



## Basic Management of a Fallen Rider

*In the spirit of education, the following information may be copied and utilized in whole wherever it might benefit equestrians. However, please do not alter the content or copy portions without first consulting with the author, Dr. Ian Maharaj, as this may compromise the safety of management of the fallen rider.*

*This discussion assumes that the fallen rider is still conscious, is breathing and has a pulse. Obviously, **if the rider is unconscious, without pulse or breathing, immediately call 911 and follow basic CPR procedures.***

*First Aid and basic CPR courses are available from St. John Ambulance.*

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### REMEMBER

The old saying "If you fall off your horse, get right back on again" DOES NOT APPLY!

ANY fall from a height greater than your own should be treated seriously.

Tell the rider to STAY DOWN and DO NOT MOVE until you have had a chance to assess the situation. Be calm and reassuring to the rider. (Nothing is worse than someone excitably shouting orders, dashing, grabbing, or rushing.)

FIRST, ensure the fallen rider is protected from the horse. A frightened horse can be unpredictable and will act instinctively to protect itself from any perceived threat, even if that threat feeds it treats daily.

If there are trained medical personnel in the vicinity, seek them out and defer to their experience. False bravado borne of a genuine sense of caring can be disastrous for the injured rider.

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- Once horse and rider are clearly separated, and you have determined that the rider has a clear airway, is breathing, has a pulse, is conscious and remaining still, you can begin a more detailed assessment.
- Begin by looking for any indication of serious bleeding and for signs of shock (shivering, sweating, confusion, reduced alertness).
  - If significant bleeding is found, or if the rider is in shock, call 911.
  - Keep the rider warm and calm. Do not attempt to move him / her. If already lying down, gently elevate the feet.
  - Apply direct pressure with gauze or at least a clean cloth to any site of significant bleeding.
  - Do not attempt to cut off blood flow by applying a tourniquet or other constrictive device.
  - Try not to move or reposition the injured area.
  - While pressure is being applied, continue to assess for other injuries.

2

- If there is no serious bleeding, or once the bleeding has been addressed, secure the rider's head and neck by placing one hand on either side of the head, preventing the neck from further movement. Do not elevate the head. If the rider was wearing a helmet, leave it on. Ask for help from a bystander if one is available. At this point you can begin to check brain and spinal cord function.
  - Ask the rider to state his or her name, current location, time of day and to describe what happened. This establishes 'orientation'. If the answers are not appropriate, a brain injury has likely occurred.

*In one study of patients hospitalized for falls from a horse, over 20% of patients were diagnosed with a concussion. In other words, it is very common.*
- If a brain injury is suspected, call 911. While awaiting the ambulance, periodically reassess orientation while continuing to assess the remainder of the brain and spinal cord function.
- Ask the rider to move his / her fingers and toes, one limb at a time. Follow this by a gentle squeeze or other touch sequentially to each limb while inquiring whether the sensation can be felt and whether it feels as expected. Finally, have the rider squeeze your hands and press their feet against resistance. A local area of weakness, altered sensation (numbness / tingling) or strength may be an indication of spinal cord injury.

If a spinal cord injury is suspected, remind the rider to remain still and call 911. While awaiting the ambulance, keep the rider warm and calm.

3

- If the rider is alert, oriented and shows no obvious sign of brain or spinal cord injury, DO NOT YET release the head or allow the him or her to change position. Consider that a fall might have resulted in a spinal fracture that, as yet, has not injured the spinal cord.
  - With the assistance of someone familiar with first aid, and continuing to stabilize the head, slip a hand beneath the rider's neck. Press on the spine, beginning at the very top of the neck and working downward. When the neck is complete, the low back should be palpated in a similar fashion. If there is tenderness, a spinal fracture may be present and the rider should remain immobile until an ambulance arrives.
  - If there is no spinal tenderness, but the patient did have an impact to the head or back, a judgement call has to be made about whether to allow the patient to move cautiously or to wait for trained medical personnel to repeat the assessment.
- If the rider is alert, oriented, shows no obvious signs of brain or spinal cord injury and is not painful to pressure over the spine, it is likely safe to allow the rider to begin movement cautiously.

4

- If the rider reports pain or impact to the chest or torso, look for for a rib fracture or trauma to the lungs. Is there pain with breathing?
  - In this case, the torso should be exposed. (Modesty has no place here.) If there is obvious bruising or deformity of the chest wall, or dramatic tenderness to gentle pressure along the ribs, a fracture should be considered.
  - Most rib fractures are very safe and do not require a call for an ambulance, but the rare fracture can result in a puncture of the lung or bleeding within the lung. In either case, the rider should become progressively short of breath. Any shortness of breath in the setting of a suspected rib fracture should result in a 911 call.

5

- Next, attention should be turned to the abdomen. A fall from a horse can result in injury to the internal organs. The liver, the spleen and the kidneys can be badly bruised or even lacerated. A laceration to these organs may not show up in the first few minutes after the injury, giving a false sense of reassurance. As the bleeding continues, the situation can still become life threatening within a short time.
  - Expose the abdomen. If internal abdominal bleeding is occurring, the abdomen will eventually look puffed out or distended, there may be visible bruising along the flanks, and pressure applied to the abdomen in the upper portion on either side should elicit pain.
  - As the blood is lost into the abdomen, signs of shock may begin to be observed. The rider may feel cold or shivery; the fingertips or toes or lips may become blue and cool or cold to touch and may be clammy; the

rider may feel dizzy, or act lethargic or confused.

- As mentioned, be on guard for these signs to begin to occur as more time goes by. If internal injury is present, the signs are not likely to occur in the first 10-15 minutes following the fall.
- If at any time, an abdominal injury is suspected, 911 should be called. The rider should be returned to a lying position with feet gently elevated.

## 6

- Last of all and perhaps most easy to recognize are injuries of the limbs. Falls from a horse are often 'broken' by an outstretched arm or leg, which in turn, can lead to a break, a strain or dislocation of any number of bones, joints or ligaments. Most limb injuries are very painful and the rider should be able to tell you exactly where the injury is located. However, a systematic approach to examination of all limbs is sometimes wise. If at any time a fracture is suspected, do not move the fractured limb as this can cut off blood flow if done incorrectly by individuals who do not have proper training. Instead, do your best to splint the fractured limb in position in order to immobilize it until help arrives.
  - Begin by looking at each limb in turn for unusual position or appearance.
  - Press each limb, starting from the part of the limb that is furthest from the centre of the body, working your way inward. In particular, press on each joint directly.
  - Finally observe the movement of each joint both passively (moved by you while the rider concentrates on allowing everything to go loose) and under direct effort of the rider.



## IN SUMMARY

- Call out 'STAY DOWN, DON'T MOVE!' Call for assistance.
- Ensure safety by removing or controlling the horse.
- Assess: Consciousness, Breathing, Pulse.  
If not, call 911, begin CPR.
- Assess for major bleeding.  
Control with direct pressure.
- Secure head position.  
Assess for head or spinal cord injury.  
Check alertness, orientation, sensation and strength.  
If suspected, call 911.
- Maintain head in neutral position.  
Assess for spinal fracture.  
If suspected, call 911.
- If there was any torso trauma, assess for rib fracture.  
Assess for lung trauma (punctured lung or bleeding into chest cavity).  
If short of breath, call 911.
- Assess for abdominal injury.  
Look for visible bruising, tenderness, distension, shock.  
If injury is suspected, call 911.
- Assess for limb fractures.  
Look, press, move in sequence.  
If fracture is minor, splint and go to hospital.  
If fracture is major, call 911.

*The preceding guidelines have been reviewed and endorsed by  
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