Prostatitis

Dr Jonny Coxon
GP
Beaconsfield Medical Practice
Brighton
<table>
<thead>
<tr>
<th></th>
<th>Club</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Blackburn Rovers</td>
<td>46</td>
<td>58</td>
</tr>
<tr>
<td>18</td>
<td>Sheffield Wednesday</td>
<td>46</td>
<td>58</td>
</tr>
<tr>
<td>19</td>
<td>Huddersfield Town</td>
<td>46</td>
<td>58</td>
</tr>
<tr>
<td>20</td>
<td>Millwall</td>
<td>46</td>
<td>56</td>
</tr>
<tr>
<td>21</td>
<td>Barnsley</td>
<td>46</td>
<td>55</td>
</tr>
<tr>
<td>22</td>
<td>Peterborough United</td>
<td>46</td>
<td>54</td>
</tr>
<tr>
<td>23</td>
<td>Wolverhampton Wanderers</td>
<td>46</td>
<td>51</td>
</tr>
<tr>
<td>24</td>
<td>Bristol City</td>
<td>46</td>
<td>41</td>
</tr>
</tbody>
</table>
Prostatitis
What is prostatitis?

- Prostat-
- -itis
What’s a prostate?

• Roughly walnut-shaped gland (young adult)
• Produces a slightly acidic milky white fluid, making up 20–30% of volume of semen
What’s a prostate?

- More fluid comes from the seminal vesicles
- Anatomical nuisance
What’s a prostate?

- Also contains smooth muscle, well innervated
- Sheathed in the muscles of the pelvic floor
What is prostatitis?
Historical perspective

• Herophilus 350BC first described the prostate
• Nicola Massa – Venetian physician C16
• Riolanus, Parisian physician, also C16

• Legneau 1815 described entity of prostatitis
• Verdies 1838 described prostatitis pathology
Historical perspective

• 19th Century:
  – Provocation of the prostate
  – Chilling
  – Sexual Indulgence
  – Alcohol
  – Violent exertion
Historical perspective

• 19th Century:
  – Gonorrhoea
  – Horseback and bicycle riding
  – High living
  – Urethral stricture
  – Passage of instruments into the urethra
Historical perspective

- 20th Century – described as an anal/rectal psychosis
- 1906 microscopy of expressed prostatic secretions
- 1968 Stamey test
What is prostatitis?

- Not brilliantly understood
- Actually a range of conditions

- Acute
- Chronic
  - ongoing or relapsing
  - more than 3 or 6 months
What is prostatitis?

US NIH classification:

I: Acute bacterial prostatitis

II: Chronic bacterial prostatitis

I & II account for <5% of all prostatitis diagnoses

III: Chronic prostatitis / chronic pelvic pain syndrome (CPPS)

IV: Asymptomatic inflammatory prostatitis
Acute prostatitis

• Actually rarely seen in primary care
• Why?
Acute prostatitis

• Usually spread from bladder /urethra /epididymis
• Patient often rapidly & significantly unwell
  – high fever
  – urinary voiding symptoms (dysuria, frequency, urgency)
  – intense local pain, can radiate
  – systemic features
  – retention (secondary to prostatic oedema)
Acute prostatitis

- Prostate tender++ on examination – ‘boggy’
Acute prostatitis

- Prostate tender++ on examination – ‘boggy’

- “Avoid vigorous digital rectal examination”
Acute prostatitis

• Urine dip – leucocytes / blood positive
Acute prostatitis - Management

- If not bypassed GP, often need to refer in
- Usually Gram –ve bacteria

- Oral antibiotics
  - Ciprofloxacin 500mg bd for 28 days
  - *Trimethoprim 200mg bd for 28 days* if quinolone intolerant
Acute prostatitis - Management

- Analgesia & hydration
- Stool softener if defaecation painful

- Early review – low threshold to admit
- If respond well will need routine urology referral
Acute prostatitis - Management

• Admit if:
  – severely unwell
  – threatened or actual acute urinary retention (avoid urethral catheterisation)
  – failing to respond to oral antibiotics

• Prostatic abscess – diagnosed on imaging, may need drainage

• Antibiotics - e.g. Augmentin + gentamicin iv
Chronic bacterial prostatitis

• Definition: “chronic bacterial infection of the prostate (with or without symptoms of prostatitis) with a history of recurrent UTI…”

• Clinical features:
  – Recurrent / relapsing UTI / urethritis / epididymitis
  – Genital / pelvic pain during flare-up
  – Diffusely tender prostate during episode
  – Between episodes: asymptomatic / mild pelvic pain / storage symptoms
Chronic bacterial prostatitis

• In other words:
  – Quite tricky

• Thankfully, confirmed to be rare

• May have to diagnose with prostatic massage

• Important – can cause raised PSA
Chronic bacterial prostatitis

• Management:
  – Ultrasound to exclude urinary tract abnormality
  – Consider flows / urodynamics

  – Antibiotic: quinolone for 28 days first line
  – α-blocker: may help alongside antibiotic
  – Recurrent infections may be due to poor emptying

  – High risk of recurrence – likely to need referral
Type III: Chronic prostatitis / chronic pelvic pain syndrome (CPPS)

- By far the most common form
- Urological “heart sink”

- Difficult condition for patients & doctors alike

- Common: 2-14% lifetime prevalence
Chronic pelvic pain syndrome

• Seeing increasing numbers
• Often aged 30 - 50 years
• Genital or pelvic pain that persists for weeks or months (once known as prostatodynia)
• Was presumed to be due to infection
• Infection found in as little as 5%, hence the term CPPS.
CHRONIC PROSTATITIS AND ITS TREATMENT.

Presented to the Section on Surgery and Anatomy at the Forty-ninth Annual Meeting of the American Medical Association, held at Denver, Colo., June 7-10, 1898.

BY H. R. WOSSIDLO, M.D.

The more or less severe tickling and burning in the urethra or at the glans, either incessantly or at intervals, the often increased frequency of micturition, the aching and stabbing pains in the anus, sacrum or perineum, the pain in the suprapubic region as well as the radiating pain along the lumbar region and the legs are well-known manifestations of chronic prostatitis.
CHRONIC PROSTATITIS AND ITS TREATMENT.

Presented to the Section on Surgery and Anatomy at the Forty-ninth Annual Meeting of the American Medical Association, held at Denver, Colo., June 7-10, 1898.

BY H. R. WOSSIDLO, M.D.

I mention the great frequency of nervous troubles as a sequel of chronic prostatitis. The more or less constant uneasy or painful sensations along the genito-urinary tract constantly draw the patient's thoughts to this region. Should he then, in addition to his disagreeable sensations, observe a degree of sexual weakness, incomplete erection or premature seminal emission, our patient's spirit becomes depressed. He is constantly worrying over his illness and loses all capacity for mental or physical work. In the worst cases general nervous debility sets in, not infrequently increasing to more or less complete exhaustion. Our patients become more or less obstinate hypochondriacs.
Chronic pelvic pain syndrome

EAU definition:

“Chronic or persistent pain perceived in structures related to the pelvis

... pain must have been continuous or recurrent for at least 6 months

... when there is no proven infection or other obvious local pathology”
Chronic pelvic pain syndrome

- Pain includes:
  - perineal
  - lower abdominal pain
  - penile
  - testicular
  - rectal and lower back
  - upper thighs
  - ejaculatory
Chronic pelvic pain syndrome

- Variable lower urinary tract symptoms (especially storage) & ejaculatory disturbance
- Allodynia

- Studies found physical abnormalities that may cause inflammation, e.g.
  - ↑ pressure from the external urethral sphincter
  - reflux of urine into the prostate from the urethra
Chronic pelvic pain syndrome

• Appears to negatively impact on many areas of psychological and sexual functioning
Chronic pelvic pain syndrome

• Psychological tests: higher scores for anxiety, depression & hypochondriasis in CPPS men.

• ↑ frequency of sexual relationship breakdown
  – May avoid sex (pain, fear of passing infection on)

• More sexual relationships outside long-term partnership
CPPS Diagnosis

Think of it.....

- Diagnosis of exclusion based on **history**
- Prostate usually tender on examination

- Rule out infection: urine dip / MSU
- Rule out prostate cancer: DRE & PSA
- Consider STI
CPPS Diagnosis

• Not usually needed in primary/community care:
  – Localisation (Stamey’s 4 glass test)
  – Cytology
  – TRUS
  – Flows / Urodynamics – unless significant LUTS
CPPS Treatment Options

- Antibiotics
- α-blockers
- NSAIDs
- Allopurinol
- Finasteride
- Phytotherapy
  - Cernilton
  - Quercetin
- Amitriptyline
- Gabapentin
- Prostatic massage
- Pelvic floor physio
- Cognitive behavioural therapy
- Hyperthermia
- Acupuncture
- Thermotherapy
- Electromagnetic therapy
- ESWL
CPPS Treatment Options
CPPS Treatment Options

European Association of Urology guideline 2009:

“Patients with CPPS are treated empirically with numerous medical and physical modalities. Despite the existence of some scientifically valid studies, no specific recommendations have been made until now. This has been because patients with CPPS probably represent a heterogeneous group of diseases and therapeutic outcome is always uncertain”
CPPS Treatment Options

“Prostate pain syndrome”

• Grade A Recommended:
  – α-blockers if duration is < 1 yr
  – Single use antibiotics (6 weeks) if duration < 1yr
  – High dose pentosan polysulfate (Elmiron) to improve QoL and symptoms
CPPS Treatment Options

• Grade B Recommended:
  – NSAIDs
  – Phytotherapy - e.g. pollen extract
  – Perineal extracorporeal shockwave therapy
  – Electroacupuncture
  – Percutaneous tibial nerve stimulation (PTNS)
  – Psychological treatment focused on the pain
CPPS Treatment Options

General treatment

Pain described in neuropathic or central pain terms

yes

First line management trial using
1. Amitriptyline
2. Gabapentin

Alternatives:
1. Nortriptyline or Imipramine
2. Pregabalin

Review

no

Simple analgesics

Review
CPPS Treatment Options

**Review**

- **Adequate analgesia:**
  - review regularly
  - sustained effect: consider dose reduction

- **Inadequate response:**
  - consider adding another first line agent
  - rotate agents

  **Still inadequate:**
  - refer to specialist pain management unit

**Review**

- **Adequate analgesia:**
  - discharge back to primary care physician

- **Inadequate response:**
  - refer to specialist pain management unit
CPPS Treatment Options

• Avoid activities that provoke attacks (especially cycling)

• Take regular hot baths

• Regular ejaculation through sexual intercourse or masturbation
  – study of 34 men; masturbation 2x per week for 6 months
  – 11% complete resolution, 55% marked or moderate improvement
CPPS Treatment Options
CPPS Treatment Options
CPPS – Pragmatic approach

• Exclude definite infection
• Exclude specific cause +/- reassure re cancer

• Quinolone: 6 weeks, e.g. ciprofloxacin 500mg bd
• α-blocker 3 months (+/- pollen extract)
CPPS – Pragmatic approach

- Consider combined α-blocker + NSAID
- Co-analgesics e.g. Amitriptyline / Gabapentin
- Pain clinic referral – behavioural and coping strategies
CPPS – Prognosis

• Quote 2 year course
• 33% symptom-free at 1 year
• 33% moderate / marked improvement at 2 years

• Prognosis worse in those with:
  – Severe symptoms
  – Anxiety / depression
  – Ejaculatory pain
CPPS – Resources

• BASHH UK and EAU Guidelines
• Clinical Knowledge Summaries

Prostate Cancer UK website

• British Prostatitis Support Association:  www.bps-assoc.org.uk
• www.prostatitis.org (U.S. Support group)