



THE BRITISH ASSOCIATION
OF UROLOGICAL SURGEONS



2013

Commissioning guide:

Asymptomatic Scrotal Swelling



Sponsoring Organisation: British Association 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
- varicocele

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 should take place within four weeks.

Following USS diagnosis, epididymal cysts, hydrocoeles and varicoceles may be safely observed.

Surgery for benign conditions should only be considered for functional problems and not for cosmetic reasons.

Aspiration of hydroceles and epididymal cysts is often ineffective in the long-term and should only be considered in patients with mechanical problems who are unfit for surgery.¹



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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) levels and Beta human chorionic gonadotrophin (β HCG) levels at the time of referral
- all uncertain scrotal swellings for routine USS

Following USS:

- if a suspected malignancy is found, refer on 2 week wait to urology
- reassure patients with Hydrocoele/ Varicocele/ Epididymal Cyst⁶
- only consider repeat USS if there is significant clinical change
- refer to urology if there are functional problems
- patients should be directed to appropriate supporting information e.g. NHS Choices, patient.co.uk

1.2 Secondary Care

Malignancy:

- once diagnosed, radical orchidectomy and tumour markers should be performed
- depending on the protocol of the local cancer network, the patient will then be referred on for specialist follow up once diagnosis is confirmed⁷

Hydrocoele with functional problems:⁶

- consider hydrocoelectomy
- aspiration and sclerotherapy - associated with fewer complications but a lower success rate and patient satisfaction - should only be considered if the patient is unfit for surgery²

Epididymal cyst:

- consider epididymal cyst excision
- aspiration - associated with fewer complications but a lower success rate and patient satisfaction - should only be considered if the patient is unfit for surgery⁷



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Varicocele with functional problems:

- consider embolisation if appropriate interventional radiology service is available or alternatively surgery
- procedures on varicoceles are not recommended as a treatment for infertility as they do not improve pregnancy rates ¹⁰

Varicocele in adolescents:

- Varicoceles become more frequent in at the beginning of puberty. Fertility problems will arise in about 20% of affected adolescents. Varicocelectomy is indicated for those patients with a small testis (growth arrest) as testicular catch up growth and improvement in sperm parameters has been reported. ¹¹

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.



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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 USS proven asymptomatic or mildly symptomatic hydrocoele/ varicocele/ epididymal cysts |
| | Patient Information | Patients should be directed to appropriate information |
| | Referral | Do not refer for repeat USS unless there is significant clinical change |
| | Referral | Patients with a suspected malignancy should be referred to urology on a 2 week wait with Alpha-fetoprotein (AFP) and Beta Human chorionic gonadotrophin (BhCG) |
| Secondary Care | Referral | Refer adolescents in whom there is the presence of a varicocele and testicular growth arrest on the ipsilateral side |
| | Intervention | Do not aspirate hydrocele/epididymal cyst with functional problems unless patient unfit for surgery |
| | Intervention | Do not operate on hydrocoele/ varicocele unless there are functional problems |
| | Intervention | Do not treat varicoceles for infertility |
| | Referral | Following radical orchidectomy and tumour markers, patients should be referred to the local testicular cancer network as per the local protocol |
| | Intervention: | Do not operate on hydrocoele unless there are functional problems |
| Intervention: | Do not treat varicocele unless there are functional problems or signs of ipsilateral testicular growth arrest in adolescents | |



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4.2 Quality Specification/CQUIN (Commissioning for Quality and Innovation)

| Measure | Description | Data specification (if required) |
|---|---|----------------------------------|
| Rapid access to USS | Access to scrotal/ testicular USS <4/52 | |
| Day case rate | Day case rate for any procedure | |
| Emergency readmission rates within 7 days | Emergency readmission rates within 7 days for any procedure | |
| Emergency reoperation rate within 30 days | Emergency reoperation rate within 30 days | |

5 Directory

5.1 Patient Information for asymptomatic scrotal swelling

| Name | Publisher | Link |
|-------------------------|---------------------|---|
| Testicular Lumps | NHS Choices | http://www.nhs.uk/conditions/testicular-lumps-benign/pages/introduction.aspx |
| Ultrasound scan | NHS Choices | http://www.nhs.uk/conditions/Ultrasound-scan/Pages/Introduction.aspx |
| Ultrasound scan | Patient.co.uk | http://www.patient.co.uk/health/ultrasound-scan |
| Testicular Cancer | MacMillan | http://www.macmillan.org.uk/Cancerinformation/Cancertypes/Testes/Testicularcancer.aspx |
| Testicular Cancer | Orchid | http://www.orchid-cancer.org.uk/Testicular-Cancer |
| Checkmelads | Checkmelads Charity | www.checkmelads.com |
| Your privates | Orchid | www.yourprivates.org.uk |
| Get to know your testes | Patient.co.uk | http://www.patient.co.uk/health/get-to-know-your-testes-testicles |



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5.2 Clinician information for asymptomatic scrotal swelling

| Name | Publisher | Link |
|--|----------------------------------|---|
| Referral for suspected cancer ⁵ | NICE CG 27 | http://www.nice.org.uk/cg27 |
| Scrotal Swelling ⁶ | NHS Clinical Knowledge Summaries | www.cks.nhs.uk |
| Map of medicine for testicular cancer | NHS Choices | http://healthguides.mapofmedicine.com/choices/map/testicularcancer1.html |
| Imaging referral guidelines | Royal College of Radiologists | http://www.rcr.ac.uk/content.aspx?PageID=995 |

6 Benefits and risks of implementing this guide

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



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7 Further information

7.1 Research recommendations

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

- direct referral to USS – 2 week wait vs. routine
- referral to one stop Urology and USS clinic – 2 week wait^{8,9}
- 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 and social issues

7.3 Evidence base

¹ Freedman D; 'A lovely bunch of coconuts'. Scand J Urol Nephrol Suppl. 1991;138:227-9.

² Ringdahl E, Teague L. Testicular torsion. American Family Physician. 2006 Nov 15;74(10):1739-43

³ Yin S, Trainor JL. Diagnosis and Management of Testicular Torsion, Torsion of the Appendix Testis, and Epididymitis. Clinical Pediatric Emergency Medicine 2009 Mar;10(1):38-44

⁴ Tegul S, Riedmiller H, Gerharz E et al. Guidelines on Paediatric Urology. European Association of Paediatric Urology. (2009) www.uroweb.org

⁵ NICE. CG27 Referral for suspected cancer (2005). www.nice.org.uk

⁶ Scrotal Swelling. Clinical Knowledge Summaries (2010). www.cks.nhs.uk

⁷ Alison Walker, The cancer pathway and the role of primary care - in association with the Department of Health, BMJ Learning - http://learning.bmj.com/learning/module-intro/cancer-pathway-primary-care-.html?locale=en_GB&moduleId=10043291

⁸ Khaniya S, Agrawal CS, Koirala R, Regmi R, Adhikary S. Comparison of aspiration-sclerotherapy with hydrocelectomy in the management of hydrocele: a prospective randomized study.

⁹ Moore JA, O'Neil C, Fawcett D. A one-stop clinic for men with testicular anxiety. Annals of the Royal College of Surgeons of England. 2009 Jan ;91(1):23-24

¹⁰ NICE Guidance 2013: CG156 Fertility: Assessment and treatment for people with fertility problems

¹¹ EAU Guidelines 2013 Male Infertility



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7.4 Guide development group for asymptomatic scrotal swelling

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.

| Name | Job Title/Role | Affiliation |
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| Anthony Doherty | Patient Representative | Royal Liverpool and Broadgreen University Hospitals NHS Trust Patient Council |



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7.5 Funding statement

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- DH Right Care funded the costs of the guide development group, literature searches and contributed towards administrative costs.
- The Royal College of Surgeons of England and the British Association of Urological Surgeons provided staff to support the guideline development.

7.6 Conflict of Interest Statement

Individuals involved in the development and formal peer review of commissioning guides are asked to complete a conflict of interest declaration. It is noted that declaring a conflict of interest does not imply that the individual has been influenced by his or her secondary interest. It is intended to make interests (financial or otherwise) more transparent and to allow others to have knowledge of the interest.

- No interests were declared by the group.