



THE BRITISH ASSOCIATION
OF UROLOGICAL SURGEONS



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ADVANCING SURGICAL CARE

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Commissioning guide:

Asymptomatic Scrotal Swelling

Sponsoring Organisation: British Associations of Urological Surgeons

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Introduction

This guide is intended for adult patients (16 and over) with an asymptomatic scrotal swelling.

- Asymptomatic scrotal swelling is the incidental finding of a swelling or lump that may be associated with minor discomfort. This guide excludes all acute and painful scrotal swelling and inguino-scrotal herniae
- The differential diagnoses of asymptomatic scrotal swelling include:
 - malignancy
 - epididymal cyst
 - hydrocoele
 - varicocoele
- Testicular torsion is a surgical emergency and is not included in this guide
- Malignancy cannot be excluded by clinical examination
- Ultrasound scan (USS) is the gold standard investigation for scrotal swelling of uncertain cause
- Do *not* arrange an ultrasound scan of the scrotum if a testicular tumour is clinically evident — refer directly for an urgent (2 week wait) outpatient appointment with an urologist.
- Ultrasound scans for clinically benign conditions should take place within four weeks.
- Following USS diagnosis, epididymal cysts, hydrocoeles and varicocoeles may be safely observed in primary care without the need for a secondary care referral
- Surgery for benign conditions should only be considered for functional problems and not for cosmetic reasons
- Aspiration of hydrocoeles and epididymal cysts is often ineffective in the long-term and should only be considered in patients with mechanical problems who are unfit for surgery¹

1. High Value Care Pathway for asymptomatic scrotal swelling

1.1 Primary Care

Refer

- Testicular torsion as an emergency^{2,3}
- Children <16 years to a paediatric surgical service⁴
- If a testicular tumour is clinically evident — refer directly for an urgent outpatient appointment (within 2 weeks) with a urologist^{5,6}
- Consider measuring Alpha-fetoprotein (α FP), Beta human chorionic gonadotrophin (β HCG) and Lactate Dehydrogenase (LDH) levels at the time of referral
- All uncertain scrotal swellings for routine USS
- Patients with acute onset of painful varicocele for renal ultrasound but patients with longstanding asymptomatic varicoceles do not require renal imaging⁷

Following Ultrasound

- If a suspected malignancy is found, refer on 2 week wait to urology
- Reassure patients with hydrocoele, varicocele or epididymal cyst⁶
- Only consider repeat USS if there is significant clinical change
- Refer to urology if there are functional problems
- Patients should be warned that treatment has a risk of chronic scrotal pain
- Patients should be directed to appropriate supporting information e.g. NHS Choices, patient.co.uk

1.2 Secondary care

Malignancy

- Once diagnosed, tumour markers should be performed prior to radical orchidectomy
- Depending on the protocol of the local cancer network, the patient will then be referred on for specialist follow up once diagnosis is confirmed⁸

Hydrocoele with significant functional problems⁶

- Consider hydrocoelectomy
- Aspiration and sclerotherapy are associated with fewer complications but a lower success rate and patient satisfaction. They should only be considered if the patient is unfit for surgery²

Epididymal cyst with significant functional problems

- Consider epididymal cyst excision
- Aspiration is associated with fewer complications but a lower success rate and patient satisfaction. This should only be considered if the patient is unfit for surgery⁸

Varicocoele with significant functional problems

- Consider embolisation if appropriate interventional radiology service is available or alternatively surgery
- Procedures on varicocoeles are not recommended as a treatment for infertility as they do not improve pregnancy rates¹¹

Varicocoele in adolescents

- Varicocoeles become more frequent at the beginning of puberty. Fertility problems will arise in about 20% of affected adolescents.
- Treatment of varicocoele is indicated for those patients with a small testis (growth arrest) as testicular catch up growth and improvement in sperm parameters has been reported¹²

2. Procedures explorer for asymptomatic scrotal swelling

Users can access further procedure information based on the data available in the quality dashboard to see how individual providers are performing against the indicators. This will enable CCGs to start a conversation with providers who appear to be 'outliers' from the indicators of quality that have been selected.

The Procedures Explorer Tool is available via the [Royal College of Surgeons](#) website.

3. Quality dashboard for asymptomatic scrotal swelling

The quality dashboard provides an overview of activity commissioned by CCGs from the relevant pathways, and indicators of the quality of care provided by surgical units.

The quality dashboard is available via the [Royal College of Surgeons website](#).

4. Levers for implementation

4.1 Audit and peer review measures

The following measures and standards are those expected at primary and secondary care. Evidence should be able to be made available to commissioners if requested.

	Measure	Standard
Primary Care	Referral	Do not refer patients with ultrasound proven asymptomatic or mildly symptomatic hydrocoele, varicocoele or epididymal cysts
	Patient Information	Patients should be directed to appropriate information
	Referral	Do not refer for repeat ultrasound unless there is significant clinical change
	Referral	<ul style="list-style-type: none"> Patients with a suspected malignancy should be referred to urology on a 2 week wait Consider Alpha-fetoprotein (AFP), Beta Human Chorionic Gonadotrophin (BhCG) and Lactate Dehydrogenase (LDH)
	Referral	Refer adolescents in whom there is the presence of a varicocoele and testicular growth arrest on the ipsilateral side
Secondary Care	Intervention	Do not aspirate hydrocoele or epididymal cyst with functional problems unless patient unfit for surgery
	Intervention	Do not operate on epididymal cysts unless there are significant functional problems

Intervention	Do not routinely treat varicoceles for infertility
Referral	Following histological confirmation of malignancy, patients should be referred to the local testicular cancer network as per the local protocol
Intervention:	Do not operate on hydrocoele unless there are significant functional problems
Intervention:	Do not treat varicocele unless there are significant functional problems or signs of ipsilateral testicular growth arrest in adolescents

4.2 Quality Specification/CQUIN

Commissioners may wish to include the following measures in the Quality Scheduled with providers. Improvements could be included in a discussion about a local CQUIN.

Measure	Description
<i>Rapid access to USS</i>	Access to scrotal/ testicular USS <4/52
<i>Day case rate</i>	Day case rate for any procedure
<i>Emergency readmission rates within 7 days</i>	Emergency readmission rates within 7 days for any procedure
<i>Emergency reoperation rate within 30 days</i>	Emergency reoperation rate within 30 days

5. Directory

5.1 Patient Information

Name	Publisher	Link
<i>Testicular Lumps</i>	NHS Choices	http://www.nhs.uk/conditions/testicular-lumps-benign/pages/introduction.aspx
<i>Ultrasound scan</i>	NHS Choices	http://www.nhs.uk/conditions/Ultrasound-scan/Pages/Introduction.aspx
<i>Ultrasound scan</i>	Patient.co.uk	http://www.patient.co.uk/health/ultrasound-scan

<i>Testicular Cancer</i>	Macmillan	http://www.macmillan.org.uk/Cancerinformation/Cancertypes/Testes/Testicularcancer.aspx
<i>Testicular Cancer</i>	Orchid	http://www.orchid-cancer.org.uk/Testicular-Cancer
<i>Checkmelads</i>	Checkmelads Charity	www.checkmelads.com
<i>Your privates</i>	Orchid	www.yourprivates.org.uk
<i>Get to know your testes</i>	Patient.co.uk	http://www.patient.co.uk/health/get-to-know-your-testes-testicles

5.2 Clinician information

Name	Publisher	Link
<i>Referral for suspected cancer⁵</i>	NICE CG 27	https://www.nice.org.uk/guidance/ng12
<i>Scrotal Swelling⁶</i>	NHS Clinical Knowledge Summaries	http://cks.nice.org.uk/scrotal-swellings
<i>Map of medicine for testicular cancer</i>	NHS Choices	http://www.nhs.uk/Conditions/Cancer-of-the-testicle/Pages/Introduction.aspx
<i>Imaging referral guidelines</i>	Royal College of Radiologists	http://www.rcr.ac.uk/content.aspx?PageID=995

6. Benefits and risks of implementing this guide

Consideration	Benefit	Risk
<i>Patient outcome</i>	Ensure rapid access to USS	
<i>Patient safety</i>	Reduce chance of missing testicular malignancy	
<i>Patient experience</i>	Improve access to patient information and support groups	
<i>Equity of Access</i>	Improve access to effective procedures	
<i>Resource impact</i>	Reduce unnecessary referral and intervention	Resource required to establish routine 4 week referral to USS

7. Further information

7.1 Research recommendations

Models of care: patient experience, patient safety, cost effectiveness

- Direct referral to ultrasound – 2 week wait vs. routine
- Referral to one stop urology and ultrasound clinic – 2 week wait^{9,10}
- Development of PROMs for benign scrotal conditions treated by surgery
- Reasons for variation in referrals from primary care for asymptomatic scrotal swelling

7.2 Other recommendations

- Improved patient Information: to include information about relevant physical, emotional, psychological, sexual, social issues, general health promotion and health lifestyle advice

7.3 Evidence base

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7.4 Guide development group

A commissioning guide development group was established to review and advise on the content of the commissioning guide. This group met once, with additional interaction taking place via email and teleconference.

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7.5 Funding statement

Funding for the literature search was provided by The Royal College of Surgeons. Funding for meetings was by the British Association of Urological Surgeons

7.6 Conflict of interest statement

The following conflicts were raised:

- Dr O'Brien, GP Clinical adviser for Liverpool CCG
- Mr Martin- Patient Council member of Royal Liverpool and Broadgreen hospital Trust