

Pain Control by Ketamine in Combat Situation; Consideration and Outcomes

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Abstract : Background: Pain management is essential to surmounting multi-injured people in an overcrowded emergency setting. Its role would be more apparent when the physician encounters a mass casualty in a war zone or even a military prehospital. Having sedative and analgesic properties, rapid onset and offset effects, and maintaining the cardiovascular and respiratory contain are the main reason for selecting Ketamine as a good choice in the war zone. Methods: In a prospective interventional study in a war zone, we have selected and followed two groups of casualties for pain management. All were men with an average age of 26.6 ± 8 y/o and 27.5 ± 7 y/o in A and B groups, respectively. Group A received only Ketamine and Group B received Ketamine and diazepam. Results: This study showed that all of the injured patients who received Ketamine had experienced some agitation, and they may finally need benzodiazepines for sedation, but in group B that received benzodiazepine before or simultaneous with Ketamine, the agitation was significantly reduced. (P Value ≤ 0.05) Conclusion: Various factors may affect pain score and perception; patients' culture, mental health, previous drug usage, and addiction could alter the pain score in similar situations. It seems that the significant agitation is due to catecholamine release in stressful Moments of the battlefield. Accordingly, this situation could be exacerbated due to ketamine properties. Nonetheless, as a good choice in the war zone, Ketamine is now recommended to combine with benzodiazepines for procedural sedation and analgesia (PSA).

Keywords : battlefield, ketamine, benzodiazepine, pain control

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