MEETING ABSTRACTS

BIOSCAVENGERS AND THE MEDICAL MANAGEMENT CHAIN

T. M. Mann and H. Rice
Presenting Author: T. M. Mann, tmann@dstl.gov.uk

Toxicology, Trauma and Medicine Group, CBR Sciences, Dstl Porton Down, SP4 0JQ, UK

Survival and recovery from nerve agent poisoning requires a continuum of medical care, starting with a rapid initial response followed by continued support though the medical chain. In a military context, research into counter-measures to nerve agent poisoning has traditionally focussed on first-aid, pretreatment and prophylaxis; however, there are many opportunities to optimise the management of nerve agent-poisoned casualties.

We have previously demonstrated the efficacy of bioscavenger as a post-exposure, pre-symptomatic therapy in guinea-pigs poisoned by VX via the dermal route. Data will be presented on the efficacy of bioscavenger before, on and after the appearance of signs of poisoning and the influence of introducing a delay between initial treatment and the administration of bioscavenger. Treatment regimens including bioscavenger offered near-complete protection against the VX challenge, in the absence of continuing supportive therapy.

The potential for bioscavenger use within the treatment chain could range from pre-exposure to hospital use. Inclusion of bioscavenger has potential to reduce the level of medical care, monitoring and therapeutic intervention for casualties that have been poisoned percutaneously. The results will be discussed in the context of the UK military medical management chain and the considerations and constraints of the operational environment.