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% *spinal bed*  
(IV-line)

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multiple trauma

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CT-Scan

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Motor )

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(Car Accident

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( spinal bed ( %)

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**Non functional IV-line**

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spinal bed

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Liberman

(MD-ALS, PMD-ALS, EMT-BLS)

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## REFERENCES

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1. Ali J, Adam RU, Gana TJ, Bedaysie H, Williams JI. Effect of the prehospital trauma life support program on prehospital trauma care. *J Trauma* 1997; 42(5):786-90.
3. Modagheh MH, Roudsari BS, Sajadehchi A. Prehospital trauma care in Tehran: potential areas for improvement. *Prehosp Emerg Care* 2002; 6(2): 218-23.
4. Zargar M, Modagheh MH, Rezaishiraz H. Urban injuries in Tehran: demography of trauma patients and evaluation of trauma care. *Injury* 2001; 32: 613-7.

- 
6. Colwell CB, Pons PT, Pi R. Complaints against an EMS system. *J Emerg Med* 2004; 25(4): 403-8.
  7. Schmidt T, Atcheson R, Federiuk C, Mann NC, Pinney T, Fuller D, et al. Evaluation of protocols allowing emergency medical technicians to determine need for treatment and transport. *Acad Emerg Med* 2000; 7(6): 663-9.
  8. Zentralbl Chir. Emergency management of polytrauma patients. *Zentralbl Chir* 1996; 121(11): 924-42.
  9. Sayre MR, White LJ, Brown LH, McHenry SD. National EMS Agenda Writing Team. National EMS Research Agenda. *Prehosp Emerg Care* 2003; 7(4): 433.
  10. Osterwalder JJ. Insufficient quality of research on prehospital medical emergency care- where are the major problems and solutions? *Swiss Med Wkly* 2004; 134: 389- 94.
  11. Moore L. Measuring quality and effectiveness of prehospital EMS. *Prehosp Emerg Care* 1999; 3(4): 325-31.
  12. Snyder JA, Baren JM, Ryan SD, Chew JL, Seidel JS. Emergency medical service system development: results of the statewide emergency medical service Technical Assessment Program. *Ann Emerg Med* 1995; 25: 768-75.
  13. Sobo EJ, Andriese S, Stroup C, Morgan D, Kurtin P. Developing indicators for emergency medical services (EMS) system evaluation and quality improvement: a statewide demonstration and planning project. *Jt Comm J Qual Improv* 2001; 27(3): 138-54.
  
  15. Combes X, Jabre P, Jbeili C, Leroux B, Bastuji-Garin S, Margenet A, et al. Prehospital standardization of medical airway management: incidence and risk factors of difficult airway. *Acad Emerg Med* 2006; 13(8): 828-34.
  16. Combes X, Jabre P, Jbeili C, Leroux B. Prehospital standardization of medical airway management: incidence and risk factors of difficult airway. *Acad Emerg Med* 2006; 13(8): 828-34.
  17. Jones JH, Murphy MP, Dickson RL, Somerville GG, Brizendine EJ. Emergency Physician-Verified Out-of-hospital intubation: miss rates by paramedics. *Acad Emerg Med* 2004; 11(6): 707-9.
  18. Roberts JR, Hedges JR. *Clinical procedures in Emergency Medicine*. 4<sup>th</sup> ed. New York: Saunders. 2004.
  19. Turner J, Nicholl J, Webber L, Cox H, Dixon S, Yates D. A randomized controlled trial of prehospital intravenous fluid replacement therapy in serious trauma. *Health Technol Assess* 2000; 4(31): 1-57.
  20. Tentillier E, Dupont M, Thicoipe M, Petitjean ME, Sztark F, Lassie P, et al. Protocol for advanced prehospital emergency care of severe head injury. *Ann Anesth Reanim* 2004; 23(2): 109-15.
  21. Emergency Medical Services. *Intermediate Life Support Pre-Hospital Treatment Protocols*. Washington state department of health. July 2000.
  22. Emergency Medical Services. *Pre-Hospital Treatment Protocols*. Massachusetts department of public health. Jan 2004.

- 
23. Hebb MO, Clarke DB, Tallon JM. Development of a provincial guideline for the acute assessment and management of adult and pediatric patients with head injuries. *Can J Surg* 2007; 50(3): 187-94.
  24. Roudsari BS, Nathens AB, Cameron P, Civil I, Gruen RL, Koepsell TD, et al. International comparison of prehospital trauma care systems. *Injury* 2007; 38(9): 993-1000.
  25. Liberman M, Mulder D, Lavoie A, Denis R, Sampalis JS. Multicenter Canadian study of prehospital trauma care. *Ann Surg* 2003; 237(2): 153-60.

