers
17:35	17:40	Introduction and opening remarks	Lysanne Campeau
17:40	17:45	Clinical Presentation and Evaluation	Ali Alsulihem
17:45	17:50	Differential diagnoses	Ali Alsulihem
17:50	18:00	Advanced evaluation (Video Urodynamics and cystoscopy)	Jacques Corcos
18:00	18:05	Discussion	All
18:05	18:15	Medical treatment	Jacques Corcos
18:15	18:25	Physiotherapy	Kari Bø
18:25	18:35	Surgical management	Lysanne Campeau
18:35	18:40	Questions	All
18:40	19:00	Cases for discussion	Lysanne Campeau Jacques Corcos Ali Alsulihem Kari Bø
19:00	19:05	Conclusion and Evaluation	Lysanne Campeau Jacques Corcos Ali Alsulihem Kari Bø

### **Description**

The female bladder outlet obstruction prevalence is 7-20% (1). The ICS defines it as obstruction during voiding, characterised by increased detrusor pressure and reduced urine flow rate (2). Patients usually present with voiding LUTS but the majority of patients presents with associated storage LUTS (1). The causes of female BOO can be divided into anatomical (such as urethral stricture, fibroid, external compression of the urethra, kinking of the urethra by pelvic organ prolapse, or obstruction due to incontinence sling (such as mid-urethral slings or pubovaginal slings), urethral diverticulum, urethral caruncle, urethral malignancies, or paraurethral masses) or functional (Failure of relaxation, or contraction, of the bladder neck and/or urethral sphincter complex or the pelvic floor muscles during a sustained detrusor contraction such as primary bladder neck obstruction, dysfunctional voiding, or idiopathic retention/Fowler's syndrome) (3,4).

Patients usually present with voiding and storage lower urinary tract symptoms, or by sequels of BOO such as recurrent UTIs, chronic urinary retention and/or acute kidney injury/chronic kidney disease (1). Clinical history is not sufficient for diagnosis of female BOO and urodynamic diagnosis is mandatory to diagnose female BOO (5). In patients with suspected BOO, along with examination and non-invasive testing such as ultrasound, uroflowmetry and measuring of post void residual, cystourethroscopy and urodynamics are essential to define the cause (anatomical/functional) and to define the level of BOO (6,7).

Treatment of anatomical causes can be achieved by treating the underlying cause, such as incision of mid-urethral sling or urethrolisis, POP reduction by pessary or surgery, urethral dilatation or urethroplasty, urethral caruncle excision or by estrogen, urethral diverticulectomy, or excision of para-urethral masses. The treatment of primary bladder neck obstruction include medical treatment with alpha-blockers or bladder neck incision. The treatment of dysfunctional voiding include treatment with muscle relaxants, pelvic floor physiotherapy +/- Biofeedback, botulinum toxin injection and sacral neuromodulation. Fowler's syndrome is usually treated with CIC and Sacral neuromodulation. Palliative measures include indwelling suprapubic catheter or CIC. (3-8)

### **Aims of Workshop**

Aims of this workshop are to understand causes and to evaluate and manage non-neurogenic female bladder outlet obstruction effectively.

Bladder outlet obstruction can be generally divided into anatomical and functional causes. Clinical history basic evaluation can raise suspicion and usually, video urodynamics is needed to confirm the diagnosis. Cystoscopy might be used selectively for evaluation. Management is usually aimed at the root cause. Which can be started with conservative and medical management. Surgical treatment is usually used after failure of medical therapy and is usually directed towards the cause.

In this course, we are going to explain how to evaluate and manage these cases including real case scenarios.

### **Educational Objectives**

The course will cover clinical steps into the evaluation from history to all aspects in management. There will be several case scenarios that will be embedded to the programme to stimulate and give education to the audience.

### **Learning Objectives**

1. Initial, basic and advanced evaluation of non-neurogenic female bladder outlet obstruction
2. Medical and conservative management of female bladder outlet obstruction
3. Surgical management of female bladder outlet obstruction

### **Target Audience**

Urology, Urogynaecology and Female & Functional Urology, Conservative Management

### **Advanced/Basic**

Intermediate

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

- 1- Malde, S., et al. Female bladder outlet obstruction: Common symptoms masking an uncommon cause. *Low Urin Tract Symptoms*, 2019. 11: 72.
- 2- Abrams, P., et al. The standardisation of terminology of lower urinary tract function: report from the Standardisation Subcommittee of the International Continence Society. *Neurourol Urodyn*, 2002. 21: 167.
- 3- Abdel Raheem, A., et al. Voiding dysfunction in women: How to manage it correctly. *Arab J Urol*, 2013. 11: 319.
- 4- Hoffman, D.S., et al. Female Bladder Outlet Obstruction. *Curr Urol Rep*, 2016. 17: 31.
- 5- Groutz, A., et al. Bladder outlet obstruction in women: definition and characteristics. *Neurourol Urodyn*, 2000. 19: 213.
- 6- Osman, N.I., et al. Contemporary surgical management of female urethral stricture disease. *Curr Opin Urol*, 2015. 25: 341.
- 7- Nitti, V.W., et al. Diagnosing bladder outlet obstruction in women. *J Urol*, 1999. 161: 1535.
- 8- Harding, C.K. et al. EAU Guidelines on Management of Non-Neurogenic Female Lower Urinary Tract Symptoms (LUTS). Edn. presented at the EAU Annual Congress Milan 2021. ISBN 978-94-92671-13-4.