



CONGRESSO
NAZIONALE
IRC 2  22

TRAUMA: NUOVE EVIDENZE E PERCORSI

AUDITORIUM DELLA TECNICA • ROMA • 14-15 OTTOBRE



Italian
Resuscitation
Council

Quando Immobilizzare e Quando No

C.Tacconi UO Rianimazione-118 Ospedale Maggiore Bologna

1980



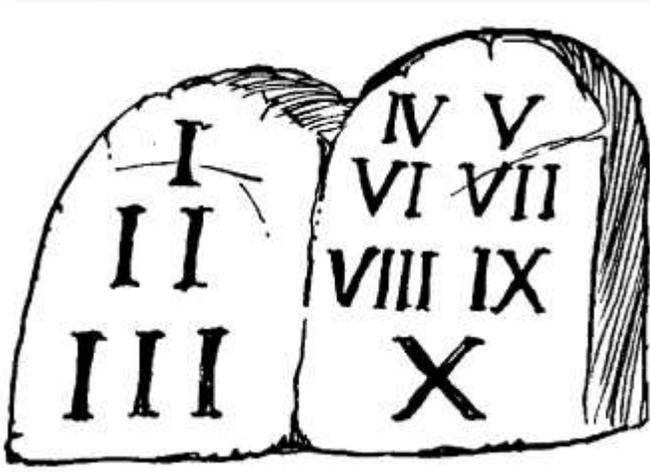
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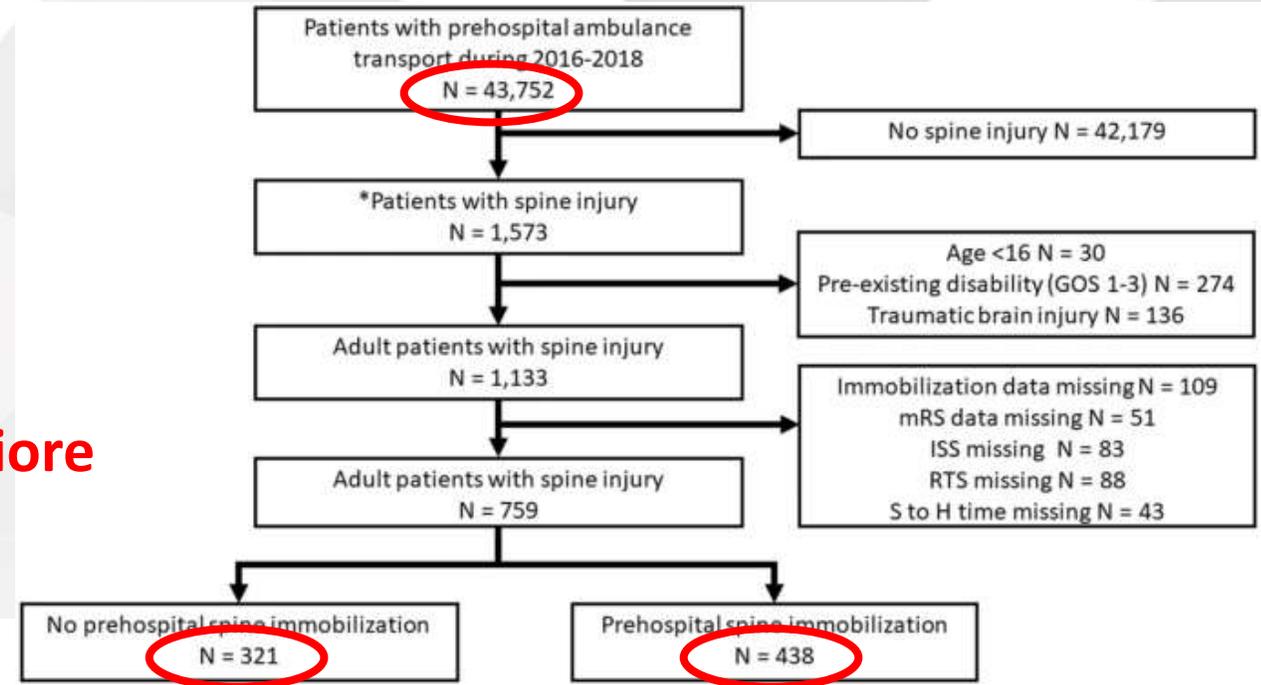
2022

XI Comandamento:

Tutti i pazienti politraumatizzati devono essere considerati portatori di lesione del rachide fino ad esclusione radiologica



- Non differenze di outcome funzionali
- TBI non immobilizzato ha outcome migliore



Article | [Open Access](#) | [Published: 03 March 2022](#)

A multicenter cohort study on the association between prehospital immobilization and functional outcome of patients following spinal injury in Asia

[Hsuan An Chen](#), [Shuo Ting Hsu](#), [Sang Do Shin](#), [Sabariah Faizah Jamaluddin](#), [Do Ngoc Son](#), [Ki Jeong Hong](#), [Hideharu Tanaka](#), [Jen Tang Sun](#) ✉, [Wen Chu Chiang](#) ✉ & [The PATOS Clinical Research Network](#)

[Scientific Reports](#) **12**, Article number: 3492 (2022) | [Cite this article](#)

- Cosa facciamo adesso?
- Quello che facciamo è corretto?
- Cosa ci potrebbe aiutare

0,5 % Traumi presenta lesione midollare

Pre-Hospital Spinal Immobilization: Neurological Outcomes for Spinal Motion Restriction Versus Spinal Immobilization

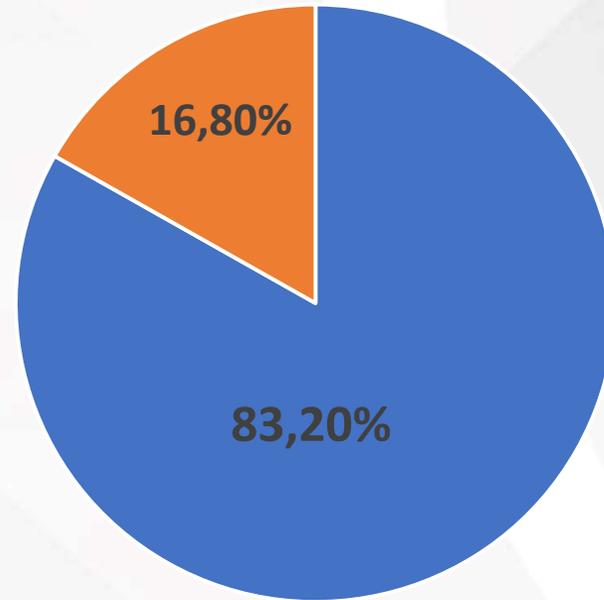
Aaron Nilhas, M.D.¹, Stephen D. Helmer, Ph.D.¹, Rachel M. Drake, M.Ed.¹, Jared Reyes, Ph.D.¹, Megan Morriss, M.D.¹, James M. Haan, M.D.^{1,2}

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Received Nov. 18, 2021; Accepted for publication Jan. 26, 2022; Published online April 29, 2022
<https://doi.org/10.17161/kjm.vol15.16036>

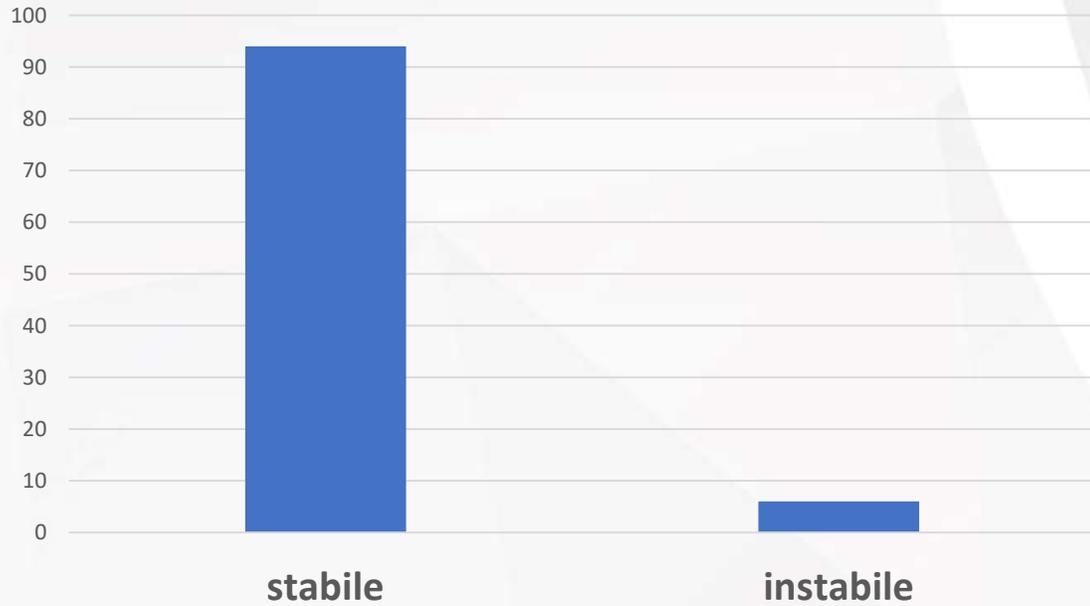
Pazienti Immobilizzati (spinal)



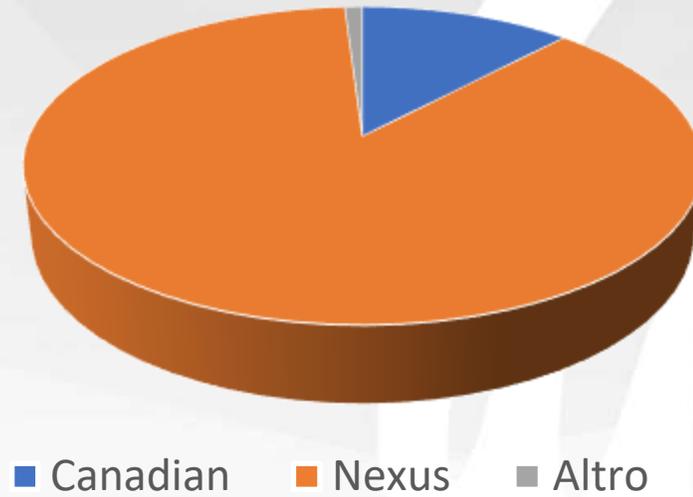
■ tutti ■ scale di valutazione



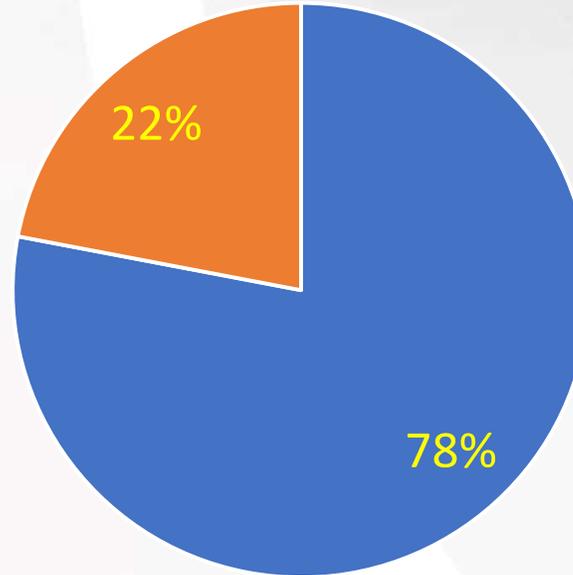
Pazienti Valutati



Scale di Valutazione



Presidi Immobilizzazione



■ collare + immobilizzazione totale

■ solo collare



Lesioni vertebrali penetranti

Open Access Systematic Review

The Impact of Prehospital Spinal Immobilization in Patients with Penetrating Spinal Injuries: A Systematic Review and Meta-Analysis

by  Ibrahim Alghamdi ¹ ,  Naif Bazaie ¹  ,  Naif Alqurashi ²  and  Zubair Ahmed ^{1,3,4,*}  

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Trauma Care **2022**, 2(2), 226-237; <https://doi.org/10.3390/traumacare2020019>

Mortalità
Complicanze polmonari

Trauma penetrante

Prehospital spine immobilization/spinal motion restriction practice modification: Eastern Association of Surgeons (EAST)

Velopulos, Catherine G. MD; Raja, Ali MD, MBA, M

[Author Information](#)

Spine immobilization in penetrating trauma is associated with increased mortality and has not been shown to have a beneficial effect on mitigating neurologic deficits, even potentially reversible neurologic deficits. We recommend that spine immobilization not be used routinely for adult patients with penetrating trauma.

Trauma: A om the y of Trauma

ence MD; Feinman, Marcie

Journal of Trauma and Acute Care Surgery: May 2018 - Volume 84 - Issue 5 - p 736-744
doi: 10.1097/TA.0000000000001764

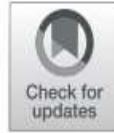
Mortalità Deficit neurologici

Maschmann et al. *Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine* (2019) 27:77
<https://doi.org/10.1186/s13049-019-0655-x>

Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine

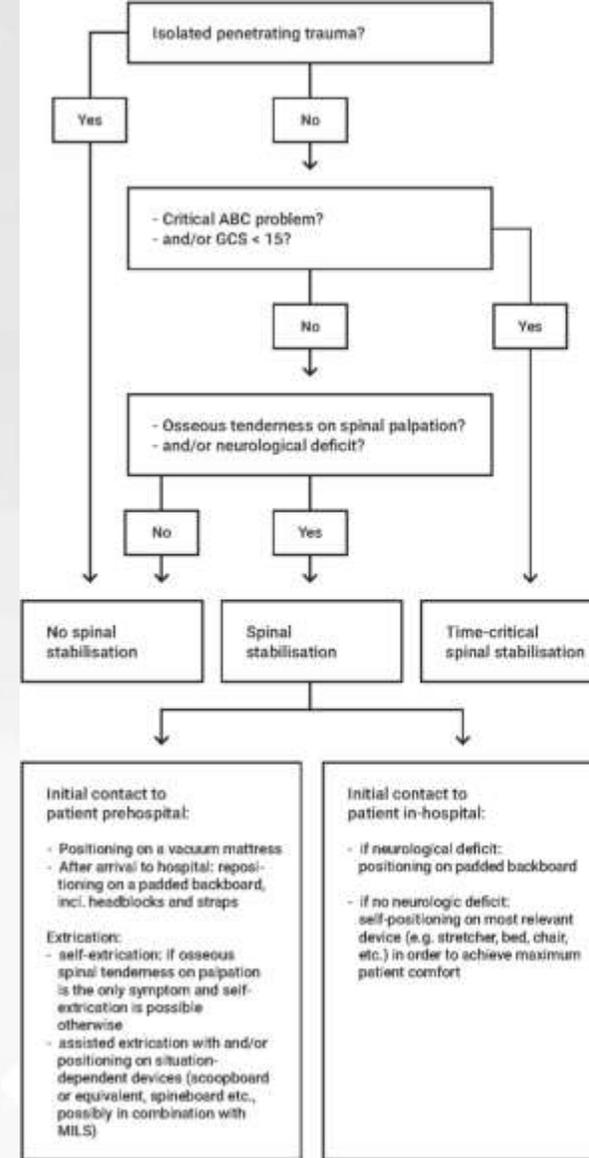
GUIDELINE

Open Access



New clinical guidelines on the spinal stabilisation of adult trauma patients – consensus and evidence based

Christian Maschmann^{1,2,3*}, Elisabeth Jeppesen^{4,5}, Monika Afzali Rubin^{6,7} and Charlotte Barfod³



Trauma
 Occurred within the last 48 hours
 Patient aged 18 years or older
 Relevant spinal trauma with risk of development of secondary traumatic spinal cord injury

Critical ABC problem
 A: airway blocked or at risk
 B: suspicion of pneumothorax, haemothorax, flail chest or hypoxia
 C: threatened or manifest circulatory instability

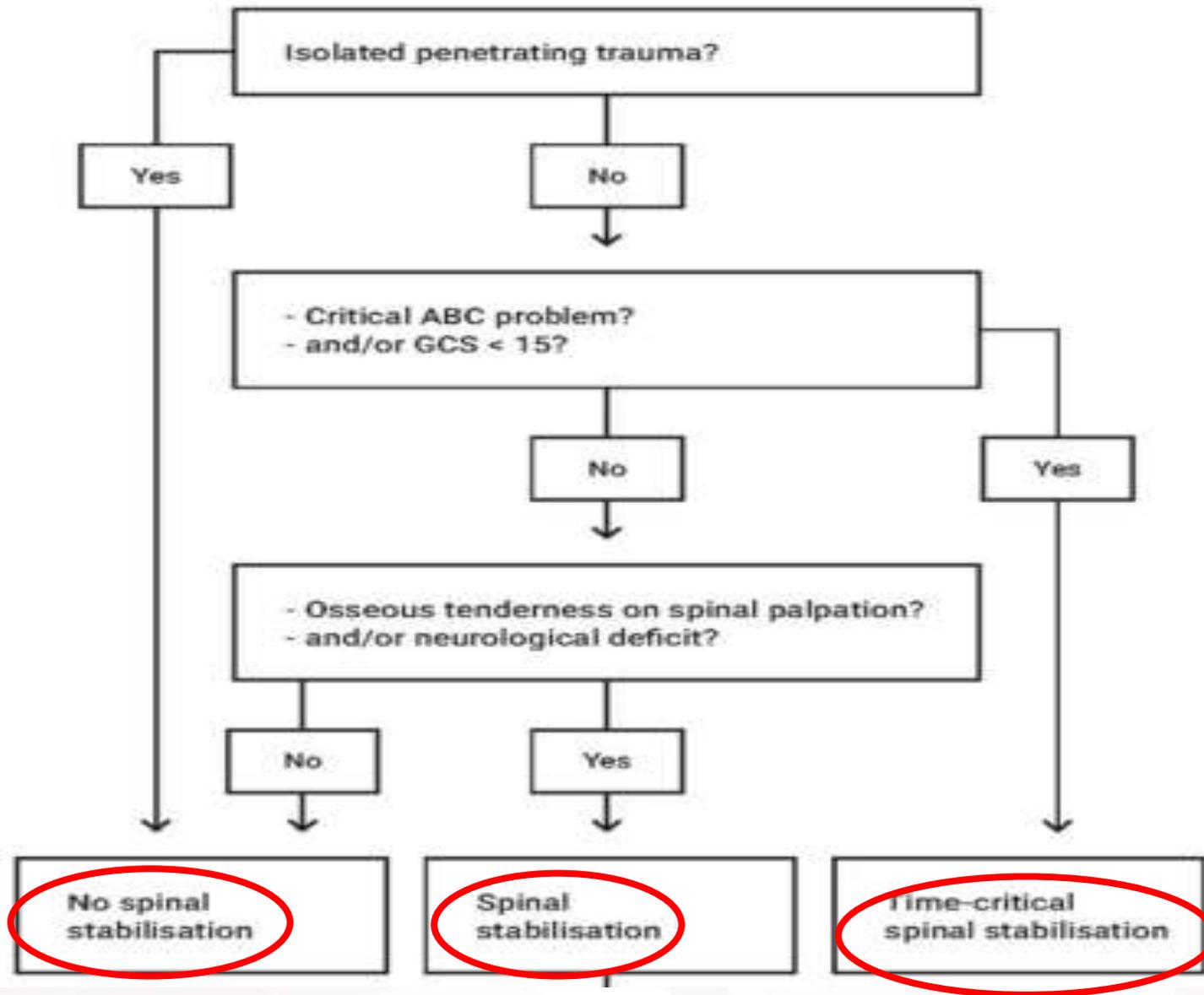
Osseous tenderness on spinal palpation
 Direct or indirect tenderness on palpation of proc. spinoi
 Instead of asking the patient about tenderness on palpation, interpretation of the patients' reaction on palpation is recommended (e.g. facial expression)

Neurological deficit
 Affected ability of handshake and/or dorsal flexion and extension of feet
 Affected sensibility of arms, legs and/or truncus (quick examination)

Time-critical spinal stabilisation
 Generally, only measures of spinal stabilisation, that do not delay any other necessary ABCDE-measures or transport to hospital
 Type of spinal stabilisation is dependent on the situation (vacuum mattress, spineboard, scoopboard or equivalent, stretcher, possibly in combination with MILS)

Spinal stabilisation
 Prehospital: positioning and transport on a vacuum mattress without use of a rigid cervical collar
 In-hospital: dependent of neurologic findings: In case of neurologic deficit: positioning on a soft backboard. In case of no neurologic deficit: self-positioning on a stretcher for instance. Try to achieve maximum patient comfort





Vacuum mattress
without collar

Fast immobilization
(rigid board....)

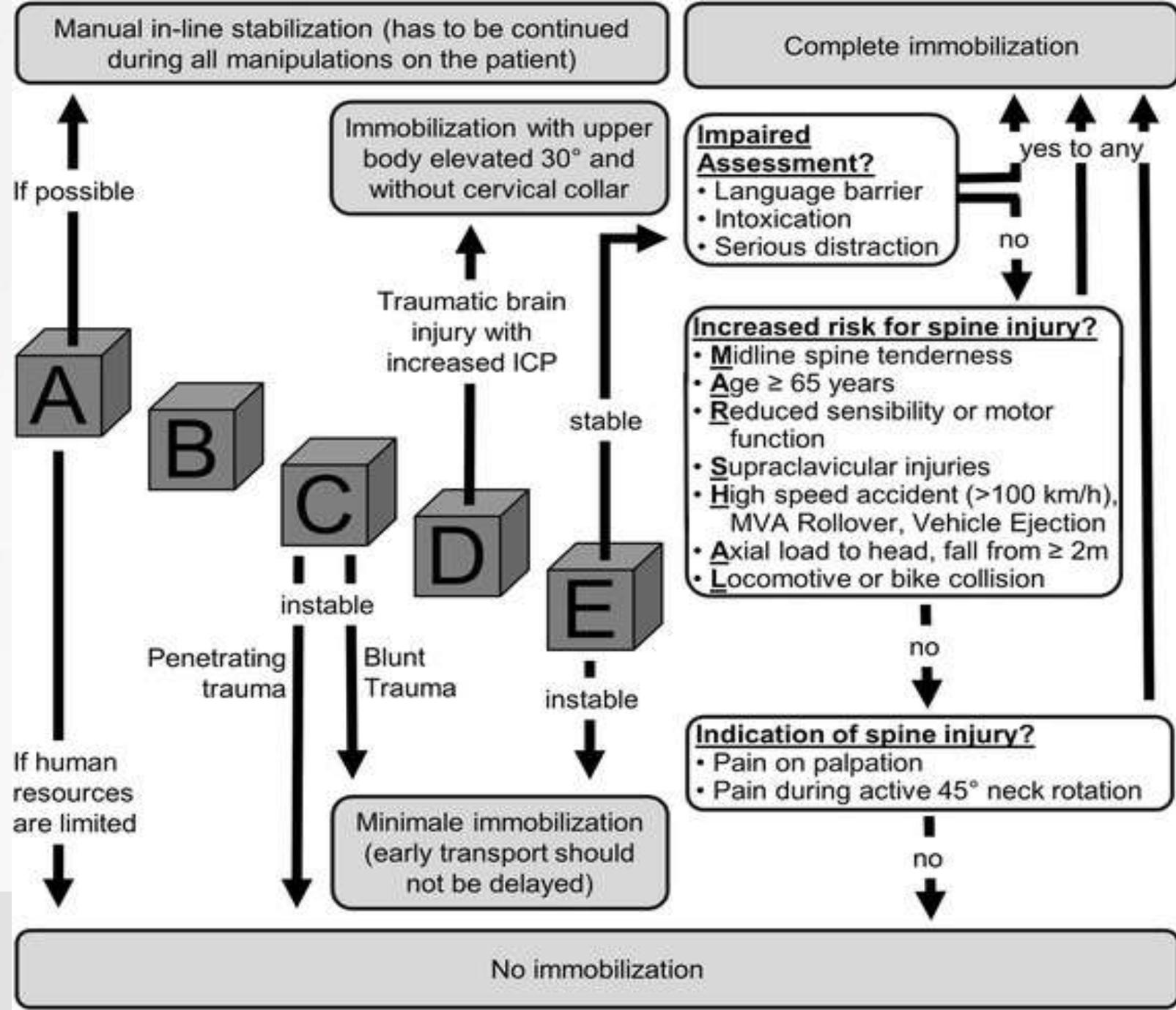
Review > [Scand J Trauma Resusc Emerg Med. 2016 May 14;24:71.](#)

doi: [10.1186/s13049-016-0267-7.](#)

Development of a new Emergency Medicine Spinal Immobilization Protocol for trauma patients and a test of applicability by German emergency care providers

Michael Kreinest^{1 2}, Bernhard Gliwitzky², Svenja Schüler³, Paul A Grützner¹,
Matthias Münzberg^{4 5}

Quale algoritmo decisionale preH?



Original Article | [Published: 21 March 2022](#)

Evaluating prehospital care of patients with potential traumatic spinal cord injury: scoping review

[Roya Habibi Arejan](#), [Mohammad Hossein Asgardoorn](#), [Maryam Shabany](#), [Zahra Ghodsi](#), [Hamid Reza Dehghan](#), [Masoud Sohrabi Asl](#), [Hamidreza Ostadrahimi](#), [Alex R. Vaccaro](#) & [Vafa Rahimi-Movaghar](#) 

European Spine Journal **31**, 1309–1329 (2022) | [Cite this article](#)

Restrizione/Riduzione/Immobilizzazione

Focus on Spinal Immobilization/Motion Restriction

New Immobilization Guidelines Change EMS Critical Thinking in Older Adults With Spine Trauma

[Linda Underbrink](#) , RN, [Alice "Twink" Dalton](#), RN, MS, NRPM, CNS, [Jan Leonard](#), MSPH, [Pamela W. Bourg](#), PhD, RN, TCRN, FAEN, [Abigail Blackmore](#), MSN, RN, [Holly Valverde](#), MPH, BSN-RN, CEN, ...show all

Pages 637-644 | Received 19 Sep 2017, Accepted 28 Dec 2017, Published online: 06 Feb 2018

 Download citation  <https://doi.org/10.1080/10903127.2017.1423138>



Effetti indesiderati

JOURNAL OF HEALTH AND
SOCIAL SCIENCES

Journal of Health and Social Sciences (JHSS)

The Italian Journal for Interdisciplinary Health and Social Development EDIZIONI FS Publishers

Meta-analysis in Emergency Medicine

Should we use cervical collars for neck stabilization in trauma patients? Evidence from a systematic review with meta-analysis

Michal LADNY¹, Gabriella NUCERA², Michal I
Francesco CHIRICO



trauma care



Systematic Review

The Impact of a Cervical Collar on Intracranial Pressure in Traumatic Brain Injury Patients: A Systematic Review and Meta-Analysis

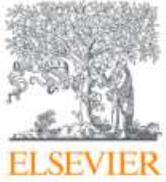
Naif Bazaie ¹, Ibrahim Alghamdi ¹, Naif Alqurashi ² and Zubair Ahmed ^{1,3,4,*}



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Immobilizzazione arti

Trasfusioni
Infezioni polmonari
Dolore?



Injury

Available online 27 September 2022

In Press, Corrected Proof



Traction Splinting for midshaft femoral fractures in the pre-hospital and Emergency Department environment—A systematic review

Sarah P.J. Philipsen^a, Arie A. Vergunst^a, Edward C.T.H. Tan^b

Take Work Message

- Immobilizzare: Penetrante/ Non Penetrante (Emorragico)
 - Utilizzare scale di valutazione (Stabilità/Rischio evolutivo/Tempo)
- Non solo la colonna vertebrale.....

“Accadono cose che sono come domande. Passa un minuto, oppure anni, e poi la vita risponde.” A.Baricco

Grazie



Italian Resuscitation Council

 ircouncil.it