An Undergraduate Syllabus for Urology

Produced on behalf of the British Association of Urological Surgeons

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INTRODUCTION

Urology is the branch of medicine that deals with dysfunction of the urinary system and of the male genitalia. Regardless of career intentions, junior doctors will meet patients with urological problems on the wards, in the emergency department and in primary care.

At least 5-10% of GP visits, and 20% of acute hospital surgical referrals, involve patients with urological problems but, until now, there has been no nationally-agreed, undergraduate curriculum for urology.

In the UK, the urology teaching received by medical students varies considerably across different medical schools, and surveys of newly-qualified doctors show that undergraduate teaching in urology is insufficient to equip them with the necessary knowledge and skills to enable safe functioning as a Foundation Doctor (FY1). Experience on core practical skills, such as catheterisation, is lacking and many newly-qualified doctors are not confident about managing basic, urological problems. This has been further exacerbated by the 2003 GMC document, “Tomorrow’s Doctors”, requiring less time focused on hospital specialties but more time in primary care and in student-choice components.

The main aim of this document is to advise on those common clinical areas of urology that are generic to the majority of practising doctors, and that must be covered during undergraduate medical training. In Appendix 1, students can document their progress through the urology syllabus, for inclusion in their undergraduate portfolio.
KEY PRESENTATIONS OF UROLOGICAL DISEASE

These can be broadly categorised as follows:

- Visible or invisible haematuria
- Lump in the scrotum
- Pain in the scrotum
- Tight foreskin
- Man with sexual problems
  - erectile dysfunction
  - premature ejaculation
  - penile deformity
- Urinary infection
  - cystitis
  - pyelonephritis
  - epididymo-orchitis
  - balanitis
  - prostatitis
- Urosepsis
- Pain in the loin
- Mass in the loin
- Lower urinary tract symptoms
  - difficulty storing urine
  - difficulty voiding urine
- Couple having difficulty conceiving
- Urinary incontinence
  - urge incontinence
  - stress incontinence
- Urological trauma
  - fractured penis
  - fractured pelvis
- Raised PSA

They are managed by sub-specialist groups of urologists, including:

- Paediatric urology
- Female urology
- Andrology & reconstructive urology
- Endourology (including stones)
- Uro-Oncology
REQUIREMENTS OF UNDERGRADUATE TRAINING IN UROLOGY

At the end of medical training, all medical students should be familiar with the presentation and safe, initial management of the following:

**Acute renal tract stone disease**
- Recognise the patient presenting with acute ureteric colic, ureteric obstruction & sepsis
- Manage the initial assessment appropriately
- Understand the appropriate investigations (CT, IVU or ultrasound)

**Acute (or chronic) abdominal pain referable to the urinary tract**
- Have awareness of the urological causes of abdominal pain
- Be familiar with appropriate investigations in both the emergency & outpatient setting
- Understand (and be competent) in the insertion of a urethral catheter in both sexes

**Lower urinary tract symptoms (LUTS) in male & female patients**
- Understand the causes of LUTS in male & female patients
- Be familiar with first-line investigations
- Be familiar with basic outpatient treatment for bladder outflow obstruction & detrusor over-activity

**Haematuria**
- Understand the common causes of haematuria
- Be able to assess the patient with haematuria
- Be able to initiate the management of haematuria

**Urinary tract infection (UTI)**
- Understand the causes of UTI
- Understand the basic investigations for UTI
- Be able to initiate first-line treatment for UTI

**Scrotal swelling & pain**
- Understand the causes and initial management of scrotal swelling & scrotal pain

**Urinary incontinence in male & female patients**
- Understand the causes of urinary incontinence in male & female patients
- Be able to differentiate between stress & urge incontinence

**Urological cancers (including kidney, bladder, prostate, penis & testis)**
- Understand how urological malignancies present
- Be able to recognise tumours of the kidney, bladder, prostate, penis & testis
- Understand the appropriate investigations for the above cancers
- Understand the role of PSA testing and testicular tumour markers
Male infertility
• Understand the causes of male fertility

Erectile dysfunction (ED)
• Understand the physical & psychological causes of erectile dysfunction
• Understand the implication of ED as a marker for systemic vascular disease

Common urological conditions of childhood
• Have an awareness of the most common urological problems in childhood (including UTI, undescended testis, phimosis & acute scrotal pain/swelling)

Acute kidney injury
• Understand the diagnosis, assessment & initial management of patients presenting with acute renal failure/anuria
# APPENDIX 1
## LOGBOOK OF OBSERVED/PERFORMED PROCEDURES

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<thead>
<tr>
<th>PROCEDURE</th>
<th>DATE</th>
<th>SIGNED</th>
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<tbody>
<tr>
<td>Male genital examination (x5)</td>
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<tr>
<td>Digital rectal examination (x5)</td>
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<td>Observe male catheterisation (x1)</td>
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<td>Observe female catheterisation (x1)</td>
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<tr>
<td>Perform male catheterisation (x3)</td>
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<td>Perform female catheterisation (x2)</td>
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<tr>
<td>Observe suprapubic catheter change or insertion (x2)</td>
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<td>Observe flexible or rigid cystoscopy (x5)</td>
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<td>Observe TURP (x2)</td>
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<td>Observe TURBT (x2)</td>
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<td>Observe CT urogram (x1)</td>
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<tr>
<td>Interpret &amp; discuss CT urogram (x5)</td>
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<td>History</td>
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<td>Interpret &amp; discuss IVU (x5)</td>
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<td>Observe TRUS &amp; biopsy (x2)</td>
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<td>Observe urodynamics (x2)</td>
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<td>Interpret voiding flow rate (x2)</td>
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<td>Perform female catheterisation (x2)</td>
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<td>Observe ureteroscopy</td>
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<td>Observe laparotomy</td>
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<td>Observe circumcision</td>
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<td>Observe scrotal surgery</td>
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