



Queensland
Trauma Education

ABDOMINAL TRAUMA

Blunt renal trauma assessment

Case discussion

Participant resource kit



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Queensland Trauma Education**Abdominal Trauma - Blunt renal trauma assessment: Case discussion - Participant resource kit
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Queensland Trauma Education

The resources developed for Queensland Trauma Education are designed for use in any Queensland Health facility that cares for patients who have been injured as a result of trauma. Each resource can be modified by the facilitator and scaled to the learners needs as well as the environment in which the education is being delivered, from tertiary to rural and remote facilities.

National Safety and Quality Health Service (NSQHS) Standards



About this training resource kit

This resource kit provides healthcare workers with the knowledge of how to effectively perform an assessment on a patient with blunt renal trauma injury.

Learning objectives

By the end of this session the participant will be able to:

- Understand the approach to the assessment of a patient with blunt renal trauma.
- Identify blunt traumatic renal injury using severity grading and classification and understand the management strategies for patients with renal injury.

Overview of blunt renal trauma

Renal trauma accounts for up to 3.25% of all trauma and is prevalent amongst males aged between 31 to 38 years. ¹ The most common mechanism of injury of blunt renal trauma in the adult population is motor vehicle accidents (63%), followed by falls (43%) and is typically caused by rapid deceleration and acceleration forces. ¹

Renal trauma assessment and diagnosis requires knowledge of key predictors of renal injury and gold standard classification tools to aid in the stratification of both grade severity and predictor of patient morbidity and mortality to guide management.

Further reading

Cabrera Castillo PM, Martínez-Piñeiro L, Maestro MÁ, De la Peña JJ.(2006). Evaluation and treatment of kidney penetrating wounds. *Ann Urol (Paris)*, 40, 297–308. <https://doi.org/10.1016/j.anuro.2006.06.002>

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Heyns C. F. (2004). Renal trauma: indications for imaging and surgical exploration. *BJU international*, 93(8), 1165–1170. <https://doi.org/10.1111/j.1464-410X.2004.04868.x>

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Erlich, T., & Kitrey, N. D. (2018). Renal trauma: the current best practice. *Therapeutic advances in urology*, 10(10), 295–303. <https://doi.org/10.1177/1756287218785828>

Acronyms and abbreviations

EFAST	Extended focused assessment with sonography in trauma
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3. Kautza, B., Zuckerbraun, B., & Peitzman, A. B. (2015). Management of blunt renal injury: what is new?. *European journal of trauma and emergency surgery: official publication of the European Trauma Society*, 41(3), 251–258. <https://doi.org/10.1007/s00068-015-0516-x>
4. Alonso, R. C., Nacenta, S. B., Martinez, P. D., Guerrero, A. S., & Fuentes, C. G. (2009). Kidney in danger: CT findings of blunt and penetrating renal trauma. *Radiographics: a review publication of the Radiological Society of North America, Inc*, 29(7), 2033–2053. <https://doi.org/10.1148/rg.297095071>
5. Heyns C. F. (2004). Renal trauma: indications for imaging and surgical exploration. *BJU international*, 93(8), 1165–1170. <https://doi.org/10.1111/j.1464-410X.2004.04868.x>
6. Viola T. A. (2013). Closed kidney injury. *Clinics in sports medicine*, 32(2), 219–227. <https://doi.org/10.1016/j.csm.2012.12.002>
7. Coccolini, F., Moore, E.E., Kluger, Y. et al. (2019). Kidney and uro-trauma: WSES-AAST guidelines. *World Journal of Emergency Surgery*, 14, 54. <https://doi.org/10.1186/s13017-019-0274-x>

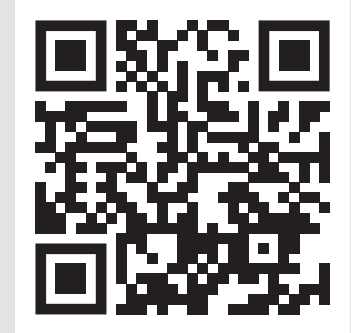
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