Reviewer’s report

Title: Should manual detorsion be a routine part of treatment in testicular torsion?

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Reviewer: Ariella A. Friedman

Reviewer's report:

In this paper, the authors aim to determine whether MD can serve as an adequate solitary treatment of testicular torsion in the emergency setting, with surgical fixation reserved for the elective setting. The authors have a good sample size, and they do a good job defining their criteria for success of MD. I believe this paper may be acceptable for publication if the following information was available for analysis or had revised discussion:

1) The authors have discussed minimally why MD with delayed orchiopexy would be an improvement on the standard of care of immediate orchiopexy (converting an emergency to an elective procedure, decreasing ischemia time). If this article is to be published, they should expand upon this discussion. Further, the authors have not discussed any limitations to this method. For example:

   a. How much time was lost in the 24% of patients who underwent MD and repeat sonogram, only to ultimately need immediate orchiopexy anyway? Did these patients experience atrophy?

   b. They did not assess how many patients had interim painful episodes prior to definitive surgery. Each episode poses additional ischemic risk

   c. They did not address the two patients, who were once no longer in acute pain, decided not to undergo definitive surgery. These patients remain at risk for retorsion, and we don't know if the decision to operate at the time of pain would have changed this decision. Any idea how these patients fared?

2) The objective outcomes of this study - preserved testicular size and function - are not adequately assessed for this paper to be published (the outcome is limited to "no parenchymal disorder"). Objective information that would need to be included to confirm that this is an adequate treatment should include at least one or hopefully more of the following:

   a. Biopsy showing no parenchymal disorder (ischemic damage is microscopic. A subjective determination of this fact is inadequate).

   b. Sonographic or orchidometric assessment of preserved testicular size.
3) The authors did not discuss that MD is most often used as an adjunct to immediate fixation and not a substitution to it. The argument that it improves ischemia time is false, as one can always perform MD prior to immediate fixation, with no time lost.

4) The authors state that only confirmed TT cases were included for study. Did any patients undergo MD due to a false diagnosis of TT (who were later confirmed to not have TT)? If not, the authors should make a statement to that effect.

5) This paper would benefit from a native English speaker performing edits

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

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