

Acute Scrotum Care Map

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Care Map Symbols

Links to more information or returns to a previous page.

Start of a Care Map Segment

Decision Point

Stop and Evaluate

Care Map Step
Blue underlined text is a hyperlink

Progression of care – Patient Improving



Source Reference



Education Module



Hospital Policy



Hospital Reference



Provider Information



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[Testicular Torsion Diagnosis, evaluation and Treatment](#)

Suggested Inclusion Criteria for Acute Scrotum

Testicular swelling or pain

Males from 4-21 with abdominal pain of unclear etiology



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**Potential Reasons to Avoid
Acute Scrotum Care Map
Neonatal Testicular Swelling**



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[Testicular Torsion : A Diagnostic Pathway](#)



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Emergency Department Care: Chief Complaint = Testicular Swelling or Pain

Literature suggests that testicular salvage is more likely if there is recognition of torsion within 6 hours of the onset of symptoms. [Awareness education at well child visits is fundamental in helping to prevent adverse outcomes.](#)

Note:
[Providers should perform a GU exam in any male with lower abdominal pain with an unclear etiology.](#)
 Patients with impaired mechanism of pain perception or developmental delay often present with non localizing pain.

- Referral from outside facility
- **Known or suspected Testicular Torsion**
- **Confirm US tech in-house**

Assign ESI* Score: ESI 2
[Initiate Standing order](#)
 Notify ED provider

Obtain a [scrotal US](#)
[Immediate Notification of results to provider](#)

[TRANSFER Recommendations](#)

TT is a clinical diagnosis. US is a confirmatory test. Do not delay surgeon notification if strongly suspicious

Administer pain medication as soon as appropriate

Torsion Confirmed
 Call Surgeon and [Attempt Manual Detorsion](#)

Flow not restored
 Call Anesthesia

Maintain NPO
 Start large bore IV (left hand preferred)

Prepare for OR

Restoration of Flow

[Disposition per surgeon.](#)
 If discharged, High Risk diagnosis follow up

- Presents to ED lobby: Testicular Pain or swelling

Assign ESI Score: ESI 2
[Initiate Standing order](#)
 Notify ED provider

Obtain a [scrotal US](#)
[Immediate Notification of results to provider](#)

US negative for torsion

Place in exam room
 Await provider evaluation

Disposition per diagnosis. Consider need for High Risk follow up designation

*ESI = Emergency Severity Index


Transfer/Referral Recommendations

- ED provider to recommend an attempt at manual detorsion if outside provider is trained.
- Educate referring facilities to call immediately if diagnosis suspected. Note: Do not delay transfer for an ultrasound.
- Referring facility to arrange transport to ETCH via fastest possible route (which may include private vehicle transport) Optimally within one hour.
- Upon receiving referral for confirmed testicular torsion, ED Provider will notify Peds Urology or Peds Surgery on-call of patient and potential arrival time.

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ED Standing Order

- Notify ED provider of suspected torsion at the time US is ordered



Print Patient Name (Required) _____
DOB _____
Height (cm): _____
Weight (kg): _____
BSA (m²): _____
Allergies: _____

Place Patient Barcode Here

Do Not Use Abbreviations: All Chemo Drugs (spell out drug name), MS, MSO4, MgSO4 (spell out drug name), TAC (spell out drug name), ug (use mcg), U, u, IU (write unit or international unit), QD or QOD (write out every day or every other day), ~~xxx~~ (for days or doses, write out), trailing zero after decimal point, no zero before decimal point, no word write-over corrections.

EMERGENCY DEPARTMENT STANDING ORDERS
Acute Scrotum – Form ~~xxxx~~

Date/Time:	Standing Order:
	<p>INCLUSION CRITERIA</p> <ul style="list-style-type: none">• Current swelling and/or pain in scrotum• History of recent swelling and/or pain in scrotum, even if it has resolved <p>EXCLUSION CRITERIA</p> <ul style="list-style-type: none">• None
	<p>1. Obtain a STAT Ultrasound of the scrotum.</p>
	<p>References: Brenner, J.S. & <u>Ojo</u>, A. (May, 2020). Causes of scrotal pain in children and adolescents. Retrieved from <i>Up-to-date.com</i> on April 5, 2021.</p>

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Caveats for historical and physical assessments

- Testicular Torsion should be included in the differential diagnosis of any male with acute abdominal pain or history of recent genital trauma.

Ultrasound Findings

- Clues for acute torsion
 - Absent internal testicular blood flow on color and/or doppler
 - Whirlpool sign and pseudo-mass of spermatic cord(direct visualization of twisting and engorgement of vascular pedicle along its course- may also be helpful in cases of intermittent or incomplete testicular torsion)
- Findings indicating non – viable Testicle
 - Infarcted and torted testicles will become swollen(asymmetrically enlarged)
 - Altered in echotexture
- US tech to notify ordering provider immediately and then call radiologists to facilitate stat read

Manual Detorsion

- Key steps are lateral rotation until pain relieved. **May need rotation of 360° or greater.**
- “Performed without using any anesthesia technique to preserve the feeling of pain, in consideration of retorsion risk in the affected testis. The affected testis was rotated laterally for detorsion. However, when lateral rotation was not successful due to lateral TT, then medial rotation was applied [14]. The success of MD was defined as the immediate relief of symptoms and improvement of the physical examination findings, and the success was confirmed by normal testicular arterial and venous blood flow on Doppler USG, which was performed immediately after MD.”

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Primary Care Educational Resources

- Heathy Ways : AAP reference
 - <https://www.healthychildren.org/English/health-issues/conditions/genitourinary-tract/Pages/Testicular-Torsion.aspx>

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References

- Demirbas et. al. “Should manual detorsion be a routine part of treatment in testicular torsion?” BMC Urology (2012) 12:84
- Sharp et al. “Testicular Torsion: Diagnosis, Evaluation, and Management”. American Family Physician Dec 2012 Vol 88, No 12 .

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Goals/Metrics

- Time from Triage to US.(30 mins)
- Triage to seen by Physician (Goal TBD)
- Time from US to OR. (Goal TBD)
- Time from triage to OR with a goal of less than 2 hours. (For a patient whose testicle is still torsed)
- Percentage of confirmed patients that present within 24 hours of symptoms that have torsion and a non viable testicle.
- Percentage of patients with a presentation greater than 24 hours.

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Physician Disclaimers: Testicular Torsion Care Map

Medical Disclaimer

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Contact and Revisions Number

- **For questions concerning this care map, contact: CareMap@etch.com**
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