

STUDY OF THE EFFECTIVENESS OF USE OF IMMOBILIZATION TECHNIQUES IN PATIENTS IN ACCIDENTS WITH SPINE FRACTURES

Estela Pazeto Nolêto

<http://lattes.cnpq.br/8536502068100082>

João Pacheco de Souza Amaral Neto

<http://lattes.cnpq.br/6660575239185265>

Sthefany Mikaely Procopio Barbosa

<http://lattes.cnpq.br/8975482160087342>

Giovanna Pilan Homsy Jorge

<http://lattes.cnpq.br/6706121126879789>

Beatriz Ledesma Pereira Silva

<http://lattes.cnpq.br/2759053333931582>

All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).



Abstract: The cervical collar and backboard are immobilization tools used in modern pre-hospital care, being present as a guideline in ATLS (Advanced Trauma Life Support) and PHTLS (Prehospital Trauma Life Support), used in Brazil and in 60 other countries. However, there is an increase in opinions opposing its uses as there is a lack of concrete evidence to support its use. Therefore, the objective of this study is to characterize the importance and effectiveness of using both the cervical collar and the backboard as immobilization techniques in patients injured with spinal fractures. To this end, the digital databases Scielo and Pubmed were used, selecting articles in Portuguese from the last 13 years. The descriptors in the search were “neck collar”; “pre-hospital”; “board”; “spine”; “immobilization”. Therefore, immobilization tools, such as collars and boards, must only be used for a short time. The collars are responsible for temporary decompression of the spinal nerves, on the other hand, the board guarantees adequate transport and enhances the blood perfusion of the spinal cord. However, there are studies that suggest the existence of more efficient

immobilization techniques, such as Spinal Motion Restriction, in which the board is not used and the patient is fitted with a cervical collar and secured to the ambulance stretcher. Furthermore, there are opinions against the use of such techniques, since they state the lack of controlled and randomized studies, in addition to the uncertainty of the beneficial effects on neurological injuries and reduced mortality. In contrast, a study published in 2016 that collected data from a private emergency services agency, operating in urban, suburban and rural areas of Western New York, reported that in 5862 patients who underwent pre-hospital immobilization using a collar cervical and plank, only 29 underwent thoracolumbar spine surgery. Furthermore, the use of cervical collars has the function of protecting patients from secondary spinal injuries and because they stabilize an unstable injury, they are considered efficient tools. Therefore, the need for immobilization techniques in injured patients is evident, essentially through the use of a cervical collar and a backboard in those with spinal fractures. **Keywords:** “cervical collar”; “board”; “immobilization”; “pre-hospital”; “spine”.