

RECOMMENDATIONS

These recommendations have been formed by a consensus exercise involving all those listed in the acknowledgements. The recommendations have been independently edited by medical editors experienced in developing recommendations for healthcare audiences to act on.

The recommendations highlight areas that are suitable for regular local clinical audit and quality improvement initiatives by those providing care to this group of patients. The results of such work should be presented at quality or governance meetings and action plans to improve care should be shared with executive boards. Quality improvement tools highlighted in this report will support this.

The recommendations in this report support those made previously by other organisations, and for added value should be read alongside the following:

[GIRFT 2021. Paediatric general surgery and urology](#)

[NICE 2023. Clinical knowledge summary: scrotal pain and swelling](#)

[HSIB 2019. Management of acute onset testicular pain](#)

Executive boards are ultimately responsible for supporting the implementation of these recommendations. Suggested target audiences to action recommendations are listed in italics under each recommendation.

PUBLIC AWARENESS AND EDUCATION

- 1 Raise awareness about testicular torsion, including the need to urgently attend an emergency department if someone experiences testicular pain. This should include a continued public awareness campaign for all who may be affected, including parents/carers, and raised at all stages of development:
- Maternity/antenatal care (e.g. advice for care of a new baby in the red book) and post-natal care.
 - Nursery education.
 - The health education curriculum in primary and secondary education.
 - Further/higher education.

SEE SECTION ON [USEFUL LINKS](#)

Primary audiences - national: *NHS England, Office for Health Inequalities and Disparities, Welsh Government, Public Health Wales, Department of Health Northern Ireland, Public Health Agency, Departments of Education.*

Primary audiences - local: *Midwives, health visitors, special educational needs staff, school nurses.*

Supported by: *Royal College of Midwives, Royal College of Paediatrics and Child Health, British Association of Paediatric Urologists, British Association of Paediatric Surgeons, Association of Paediatric Anaesthetists of GB and Ireland, British Association of Urological Surgeons, Royal College of Surgeons, Association of Surgeons of GB and Ireland, Getting It Right First Time, Commissioners, Integrated Care Boards.*

RECOGNITION OF TESTICULAR TORSION IN PRIMARY CARE AND THE EMERGENCY DEPARTMENT

- 2 Update training modules for primary care, and emergency department staff, to emphasise the importance of early recognition of testicular torsion, including atypical or warning presentations, urgent referral pathways and timely surgery.

Primary audiences: NHS 111, Ambulance Trusts, Royal College of General Practitioners, Royal College of Emergency Medicine.

Supported by: British Association of Paediatric Urologists, British Association of Paediatric Surgeons, Association of Paediatric Anaesthetists of GB and Ireland, British Association of Urological Surgeons, Royal College of Surgeons, Association of Surgeons of GB and Ireland, Royal College of Paediatrics and Child Health, NHS England, Welsh Government, Department of Health Northern Ireland.

PATHWAY UP TO AND INCLUDING ARRIVAL AT HOSPITAL

- 3 Reduce delays for patients with testicular pain/suspected testicular torsion by:
- Minimising transfers to another hospital by referring patients to a hospital where scrotal exploration can be performed safely on-site – ideally including a pre-alert to the receiving hospital.
 - Ensuring that any essential transfer is as urgent as possible*, including when patients self-present but need to be at another hospital.
 - Having a clear, documented clinical pathway of care for patients with testicular pain/suspected testicular torsion in hospitals where surgery for testicular torsion is undertaken, which is communicated to all healthcare professionals involved in the care of this group of patients.
 - Auditing the testicular torsion pathway, at least annually, to identify areas for improvement.

*This is in line with the [GIRFT report on paediatric surgery and urology](#).

Primary audiences - national: Royal College of General Practitioners, NHS 111, Ambulance Trusts

Primary audiences - local: Medical Directors, Directors of Nursing, Integrated Care Boards, Operational Delivery Networks Commissioners

Supported by: British Association of Paediatric Urologists, British Association of Paediatric Surgeons, Association of Paediatric Anaesthetists of GB and Ireland, British Association of Urological Surgeons, Royal College of Surgeons, Association of Surgeons of GB and Ireland, Royal College of Paediatrics and Child Health, Royal College of Emergency Medicine, Royal College of Anaesthetists, Association of Anaesthetists, Royal College of Radiologists, NHS England, Welsh Government, Department of Health Northern Ireland.

PATHWAY IN HOSPITAL

- 4 Patients with suspected testicular torsion should have an urgent* referral and clinical review by a senior surgical decision-maker (minimum ST3 or equivalent) specialising in urology, paediatric surgery, or general surgery.

*[NCEPOD Classification of Intervention](#)

Primary audiences - national (to agree a timeframe): NHS England, Welsh Government, Department of Health Northern Ireland, British Association of Paediatric Urologists, British Association of Paediatric Surgeons, Association of Paediatric Anaesthetists of GB and Ireland, British Association of Urological Surgeons, Royal College of Surgeons, Association of Surgeons of GB and Ireland, Royal College of Emergency Medicine.

Primary audiences - local: Emergency Medicine Physicians, Paediatric Surgeons, Urologists, General Surgeons, Anaesthetists, Radiologists

Supported by: Medical Directors, Directors of Nursing

5	<p>A consensus is needed on the role of Doppler ultrasound in the care pathway for suspected testicular torsion to aid surgical decision-making whilst not adding delay to surgery.</p> <p>Primary audiences: British Association of Urological Surgeons, British Association of Paediatric Urologists, British Association of Paediatric Surgeons, Association of Paediatric Anaesthetists of GB and Ireland, Royal College of Paediatrics and Child Health, Royal College of Radiologists, Royal College of Surgeons, Association of Surgeons, National Institute for Health and Care Excellence</p> <p>Supported by: NHS England, Welsh Government, Department of Health Northern Ireland, medical directors, National Institute for Health and Care Research Health Technology Assessment</p>
6	<p>Perform surgery for testicular torsion as an immediate or urgent procedure (NCEPOD 1 or 2)*, once the decision to operate has been made.</p> <p><i>*NCEPOD Classification of Intervention</i> This also supports the GIRFT report on paediatric surgery and urology</p> <p>Primary audiences: Consultant Surgeons, Consultant Anaesthetists</p> <p>Supported by: Clinical Directors and Medical Directors</p>
DISCHARGE AND FOLLOW-UP	
7	<p>Discharge information for patients, and parent/carers should include:</p> <ol style="list-style-type: none"> a. Any follow-up arrangements. b. Delayed side effects that might occur following orchidectomy, or the risk of late testicular atrophy in patients who had an operation that led to no orchidectomy, but fixation (orchidopexy), including risks to fertility. c. Details of patient-initiated follow-up (PIFU) follow-up e.g. to discuss prosthetic implants for patients who underwent an orchidectomy. d. How to access psychological support. <p>Primary audiences: The medical team or specialist nurses caring for patients following surgery for testicular torsion.</p> <p>Supported by: Clinical Directors and Medical Directors.</p>
8	<p>Review the care of all patients who underwent an orchidectomy in a multidisciplinary morbidity and mortality meeting. This should include primary care and, ideally a regional approach to shared-learning and quality improvement.</p> <p>Primary audiences: The medical team or specialist nurses caring for patients following surgery for testicular torsion.</p> <p>Supported by: Clinical Directors and Medical Directors.</p>