From the Chief Medical Officer
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Department of Health
An Roinn Sláinte
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HSS(MD)3/2025

FOR ACTION
Chief Executives, Public Health Agency/HSC Trusts/NIAS
(for onward distribution to:
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Directors of Maternity Services
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Heads of Midwifery)
Chief Operating Officer, SPPG
GP Medical Advisers, SPPG
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Chief Executive, NIMDTA
Chief Executive, RQIA

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Our Ref: HSS(MD)3/2025
Date: 27 January 2024

Dear Colleague

TWIST AND SHOUT. A REVIEW OF THE PATHWAY AND QUALITY OF CARE PROVIDED TO CHILDREN AND YOUNG PEOPLE AGED 2-24 YEARS WHO PRESENTED TO HOSPITAL WITH TESTICULAR TORSION

SUMMARY

On the 8 February 2024, the National Confidential Enquiry into Patient Outcome and Death (NCEPOD) published its report “Twist and Shout. A review of the pathway and quality of care provided to children and young people aged 2-24 years who presented to hospital with testicular torsion”.

The focus of this report is testicular torsion which is a surgical emergency requiring prompt diagnosis and surgical intervention to preserve the testicle. The full report can be accessed at:

Twist and Shout: Review of care provided to children and young people with testicular torsion – HQIP

ACTION

Chief Executives of HSC Trusts should:

- Consider the key findings and recommendations set out in this report and bring these to the attention of relevant staff to further inform future service improvements and developments.

Chief Operating Officer, Strategic Performance and Planning Group should:

- Disseminate this letter to all relevant staff including those in primary care to further inform commissioning and improvement of services.
- Report on the required actions through the established arrangements of the "SPPG Overarching Comprehensive Report on SPPG Safety and Quality Processes."

Chief Executive Officer PHA should:

- Disseminate this circular to all relevant PHA staff.
- Ensure relevant professionals work with colleagues in SPPG to further develop and inform commissioning and service improvements.

Chief Executive, RQIA should:

- Disseminate this letter to all relevant Independent Sector providers.

Chief Executive, NIMDTA should:

- Disseminate this letter to doctors in training in all relevant specialties.

BACKGROUND

Testicular torsion occurs when the spermatic cord twists and cuts off the blood supply to the testicle. Testicular torsion is a surgical emergency requiring prompt diagnosis and surgical intervention to preserve the testicle.

Delay in diagnosis and treatment of testicular torsion is known to lead to poorer outcomes.

KEY FINDINGS AND RECOMMENDATIONS

The report highlights the following:

- The need for greater public awareness about testicular torsion.
- Hospitals need to be equipped to deal with testicular torsion as an emergency operation, with senior clinicians able to decide whether surgery is needed and to be able to perform the surgery/anaesthetise the patient. If these services are not available, then there needs to be robust transfer arrangements in place to get the patient to theatre.
- Patients will need good information at discharge, and the option to return for further follow-up should they need psychological support or wish to discuss the use of a prosthesis.

A summary of the key messages and recommendations in this report are set out in **Annex 1 and 2.**

Yours sincerely

PROFESSOR SIR MICHAEL McBRIDE
Chief Medical Officer

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Annex 1

1. INCREASE PUBLIC AWARENESS

Increased awareness and education may reduce embarrassment and get people talking.

Testicular torsion was not recognised by 157/239 (65.7%) patients or 83/239 (34.7%) parents/carers.

Only 294/403 (73.0%) patients had contacted a healthcare professional within six hours of developing symptoms.

2. ENSURE PATHWAYS MINIMISE THE NEED FOR TRANSFERS

Directing patients to hospitals where surgery for testicular torsion can be undertaken will minimise the need for transfer and reduce the risk of delay to theatre.

60/475 (12.6%) patients were referred by a GP, 34/475 (7.2%) from an urgent treatment centre and 25/475 (5.3%) NHS 111.

91/143 (63.6%) hospitals reported that patients were transferred out of the hospital for treatment on occasions.

Patients not on a pathway were more likely to have their testicle removed (154/389; 39.6%) compared with those who were (16/67; 23.9%).

3. URGENT SENIOR REVIEW, DECISION-MAKING AND OPERATION

Urgent review by senior decision-makers and access to senior specialists in urology, paediatric surgery, or general surgery for urgent surgery is essential for prompt treatment.

136/435 (31.3%) patients had their first assessment on arrival at hospital performed by a junior specialist trainee.

113/422 (26.8%) patients had not had their first ST3+ surgical review within two hours of arrival and 40/422 (9.5%) patients waited more than four hours.

There was a delay in making a diagnosis in 116/635 (18.3%) patients which impacted their care in 69/116 (59.5%) cases.

4. EXTENDED FOLLOW-UP

Patient-initiated follow-up after surgery may encourage patients to seek psychological support and/or the use of prosthetic implants.

Information on prosthetic replacements could only be found in the case notes of 139/534 (26.0%) patients who had a testicle removed, with an explanation recorded for 83/139 (59.7%) patients.

Adequate written information given to the patient and family at discharge could only be found in the case notes of 123/233 (52.8%) patients.

ANNEX 2

No.	Recommendation	Target Audience
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: a. Maternity/antenatal care (e.g. advice for care of a new baby in the red book) and post-natal care. b. Nursery education. c. The health education curriculum in primary and secondary education. d. Further/higher education.	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
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
3	Reduce delays for patients with testicular pain/suspected testicular torsion by: a. 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. b. Ensuring that any essential transfer is as urgent as possible*, including when patients self present but need to be at another hospital. c. 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. d. 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.
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	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	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 S Supported by: NHS England, Welsh Government, Department of Health Northern Ireland, medical directors, National Institute for Health and Care Research Health Technology Assessment
6	Perform surgery for testicular torsion as an immediate or urgent procedure (NCEPOD 1 or 2) *, once the decision to operate has been made. *NCEPOD Classification of Intervention This also supports the GIRFT report on paediatric surgery and urology	Primary audiences: Consultant Surgeons, Consultant Anaesthetists Supported by: Clinical Directors and Medical Directors
7	Discharge information for patients, and parent/carers should include: a. Any follow-up arrangements.	Primary audiences: The medical team or specialist nurses caring for patients following surgery for testicular torsion.

	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.	Supported by: Clinical Directors and Medical Directors.
8	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.	Primary audiences: The medical team or specialist nurses caring for patients following surgery for testicular torsion. Supported by: Clinical Directors and Medical Directors.