


**Persistent Bladder Discomfort –  
Assessment & Management**


Marcus Carey



**DEFINITION: Interstitial Cystitis/Bladder Pain Syndrome (IC/BPS)**


“An unpleasant sensation (pain, pressure, discomfort) perceived to be related to the urinary bladder, associated with lower urinary tract symptoms of more than six weeks duration, in the absence of infection or other identifiable causes.”

NeuroUrol Urodyn 2009; 28: 274




**PREVALENCE**

Typically female aged 40-60 years  
Female to Male ratio 9:1  
2.7 to 6.5% of women in USA




**AETIOLOGY**

Unknown  
?Infection  
?Autoimmune  
?Ischaemia  
?Defective/deficient GAG layer



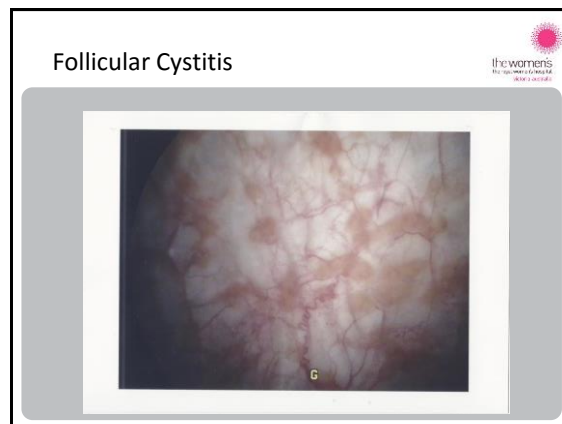
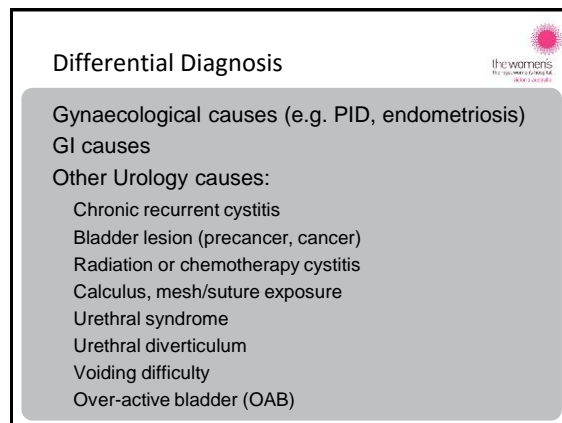
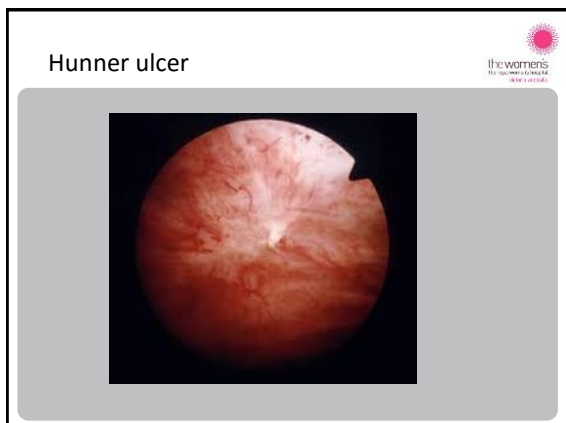
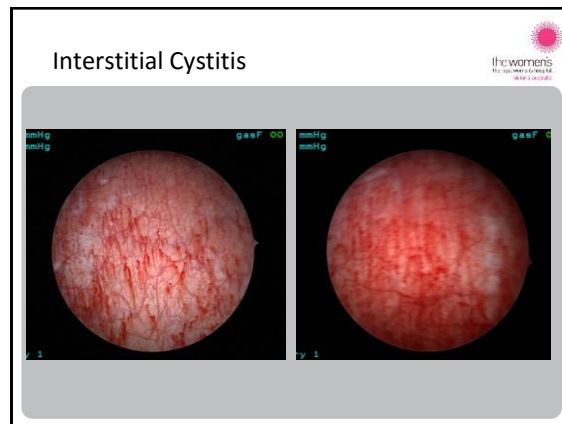
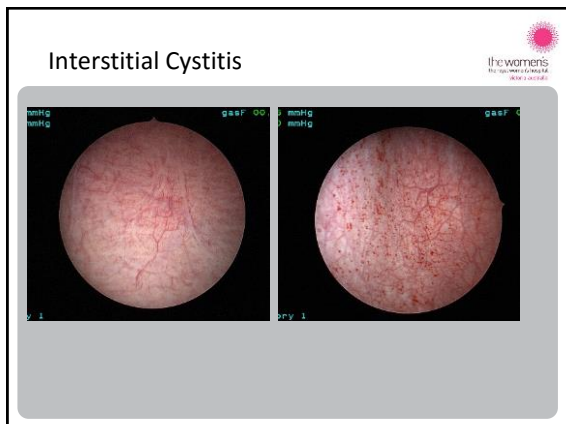
**BASIC ASSESSMENT**

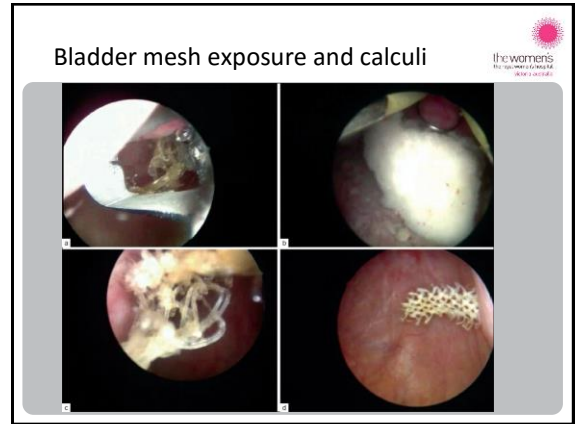
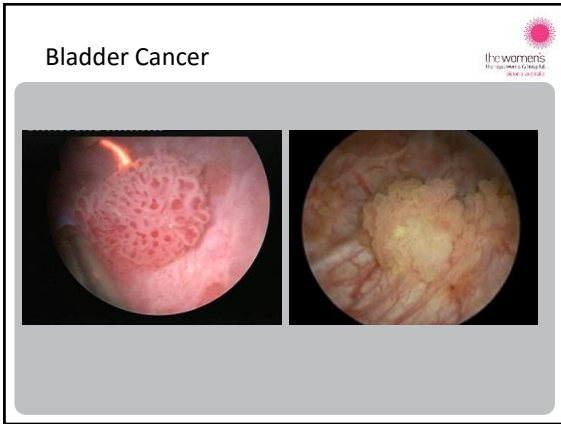
History  
Frequency/Volume Chart (Bladder Diary)  
Post-void residual  
Physical examination  
Urinalysis/culture → Treat & Reassess  
Symptom questionnaire  
Pain evaluation



**INVESTIGATIONS**

Urine cytology x3 (especially if smoking history)  
Imaging (CT KUB, renal ultrasound)  
Specialist referral for:  
Cystoscopy  
Urodynamics  
Other investigations (e.g. laparoscopy)





### Mycoplasma genitalium

<p>The Royal Children's Hospital                  Laboratory Service, AFA                  Pathology Service to The Royal Children's Hospital &amp; The Royal Women's Hospital                  The Royal Children's Hospital 47 Flemington Road, Parkville, 3052                  The Royal Women's Hospital, 46 Victoria Parade, Parkville, 3052</p>	
<p>Requester Name                  DR MARCOUS CARMY                  SMO, STE B PCR                  LEVEL 2 20 FULMINGTON RD                  PARKVILLE VIC 3052</p>	<p>Ref No                  [REDACTED]                  Date Recd                  08/39 28/12/16                  Requested By                  [REDACTED]                  Date Recd                  12/13 26/12/16                  MOLECULAR MICROBIOLOGY Prof. S. O'Garra</p>
<p>For information regarding this result, please phone: 8345 3594</p>	
<p><b>Mycoplasma genitalium and Macrolide Resistance Nucleic Acid Detection</b></p> <p>Specimen type: URINE</p> <p>M. genitalium DNA DETECTED                  23s rRNA mutation: NOT DETECTED</p> <p>Comments:                  The absence of a 23s rRNA gene mutation associated with macrolide resistance may not always lead to successful treatment with azithromycin. Following the treatment course, a test of cure is advised 30 days after this treatment is completed. From June 20, 2016, M. genitalium detection is performed using an assay which enables simultaneous reporting of a macrolide resistance marker when M. genitalium is detected.</p>	

Azithromycin  
Moxifloxacin

### Clinical Management Principles (AUA 2014)

Treatments are ordered from most to least conservative

Initial treatment level depends on symptom severity, clinical judgement, and patient preferences

Multiple, simultaneous treatments may be considered if in best interests of patient

### Clinical Management Principles (AUA 2014)

Ineffective treatment should be stopped

Pain management should be considered throughout course of therapy with goal of maximising function and minimizing pain and side effects

Diagnosis should be reconsidered if no improvement within a clinically-meaningful time-frame

### 1st Line Treatment

Patient education on normal bladder function and on IC/BPS

Bladder retraining

General relaxation/stress management

Pain management

Self-care/behavior modification

## 2<sup>nd</sup> Line Treatments



Appropriate manual physical techniques  
 Oral: amitriptyline, cimetidine, gabapentin, pentosan polysulfate sodium etc  
 Intra-vesical: DMSO, Heparin, LA,  
 Na Hyaluronate/Na Chondroitin (iAluRil),  
 Pain management

## 3<sup>rd</sup> Line Treatments



Cystoscopy under GA with bladder distension  
 Pain management  
 Treatment of Hunner's lesions if present

## 4<sup>th</sup> Line Treatments



Intra-detrusor botulinum toxin A  
 Neuromodulation  
 Pain management

## 5<sup>th</sup> Line Treatments



Cyclosporine A  
 Pain management

## 6<sup>th</sup> Line Treatments



Diversion with or without cystectomy  
 Pain management  
 Substitution cystoplasty

## Sacral Neuromodulation (SNM) for IC/BPS

J Urol 2003;169:1369



