# **EXECUTIVE SUMMARY**

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 recognising testicular torsion and delay in presenting to hospital is known to lead to poorer outcomes.

There needs to be 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 should 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.

# **IN THIS STUDY**

The pathway and quality of care provided to patients aged 2-24 years who presented to hospital with testicular torsion was reviewed. The sampling period of 1st April 2021 to 31st March 2022 was used and data were included from 574 clinician questionnaires, 143 organisational questionnaires and the assessment of 635 sets of case notes.

#### 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 followup after surgery may encourage patients to seek psychological support and/or the use of prosthetic implants.



For those patients who underwent an orchidectomy, adequate explanation of the option of prosthetic replacement happened 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.