



Queensland  
Trauma Education

**TRAUMA AND THE OLDER PERSON**

# Major pelvic trauma

## Case discussion

Participant resource kit

**CSDS**



Clinical Skills Development Service



Queensland  
Government

## 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.

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Queensland

### Queensland Trauma Education

**Trauma and the Older Person – Major pelvic trauma: Case discussion – Participant resource kit**

**Version 1.0**

Published by the State of Queensland (Clinical Skills Development Service), 2021



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## About this training resource kit

This resource kit provides healthcare workers with the knowledge of assessment and management of major pelvic injury in the geriatric population.

### National Safety and Quality Health Service (NSQHS) Standards



### Learning objectives

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

- Recognise high risk mechanism of injury (MOI) for major trauma in geriatric population.
- Understand the challenges with haemodynamic assessment in the older population.
- Discuss the indications for CT angiogram acquisition in pelvic trauma.

## Overview of elderly major pelvic trauma

Major pelvic trauma is uncommon in patients > 80 years, despite pelvic injury being a common presentation to major trauma centres. In geriatric patients any injury to the pelvis should be considered higher risk for haemorrhage and more significant injury profile due to their increased co-morbidities and osteopenia.<sup>1</sup>

### Further reading

<b>Survivorship and severe complications are worse for octogenarians and elderly patients with pelvis fractures as compared to adults: data from the national trauma data bank</b>	
Publication	Journal of Osteoporosis 2012
Link	<a href="https://doi.org/10.1155/2012/475739">https://doi.org/10.1155/2012/475739</a>

<b>Pelvic Fractures and Associated Genitourinary and Vascular Injuries: A Multisystem Review of Pelvic Trauma</b>	
Publication	American Journal of Roentgenology
Link	<a href="https://doi.org/10.2214/AJR.18.21050">https://doi.org/10.2214/AJR.18.21050</a>

<b>Primary Clinical Care Manual 10th edition, Fractured Pelvis, p.190</b>	
Organisation	Queensland Health
Link	<a href="https://qheps.health.qld.gov.au/_data/assets/pdf_file/0027/2354850/PCCM-10th-Edition.pdf">https://qheps.health.qld.gov.au/_data/assets/pdf_file/0027/2354850/PCCM-10th-Edition.pdf</a>

<b>Procedure: Haemodynamically Unstable Pelvic Trauma Guideline</b>	
Organisation	Queensland Health
Link	<a href="#">PAH   PSQU - Procedure: Haemodynamically Unstable Pelvic Trauma Guideline (01233) (health.qld.gov.au)</a>

<b>CT polytrauma (technique)</b>	
Organisation	Radiopaedia
Link	<a href="https://radiopaedia.org/articles/ct-polytrauma-technique">https://radiopaedia.org/articles/ct-polytrauma-technique</a>

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<b>CT polytrauma (approach)</b>	
Organisation	Radiopaedia
Link	<a href="https://radiopaedia.org/articles/ct-polytrauma-approach">https://radiopaedia.org/articles/ct-polytrauma-approach</a>

## Acronyms and abbreviations

Term	Definition
UA	urine analysis
ECG	electrocardiogram
BSL	blood sugar level
US	ultrasound
USGPIVC	ultrasound guided peripheral intravenous cannulation
VHA	viscoelastic haemostatic assay
PRBC	packed red blood cells
FFP	fresh frozen plasma
TXA	tranexamic acid

## References

1. Matityahu, A., Elson, J., Morshed, S., & Marmor, M. (2012). Survivorship and severe complications are worse for octogenarians and elderly patients with pelvis fractures as compared to adults: data from the national trauma data bank. *Journal of osteoporosis*, 2012, 475739. <https://doi.org/10.1155/2012/475739>
2. Lee, M. J., Wright, A., Cline, M., Mazza, M. B., Alves, T., & Chong, S. (2019). Pelvic Fractures and Associated Genitourinary and Vascular Injuries: A Multisystem Review of Pelvic Trauma. *AJR. American journal of roentgenology*, 213(6), 1297–1306. <https://doi.org/10.2214/AJR.18.21050>
3. The Royal College of Radiologists. (2011). *Standards of Practice and Guidance for trauma radiology*. Retrieved from [https://www.rcr.ac.uk/sites/default/files/docs/radiology/pdf/BFCR\(11\)3\\_trauma.pdf](https://www.rcr.ac.uk/sites/default/files/docs/radiology/pdf/BFCR(11)3_trauma.pdf)
4. Iacobellis, F., Romano, L., Rengo, A. et al. (2020). CT Protocol Optimization in Trauma Imaging: A Review of Current Evidence. *Current Radiology Reports* 8,
5. Trauma Victoria. (2021). Imaging in trauma. <https://trauma.reach.vic.gov.au/guidelines/imaging-in-trauma/indications-for-imaging>
6. Raniga, S. B., Mittal, A. K., Bernstein, M., Skalski, M. R., & Al-Hadidi, A. M. (2019). Multidetector CT in Vascular Injuries Resulting from Pelvic Fractures: A Primer for Diagnostic Radiologists. *Radiographics : a review publication of the Radiological Society of North America, Inc*, 39(7), 2111–2129. <https://doi.org/10.1148/rq.2019190062>

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