Horse related injuries

Are you safer in or out of the saddle?

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RCH Trauma Manager
Farm Safety & Trauma Forum
Mechanism
RCH Horse-related injuries

- 2000 - 2013
- 452 admissions
- Injuries sustained off the horse (most commonly kicks) are 70% more likely on a farm
- Helmet use (or absence) documented in <60% of patients
  - more likely if head injury present; documentation >75% complete
Horse-related injuries by age and gender \((n=452)\)
Horse-related injuries
by age, gender and location \( (n=452) \)
### Horse-related injuries by mechanism and location (n=452)

<table>
<thead>
<tr>
<th>Cause of Injury</th>
<th>Not riding</th>
<th>Riding at time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple fall</td>
<td>-</td>
<td>277</td>
</tr>
<tr>
<td>Kicked</td>
<td>79</td>
<td>9</td>
</tr>
<tr>
<td>Horse fell onto patient</td>
<td>3</td>
<td>31</td>
</tr>
<tr>
<td>Trodden</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>Dragged</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Bitten</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>107</strong></td>
<td><strong>345</strong></td>
</tr>
</tbody>
</table>
## Horse-related injuries

by place of injury and location \( (n=452) \)

<table>
<thead>
<tr>
<th></th>
<th>Not riding</th>
<th>Riding at time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm</td>
<td>66</td>
<td>166</td>
</tr>
<tr>
<td>Other or unspecified</td>
<td>41</td>
<td>179</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>107</td>
<td>345</td>
</tr>
</tbody>
</table>
Horse-related injuries
by mechanism and place of injury \((n=452)\)

<table>
<thead>
<tr>
<th>Mechanism</th>
<th>Farm</th>
<th>Not Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple fall</td>
<td>135</td>
<td>142</td>
</tr>
<tr>
<td>Kicked</td>
<td>55</td>
<td>33</td>
</tr>
<tr>
<td>Horse fell onto patient</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>Trodden</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Dragged</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Bitten</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>232</strong></td>
<td><strong>220</strong></td>
</tr>
</tbody>
</table>
Horse-related injuries by mechanism of injury and injury type ($n=441$)

- Fall ($n=270$)
- Kick ($n=86$)
- Other ($n=85$)
Case Presentation

• Miss A

• 2 years old

• Patient kicked in head by a horse after she walked up behind it while patient’s mother was leading it.
Scene

- Immediately loss consciousness

- Mother reported Miss A opened her eyes (with eye deviation to the right)

- Vomited +++
Pre-hospital

- Paramedics arrived
- GCS 7
- Intubated
- Transferred via helicopter to RCH
RCH ED

• Arrived ED

• Trauma Call

• Large left temporal swelling

• Admitted under Neurosurgery
CT

- Traumatic Brain Injury
  - Left parieto-temporal fracture
  - Left fronto-parietal contusions
  - Left subdural haemorrhage
  - Intraventricular haemorrhage
Theatre

- Transferred to theatre
- ICP inserted
- Transferred to PICU
PICU

- Intubated for 200 hrs (8.5 days)
- MRI - Soft tissue oedema
- Medication for seizures
- Not yet verbalizing on discharge
- LOS 10 days
In-patient ward

- Transferred to head injury unit
- Extensive Allied Health involvement
- LOS 8 days
Rehabilitation

• Significant word finding difficulty
• Right sided hemiplegia
• Extensive Allied Health involvement
• LOS 24 days
Home

- No ongoing medical issues
- Mobility and speaking improved
- Splint to right wrist
- Total RCH admission 42 days
What can we do about it?
Communication

• Spend time learning about horses and their method of communicating.
Awareness

• Always be aware of your position in relation to the horse and help him to stay aware of where you are too.
Approaching a horse

• Do not approach horses from the direct front or from behind. Get into the habit of always approaching a horse toward his left shoulder.
Never stand directly behind a horse

• This is your horse's blind spot and more importantly, it's his powerful kicking space. Never underestimate a horse's kicking distance
Speak and behave calmly in the presence of horses

• Never yell or shout at a horse.

• Keep reprimands to the tone of a raised voice and no more.
Be on the alert at all times.

• Check what could possibly frighten a horse;
  • Running children
  • Approaching car
  • Bicycles
Never work alone

• Always ensure others are nearby
Lead horses with care

- From the front
- Remain alert
- Keep body close to neck area
Horse safety check list

• Are children only allowed to ride horses suited to their age and riding ability?

• Are children appropriately instructed and supervised when riding and handling horses?

• Do children always wear a well fitting riding helmets and is the chin strap is done up when riding horses on the farm?
Horse safety check list

- Do children always wear boots with a smooth sole, a heel and no laces when riding horses on the farm?

- Does your child always stand beside a horse?

- Never allow your child to stand behind or in front of a horse.
"Human safety is first. Horse safety is second. Everything else is third."
Thank you