Oral Abstracts

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MANAGEMENT OF NERVE AGENTS POISONING ROLE OF FIELD TRIAGE KIT AND FIELD ADMINISTERED ANTIDOTES

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Inhalation exposure to nerve agents results in respiratory failure with death ensuing within minutes in the absence of antidote administration. On the other hand, percutaneous exposure to persistent nerve agents such as VX produces largely asymptomatic casualties for several hours before casualties succumbed to its effects. The uncertainty in type of nerve agent exposure poses a challenge in mass casualties triage as observed in the 1995 Tokyo Sarin attack. The large influx of casualties within initial hours of the incident compounded the challenge on clinical triage. The current diagnostic assay to support clinical triage relies on monitoring for substantial depreciation in blood acetylcholinesterase levels. This approach requires individual's pre-exposure value for meaningful interpretation of results, which limits its application for differentiating casualties without clear signs of intoxication. To circumvent this challenge, DSO developed a novel field triage kit that detects for nerve agents regenerated in-situ from inhibited blood. This presentation describes the ability of this field- deployable kit for screening masses of asymptomatic casualties with suspected exposure to various types of nerve agents. The presentation will also provide a brief comparison on the relative roles of anticholinergic and oximes reactivators during the acute phase of resuscitating severely intoxicated casualties.