

# *UAB & UROLOGY*

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## SOMETHING FOR ALL UROLOGISTS

- Clinicians
- Researchers
- Educators
- Subspecialists

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## UNDERACTIVE BLADDER

- Ubiquitous
- Taken for granted
- Poorly understood
- Poorly managed

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## WHAT UROLOGISTS SHOULD FOCUS ON

- Terminology What?
- Pathophysiology Why?
- Clinical presentations Who?
- Diagnostic approach How?
- Management
  - Curative
  - Supportive
  - Preventive

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## TERMINOLOGY

- What is underactive bladder?
  - Clinical definition is diffuse and non-specific
  - Technical definition with urodynamic testing
    - Highly subspecialized approach
    - Specific criteria for UAB still ill-defined for men, women and children

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## PATHOPHYSIOLOGY

- Basic physiology of the smooth muscle
  - Tonicity – Elasticity – Intrinsic
  - Contractility – Innervation - Extrinsic

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## POTENTIAL CAUSES OF DETRUSOR FAILURE

- Prolonged over-distention
- Ischemia/vascular
- Inflammation
- Collagen/elastin defect
- Denervation

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## ETIOLOGY

- Primary UAB - Secondary to loss of smooth muscle tone due to atonic or hypotonic detrusor
- Secondary UAB - Secondary to loss of innervation to the detrusor, neuropathic
- Mixed UAB - Has elements of both intrinsic and extrinsic factors (myogenic & neuropathic)

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## CLINICAL MANIFESTATION/PRESENTATIONS

- Silent UAB - Asymptomatic
- Symptomatic UAB with abnormal bladder emptying symptoms
  - Total failure - complete retention with no voiding
  - Partial failure - partial emptying with high PVR or complete emptying with low PVR

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## DIAGNOSTIC APPROACH

- Urodynamic pressure flow study in men, women and children
- Standardized simplified technique
- Definition of normal and abnormal voiding pressure flow for each patient population

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## MANAGEMENT OF UAB

- Curative approach of restoring effective bladder emptying: How?
  - Restore smooth muscle tone
  - Restore smooth muscle contractility
  - Both

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## SUPPORTIVE MANAGEMENT

- Improve intermittent catheterization technique and equipment
- Innovate on new catheters and drainage system and new mechanical device for bladder emptying
- Improve the various devices and pads to contain urine loss

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## PREVENTIVE STRATEGIES

- Public health measures to prevent deterioration of smooth muscle tone through bladder health programs
- Direct focus on all organs within the pelvis to maintain pelvic health
- Educate health care providers to include bladder health in the total care of patients
- Reduction of the incidence of congenital neural malformations and spinal cord trauma

*Thank you.*



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