A study on police bean bag injuries in a pork model

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Introduction: Currently law enforcement agencies in 10 countries have been granted approval for the use of police bean bag. The need for "less lethal" weapon to control violent suspects is under hot discussion. The manufacturer acknowledges that this weapon will only cause bruises, skin abrasions and minor injuries so as to incapacitate the violent suspect. The objective of this study was to see the degree of trauma produced by shooting police bean bag at different firing ranges. Materials and methods: Fresh pork was chosen for this test. The pork was subjected to police bean bag challenge at two different firing ranges. A standard shotgun (Model Remington 870P) was used. In order to test the degree of trauma to different parts of the body, regions with small amount of soft tissue (pig rib) and large amount of soft tissue (pig thigh) were selected. Each region would receive challenge of police bean bag at three and five meters range shot. The above test was repeated with heavy clothing covering the pork. Results: It was shown that all shots of police bean bag could produce injuries, ranging from minor indentation to laceration of soft tissues. The degree of trauma was greatly diminished if the target had been protected by heavy clothing. Moreover, the trauma produced on rib region was more severe than that of the thigh region. The larger volume of soft tissue, the better absorption of kinetic energy was expected and resulted in lesser degree of injuries. Conclusion: Although police bean bag can still produce injuries, there is great potential for bean bag technology as this is an alternative to deadly force. Both suspects and law enforcement agencies can benefit from this less lethal technology as police bean bag clearly causes fewer fatal injuries and death than traditional bullets. (Hong Kong j.emerg.med. 2003;10:124-129)

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