NORTH OF TYNE AND GATESHEAD GUIDELINES FOR MANAGEMENT OF COMMON UROLOGICAL CONDITIONS IN ADULTS ≥ 18 YEARS IN PRIMARY CARE

July 2013 (minor update page 11, March 2014)

This document has been prepared and approved for use in Newcastle, Gateshead, North Tyneside and Northumberland.

An electronic version of this document can also be viewed / downloaded from the North of Tyne Medicines Optimisation Website at http://medicines.necsu.nhs.uk/guidelines/north-of-tyne-guidelines/

<table>
<thead>
<tr>
<th>Approved on behalf of the</th>
<th>Name</th>
<th>Signature</th>
<th>Date</th>
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<tbody>
<tr>
<td>North of Tyne Medicines Guidelines and Use Group</td>
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INTRODUCTION

This guidance is intended to inform management of common urological conditions in primary care and has been developed as a consensus between representatives from primary and secondary care with reference to national guidelines, including from NICE as appropriate. The guidelines are intended to guide clinical management, but every patient should be assessed and managed individually.

These guidelines are intended for all clinicians in primary care in the Newcastle, North Tyneside, Northumberland and Gateshead areas involved in managing patients with urological conditions. This is the first iteration of these guidelines and any gaps should be identified for inclusion when the guideline is reviewed.

How to use the guidelines
The guidelines are a set of flow charts covering a variety of urological conditions. Each of these can be printed and laminated for easy reference if preferred.

The BNF and the North of Tyne / Gateshead Formulary should be referred to as appropriate.

Referrals
When referral to secondary care urology clinic is recommended in the guideline, referral for patients to be seen at a local outreach clinic may be preferred. It is anticipated that clinicians in localities where such clinics are available will be aware of them, but further information can be obtained from the urology department at the Freeman Hospital.
Scrotal lumps

Presentation with scrotal lump

History and examination

Testis normal and separate to scrotal lump?

Confident of diagnosis of epididymal cyst?

Ultrasound scan

Testis normal

Testis abnormal

Confirm diagnosis from ultrasound report

Urgent referral to urology

2 week rule

Epididymal cyst

Hydrocoele

Varicocoele

Assess symptoms and patient preferences

Treatment required / clinical concern?

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Yes

No

Reassure (routine urology referral if patient wishes treatment, particularly when symptomatic)

Routine referral to urology

Urgent renal ultrasound scan to exclude renal carcinoma

Reassure

Notes
If a varicoceoe is diagnosed clinically, please follow recommendations as if diagnosed from an ultrasound scan.

Patients with a varicoceoe and concerns about infertility: this is beyond the scope of this guideline, refer to other guidelines for management of infertility.

Aspiration of a hydrocoele is no longer recommended.
Haematuria

Visible haematuria

Refer to haematuria clinic (2 week rule)

Notes – visible haematuria
Patients with visible haematuria should be referred to the haematuria clinic, irrespective of the presence of a UTI if cancer is suspected.

Haematuria should not be attributed to oral anticoagulants in the therapeutic range and/or anti-platelet agents as a cause.

Confirmed non-visible haematuria

Exclude UTI
Measure blood pressure
Check serum U&E, creatinine, eGFR and urine for PCR (or ACR)

Symptomatic?
(eg loin pain, voiding lower urinary tract symptoms: hesitancy, frequency, urgency, dysuria)

No

Yes

Recurrence ie 2 out of 3 dipsticks positive of non-visible haematuria

Aged ≥ 40 years?

No

Yes

Refer to nephrology

Refer to haematuria clinic (2 week rule)

Notes – non-visible haematuria
Non-visible haematuria is confirmed with 1+ blood or more on urine dipstick, on 2 or more occasions (urine microscopy should not be used to diagnose haematuria).

In patients with a UTI, the UTI should be treated and the urine re-tested to confirm the haematuria has resolved.

Haematuria should not be attributed to oral anticoagulants in the therapeutic range and/or anti-platelet agents as a cause.

Recurrent presentation with asymptomatic non-visible haematuria which has previously been investigated does not require re-referral, unless symptoms develop or haematuria becomes visible.

Note: The guideline group recognised that the Northern Cancer Network is developing guidelines for haematuria, and the outcome is pending. This pathway will be updated if there is a significant difference in the recommendations eg with respect to age cut offs for referral to urology or nephrology.
Urinary tract infection

Suspected UTI in a male*

Obtain MSU prior to antibiotic treatment unless exceptional circumstances

Course of antibiotics (refer to local antibiotic policy)

Recurrent proven UTI (2 or more)?

<No, 1st UTI>

Symptoms settle quickly, no residual symptoms, no signs of pyelonephritis?

Yes

Visible haematuria (single or recurrent) and cancer possible

No

Reassure

Yes

Refer haematuria clinic (2 week rule)

No

Yes

Refer to urology

Notes

* Symptoms of a UTI in a man: review sexual history, consider need for referral to sexual health.

Visible haematuria associated with a UTI in a woman should also prompt referral to the haematuria clinic if cancer is possible (2 week rule). Use clinical judgement when deciding whether referral is indicated.
Haematospermia

Visible or confirmed non-visible haematuria?

Yes

Refer to haematuria guideline

No

Digital rectal examination and PSA* following appropriate counselling

Normal and no clinical concern

Yes

Reassure

No

Refer to urology

Notes
There is a low correlation between haemospermia and prostate cancer. It is important to exclude haematuria (visible or non-visible). Non-visible haematuria is confirmed with 1+ blood or more on urine dipstick, on 2 or more occasions (urine microscopy should not be used to diagnose haematuria).

* refer to PSA guideline
Renal cyst on ultrasound

Renal cyst on ultrasound

Simple renal cyst reported?

Yes

Simple renal cyst (no calcification, no septae, no solid components)

Reassure
(if a simple renal cyst is large, eg ≥ 5 cm diameter or more, and the patient has pain, consider referral to urology)

No

Clarify nature of cyst (review ultrasound report, if uncertain phone sonographer)

Not a simple cyst

Refer to urology
Suspected renal stones

Suspected renal stones

Symptomatic (e.g. flank pain - consider emergency / urgent referral if severe pain)

No, i.e. coincidental finding on imaging

Refer to urology for assessment and further management including recommendations about follow-up (do not arrange CT scan before referral)

Yes

Renal ultrasound and plain plain radiograph (no CT scan)

Renal stones confirmed?

Yes

Reassess, manage appropriately

No
Management of PSA

PSA measured and digital rectal examination (DRE) after appropriate counselling

PSA and DRE both normal?

Yes

Reassure

No

DRE abnormal or uncertain?

Yes

PSA > 10

Refer to urology (2 week rule)

No

DRE normal and no immediate clinical concern, and PSA < 10

Reassure

Yes

Repeat PSA after 8 weeks

Raised PSA using age related cut offs?

Yes

Age specific cut off PSA levels (from Northern Cancer Network guideline)

- Aged 50–59 years: 3.0 ng/ml
- Aged 60–69 years: 4.0 ng/ml
- Aged 70 years and older: 5.0 ng/ml

(There are no age-specific reference ranges for men aged over 80 years)

No

Notes

Do not measure PSA if suspicion of UTI. Treat UTI if MSU confirms infection, and measure PSA after 12 weeks if required.

Men aged > 80 years, consider the presence of other co-morbidities including long term catheter, and only check PSA if:

- Clinically malignant prostate cancer on DRE
- Clinical suspicion of bony metastases

Note: nearly all men aged > 80 years have at least a focus of cancer, this only needs diagnosing if palliative treatment is required.
Follow up of patients

Raised PSA without cancer

Patient with raised PSA been assessed and investigated in specialist urology care

No evidence of malignancy

Discharge to primary care with clear instructions for follow up, to include:
- Frequency and content of follow up
- Indications to refer back

Prostate cancer not currently on treatment, in whom radical treatment would be offered

Patient with prostate cancer in whom radical treatment would be offered

Active monitoring in urology clinic

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1 Updated text March 2014. Recommendations in NICE CG175 Prostate Cancer will be implemented as appropriate by urologists

Approved by APC: May 2014

Review date: July 2016
Prostate cancer managed with hormonal therapy

Gleason score < 8

Follow up for 6 months in urology clinic
Stable for 6 months, asymptomatic, no clinical concerns

Follow up in primary care, in line with Local Enhanced Service arrangements, if in place
Individual management plan from secondary care, including any recommendations for bone protection

Patient management booklet

Red flags
If patients develop the following symptoms:
- Lower limb neurology
- Suspicion of spinal cord compression

Contact the urology team as an emergency with a view to same day admission

Patients should only be discharged for follow up in primary care when an appropriate LES, or similar arrangements, are in place.
Curative treatment for prostate cancer

Follow up in urology clinic for at least 2 years
- Monitor highly sensitive PSA
- Assess for new symptoms
- Consider discharge to primary care after 2 years with individual management plan, unless on-going follow up in secondary care clinically indicated

Annual review in primary care
(robust system for recall and action if non attendance)
- Measure PSA (interpret using recommendations in individual management plan)
- Assess for new symptoms
- Use guidance in individual management plan for indications for re-referral to secondary care
Lower urinary tract symptoms (LUTS) in men: assessment and management

Suspected LUTS in a man

Initial assessment
- Assess symptoms: voiding, storage, nocturia, post micturition dribble
- Ask about lifestyle including caffeine, alcohol, prescribed and OTC drugs, fluid intake
- Assess how troublesome symptoms are and complete IPSS score (see next page)
- Examine abdomen and external genitalia
- Perform DRE
- Perform urine dipstick for blood, glucose, leucocytes, and nitrites
- Check eGFR if renal impairment suspected
- Offer PSA testing after appropriate counselling if: Suspected BPH, or Prostate abnormal, or Prostate cancer suspected

Consider if there is an underlying cause for obstructive symptoms (eg drugs, urethral stricture, urological cancer, neurological problems)

Refer for further assessment if clinically indicated. Use clinical judgement to determine urgency

PSA raised
- Refer to flow chart for raised PSA for further management

If troublesome LUTS symptoms
- Assess severity with urinary frequency volume chart

Symptoms not very troublesome and low risk of progression
- Lifestyle advice
  - Review after 3 months
  - Consider conservative measures, which may include:
    - Pelvic floor muscle training
    - Bladder training
    - Post void milking
    - Prudent fluid intake
    - Healthy lifestyle
    - Containment products (pads, waterproof pants, external sheath).
    - Catheter only if no other option

Symptoms troublesome and or high risk of progression
- Lifestyle advice
- Consider drug treatment (see flow chart for drug treatment)

Refer to urology (2 week rule) if urological cancer suspected:
- Haematuria (refer to haematuria guideline)
- Raised PSA (refer to PSA guideline)
- Abnormal prostate on DRE

Other symptoms for urgent referral (use clinical judgement to determine urgency)
- Palpable bladder
- Neurological symptoms

Risk of progression of benign prostatic enlargement is higher in men:
- Who are older
- With a poorer urine flow
- Have a higher symptom score
- Have evidence of bladder decompensation (eg chronic urinary retention)
- Larger prostate
- Higher PSA level

Approved by APC: May 2014
Review date: July 2016
# International Prostate Symptom Score (IPSS)

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Less than 1 time in 5</th>
<th>Less than half the time</th>
<th>About half the time</th>
<th>More than half the time</th>
<th>Almost Always</th>
<th>Your score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Incomplete Emptying</strong>&lt;br&gt;Over the past month, how often have you had a sensation of not emptying your bladder completely after you finish urinating?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Frequency</strong>&lt;br&gt;Over the past month, how often have you had to urinate again less than 2 hours after you finished urinating?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Intermittency</strong>&lt;br&gt;Over the past month, how often have you found you stopped and started again several times when you urinated?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Urgency</strong>&lt;br&gt;Over the last month, how difficult have you found it to postpone urination?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Weak stream</strong>&lt;br&gt;Over the past month, how often have you had a weak urinary stream?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Straining</strong>&lt;br&gt;Over the past month, how often have you had to push or strain to begin urination?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Nocturia</strong>&lt;br&gt;Over the past month, how many times did you most typically get up to urinate from the time you went to bed until the time you got up in the morning?</td>
<td>None</td>
<td>1 time</td>
<td>2 times</td>
<td>3 times</td>
<td>4 times</td>
<td>5 times or more</td>
<td></td>
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## Total IPSS Score

### Bothersomeness

<table>
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<tr>
<th>Quality of life due to urinary symptoms</th>
<th>Delighted</th>
<th>Pleased</th>
<th>Mostly satisfied</th>
<th>Mixed — about equally satisfied and dissatisfied</th>
<th>Mostly dissatisfied</th>
<th>Unhappy</th>
<th>Terrible</th>
</tr>
</thead>
<tbody>
<tr>
<td>If you were to spend the rest of your life with your urinary condition the way it is now, how would you feel about that?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
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Drug treatment for LUTS being considered (see LUTS management guideline above)

Symptoms troublesome and moderate to severe (IPSS score ≥ 8) and prostate is small and/or PSA < 1.4 nanogram/ml

Offer alpha blocker, uroselective agent better tolerated, more effective, eg tamsulosin or other local formulary drug (if doxazosin is used minimum effective dose is 10 mg)

If storage symptoms persist once voiding symptoms managed:
- Refer to urologist, or
- If confident that prostate is small, consider cautious use of an antimuscarinic agent (consider side effects, tolerability: refer to local formulary)

If treatment fails
- Refer to urology

Risk of progression of benign prostatic enlargement is higher in men:
- Who are older
- With a poorer urine flow
- Have a higher symptom score
- Have evidence of bladder decompensation (eg chronic urinary retention)
- Larger prostate
- Higher PSA level

Notes
Refer to local formulary for additional information and for details of drugs on the local formulary

Follow up
Alpha-blocker: after 4-6 weeks, and then every 6-12 months
5-alpha-reductase inhibitor: after 3-6 months, then every 6-12 months
Antimuscarinic agent: every 4-6 weeks until stable, then every 6-12 months

Interpretation of PSA results
After 6 months of 5-alpha reductase inhibitor use, PSA levels reduce by about 50%. When interpreting a PSA level measured after at least 6 months of 5-alpha reductase inhibitor treatment, double the PSA result
APPENDIX

Membership of the guideline development group
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Declared conflicts of interest
Toby Page has received honoraria from GSK, Pfizer, Astrellas and Ferring, and educational support from Ethicon, Ferring and Astra-Zeneca.

Date of guideline and review date
July 2013, review July 2016