

A LATERAL MOVE

Is it the new position for trauma?

By Keith Wesley, MD, FACEP, FAEMS & Karen Wesley, NREMT-P

THE RESEARCH

Hyldmo PK, Horodyski M, Conrad BP, et al. Does the novel lateral trauma position cause more motion in an unstable cervical spine injury than the logroll maneuver? *Am J Emerg Med.* 2017;35:1630–1635.

THE SCIENCE

The authors sought to examine the degree of cervical spine motion that occurs during the traditional log-roll maneuver compared to a technique called the “lateral trauma position.”

A neurosurgeon created an unstable cervical spine injury in five fresh cadavers by cutting all the ligaments between the fifth and sixth cervical vertebra. An electromagnetic tracking device was applied over and around the cervical spine to measure motion of the unstable cervical spine during any maneuvers.

The cadavers were then placed in the supine position and EMTs were tasked to apply a cervical collar then perform the log-roll maneuver or place the cadaver in the lateral trauma position. The authors found no significant difference in motion of the cervical spine with either technique.

DOC WESLEY COMMENTS

From the earliest days of EMS, we have been taught and tested to log-roll our trauma patient on to a backboard and then transport them on their back in the supine position. The supine position in the minimally or unresponsive patient increases the risk of aspiration in the event the patient vomits. It's been recommended that, when this happens, we simply need to roll the patient on their side to clear their airway.

Yeah, right! This isn't only impractical, it's unlikely to occur without the assistance of multiple rescuers. Once transport begins, turning the patient simply isn't a great option.

Although ALS providers may have the ability to secure the airway of the supine patient,

BLS providers are only provided suction and bag-valve mask ventilation with airway adjuncts to deal with this airway catastrophe. Even with the best BLS technique, the potential for hypoxia is significant.

This paper provides us with an alternative. The lateral trauma position is akin to the recovery position we were taught as first responders. The only difference is that, instead of placing the hand under the head, pillows or towels are used to support the cervical collared head and neck. Suctioning a patient's airway in the lateral trauma position is significantly easier and transporting them in this position presents no greater risk to their spine than the log-roll.

I'm confident that with a combination of pillows and blankets, the patient can be secured safely to the backboard. This technique should be adopted by every training program. In fact, I've got a phrase to help you remember it: “On their back, airway lack. On their side, stay alive.”

MEDIC WESLEY COMMENTS

I'm always up for a new idea, and this seems like a good alternative for moving patients to a lateral position. Adding padding to maintain neutral alignment of the cervical spine while maintaining the patient in the modified lateral recumbent position makes sense. The lateral trauma position does, as Doc stated, allow for a much easier access for suctioning and airway management.

The log-roll isn't meant for a stable position, but more of a movement to facilitate long-boarding a patient or turning to clear an airway. I can see where the lateral trauma position could be utilized for a transport position with modified straps, head stabilization and proper padding.

The study was done on cadavers. The induced injuries were very defining. In an actual patient, the trauma necessary to produce the same type of injury would be very significant and would probably place the patient into one

of the following five categories outlined in the National Association of EMS Physicians (NAEMSP) position statement:

1. Blunt trauma and altered level of consciousness;
2. Spinal pain or tenderness;
3. Neurologic complaint (e.g., numbness or motor weakness);
4. Anatomic deformity of the spine; or
5. High-energy mechanism of injury and any of the following: drug or alcohol intoxication; inability to communicate; and distracting injury.¹

If this is the case, NAEMSP recommends the patient be placed on a backboard. It implies, but doesn't specifically state, that the patient would be placed in the supine position. I would like to see a position statement from the NAEMSP on when the lateral trauma position would be acceptable. Once a procedure is developed for providers, it may very well be the new best thing for spinal injury positioning. **JEMS**

REFERENCE

1. White CC, Domeier RM, Millin MG. EMS spinal precautions and the use of the long backboard: resource document to the position statement of the national association of EMS physicians and the American college of surgeons committee on trauma. *Prehosp Emerg Care.* 2014;18:306–314.



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