The Twisted Truth: Decision-to-Incision Time in Ovarian versus Testicular Torsion

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INTRODUCTION

- Ovarian torsion (OT) and testicular torsion (TT) are surgical emergencies. Delays in treatment of either condition will result in the loss of gonadal function and fertility.
- We aimed to describe the length of time between a surgeon’s decision to operate emergently on gonadal torsion and the start of the operation, termed decision-to-incision time (DTI), and compare DTI between OT and TT. DTI is a measurement of resource mobilization and team efficiency.

METHODS

- Twenty-one emergent cases of OT and nineteen emergent cases of TT were identified.
- DTI was calculated retrospectively based on case posting time and incision time as recorded in the electronic medical record.
- Variables included patient demographics, time of day, and surgeon gender and experience level.
- Poisson regression was used.

RESULTS

- Overall DTI was 116.6 min (range 55-178).
- Median DTI was 153.2 min for OT and 80.2 min for TT (p=0.003).
- OT cases were more likely to have a DTI >90 min compared to TT cases (76.2% vs 26.3%, p=0.004).
- Gonadal torsion patients with BMI > 25 were less likely to have DTI <90 min compared to those with a BMI < 25 (69.6% vs 29.4%, p = 0.024)
- OT patients were more likely to undergo gonadal tissue excision intraoperatively than TT patients (57% vs 26.3%, p = 0.06)

CONCLUSION

Patients undergoing emergency surgery for treatment of ovarian torsion have a delayed decision-to-incision time that is nearly double as compared to patients with testicular torsion. It is important to note that this time is after diagnosis. Steps must be made to identify barriers to expeditious treatment of ovarian torsion to avoid adverse patient outcome.