# AB094. SOH21AS003. Pelvic and acetabular trauma in amateur equestrian enthusiasts — a retrospective review

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**Background:** Horse riding related accidents can present with devastating pelvic and acetabular fractures. This study examines the nature, management and treatment outcomes of severe pelvic and acetabular trauma in amateur horse riders presenting to a national tertiary referral centre. We also aim to define certain at-risk groups who may consider wearing additional protective gear.

**Methods:** This was a retrospective descriptive cohort of all patients who were referred to the National Centre for Pelvic and Acetabular trauma resulting from horse riding accidents. All patients who were referred to the National Centre for Pelvic and Acetabular Trauma between January 2018 and July 2020 were included. Professional horse riders were excluded. Clinical and treatment outcome measures were stratified to four different mechanisms of injury: fall from horse (FFH), horse crush (HC), horse kick (HK) and saddle injury (SI).

**Results:** There were 31 equestrian related injuries referred to our centre between January 2018 and July 2020. One patient was a professional jockey and was thus excluded from the study. Eighteen were female and the mean age at referral was 37 years old. The majority of these were pelvic ring injuries (83.3%). Fifty per cent of patients required surgical intervention and the majority of these were male. **Conclusions:** Horse riding is a potentially dangerous recreational pursuit with significant risk of devastating injury. Riders of all abilities should be educated on the importance of wearing adequate protective gear and safe riding techniques with particular focus on at risk groups such as young women and older men.

Keywords: Pelvis; acetabulum; fracture; equestrian; amateur

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#### Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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