

Optimising the Management of Testicular Torsion in Accordance with the Getting it Right First Time (Girft) National Report 2024: A One Year Study in a University Teaching Hospital

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Abstract

Introduction and Objectives: Testicular torsion occurs when a testicle twists and blood supply to the testicle is compromised; causing sudden scrotal pain. It is a time-critical surgical emergency and occurs most commonly in boys aged between 10 and 20 years. Testicles can die within 6 h of twisting without emergency surgical intervention. The Getting it Right First Time (GIRFT) national report outlines key recommendations to ensure boys with suspected testicular torsion are seen promptly and treated closer to home. These include: minimising the number patient transfers, expediting surgical assessment, utilising the TWIST scoring system, and arranging appropriate follow up post orchidopexy and orchidectomy. Our audit assessed adherence to these guidelines in our hospital trust, analyzing data from 77 patients aged 2–24 who underwent surgical exploration for suspected torsion.

Materials and Methods: We collected data for 77 patients between the ages of 2 and 24 years from January 2023 to February 2024 who underwent surgical exploration for suspected testicular torsion in our trust.

Results: Results showed only 18 out of 77 patients had true torsion on surgical exploration. The average time between presentation to emergency department (ED) and operation start time was 263 min (4.38 h), with no patients operated on within 60 min of presentation to ED. The TWIST scoring system was only used once. 16 patients were transferred from a non-urological trust, with no patients transferred more than once. 54 orchidopexies were performed; 7 of which were followed up.

Conclusions: Our data showed that patients need to be assessed by a surgical decision maker in ED more promptly. Increased use of the TWIST scoring system may stress the urgency of a possible torsion and allow patients to be operated sooner. GP practices/patients need to be aware of their local urological centre. This will reduce patient transfers. Increased ultrasound use allows more accurate torsion diagnosis and prevents unnecessary surgical exploration. Ultrasound training for surgical decision makers is warranted. Follow up is needed in all patients undergoing orchidopexies and orchidectomies, to reduce the incidence of delayed testicular atrophy and to ensure patients are aware of the option of a prosthesis in later life.

Keywords: Testicular Torsion, GIRFT National Report, Twist Scoring System, Surgical Exploration, Orchidopexy and Orchidectomy, Ultrasound in Torsion Diagnosis

Introduction

Testicular torsion occurs when a testicle twists and blood supply to the testicle is compromised; causing sudden scrotal pain. It is a timecritical surgical emergency and occurs most commonly in boys aged between 10 and 20 years. Testicles can die with-

in 6 hours of twisting without emergency surgical intervention. The Getting it Right First Time (GIRFT) national report outlines key recommendations to ensure boys with suspected testicular torsion are seen promptly and treated closer to home to reduce the risk of testicular loss. These include: minimising the num-

ber patient transfers, expediting surgical assessment, utilising the TWIST scoring system, and arranging appropriate follow up post orchidopexy and orchidectomy.

Aim

Our audit assessed adherence to these guidelines in our hospital trust, analyzing data from 50 patients aged 2-24 who underwent surgical exploration for suspected torsion

Method

We collected data for 50 patients between the ages of 2 and 24 years from January 2023 to February 2024 who underwent surgical exploration for suspected testicular torsion in our trust.

We used

- Operation Notes
- Emergency Admission Clerking information
- Theatre Times
- Patient Clinical Letters for follow up
- Discharge Summaries

We Measured

- Time of first presentation to ED

- Starting time of Operation
- Use of TWIST Scoring System
- Use of Ultrasound
- Whether patient has been transferred from Non-Urological Hospital within Trust.
- Number of Orchidopexies
- Follow up Clinic Offered
- Number of Orchidectomies
- PIFU offered.

Results

- 50 Patients Audited
- The mean time between presentation to ED and surgical start time was 4 hours and 22 minutes.
- 35 patients underwent orchidopexy
- 3 patients underwent orchidectomy.
- The TWIST score was utilized in only one case.
- ultrasound was used in 3 instances to aid diagnosis.
- 10 patients were transferred from Conquest Hospital, as there is no urology department at that site.
- 5 patients had post-operative follow-up after orchidopexy
- 2 patients were offered post-operative fertility preservation (PIFU) following orchidectomy.

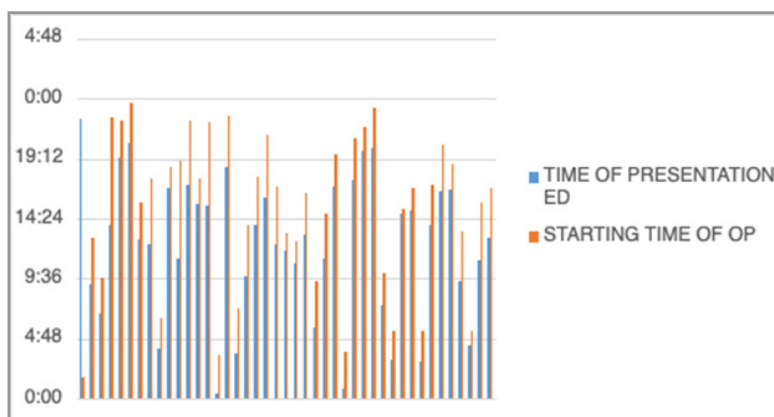


Figure 1

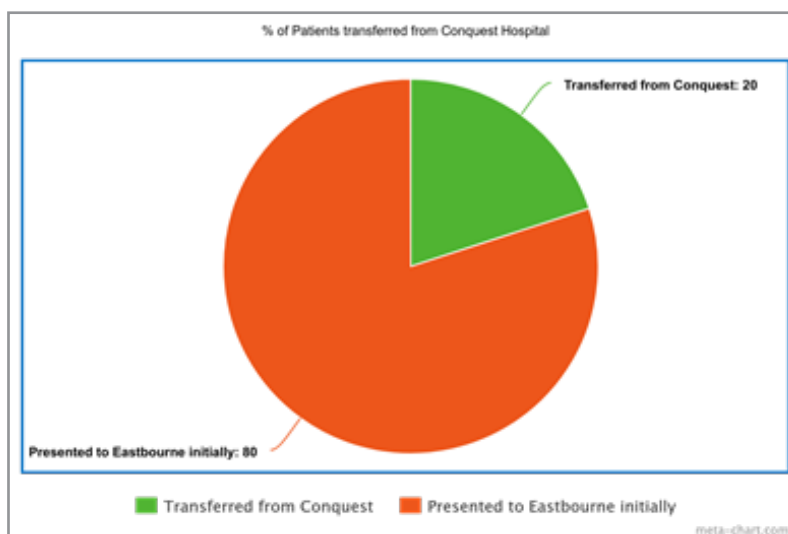


Figure 2

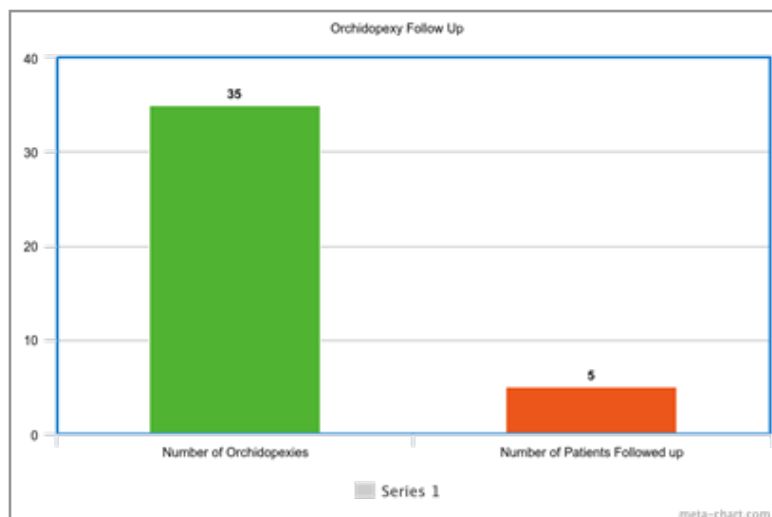


Figure 3



Figure 4

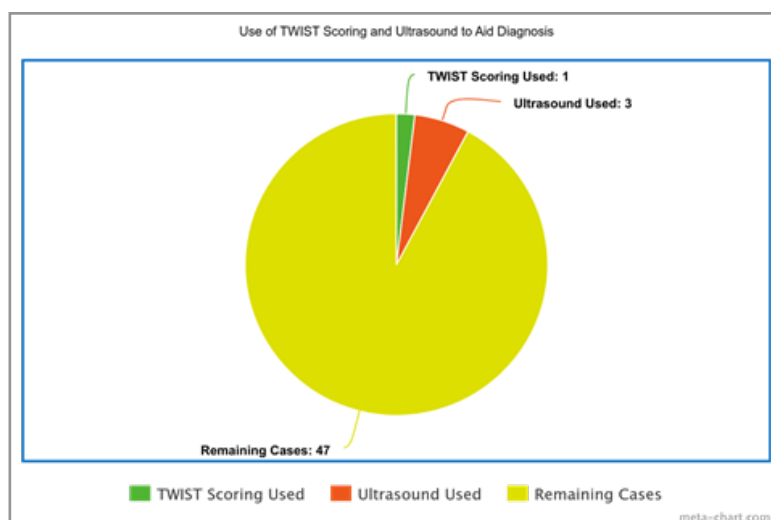


Figure 5

Conclusion

Our data showed that patients need to be assessed by a surgical decision maker in ED more promptly. Increased use of the TWIST scoring system may stress the urgency of a possible torsion and allow patients to be seen and operated sooner. GP practices and patients need to be more aware of their local urological centre, and how to find it. This will reduce the number of patient transfers and therefore the time between presentation of symptoms and surgical exploration. Increased use of ultrasound may allow more accurate torsion diagnosis and prevent unnecessary surgical exploration. Increasing ultrasound training for surgical

decision makers is warranted. Follow up is needed in all patients undergoing orchidopexies and orchidectomies, to reduce the incidence of delayed testicular atrophy and to ensure patients are aware of the option of a prosthesis in later life.

References

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