reproductive, pregnancy, foetal and infant outcomes in an exclusively Australian military cohort.

Biography

Miss Rachelle Warner is a toxicologist and environmental risk assessor educated at the University of Sydney and RMIT University in Melbourne. She is currently undertaking her PhD at the University of Adelaide School of Medicine under Prof Michael Davies and A/Prof Susan Neuhaus studying the effects of deployment on the reproductive health of ADF veterans. Her research interests are broad – she was an associate investigator on the Jet Fuel Exposure Syndrome Study and has previously studied the effects of jet fuel and noise on the central auditory nervous system, the effects of prenatal exposure to toluene on foetal development and the genotoxic and mutagenic effects of herbal medicines.

Short Term Gains v Long Term Problems: The Use of NSAIDs in Lower Limb Injuries

Mr Joshua Sherwood[1,2]

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Abstract

Lower limb injuries are a common presentation for military health care providers to manage. These injuries are often managed with non-steroidal anti-inflammatory drugs (NSAIDs) due to their demonstrated effective analgesic properties, which allow an earlier return to activity and work. NSAIDs are not a benign treatment; their negative effects on the gastrointestinal tract are well documented; however, their benefits are often considered to outweigh their harms. NSAIDs effect on the injuries they are used on are not well understood. Animal studies have shown that NSAIDs inhibit tendon and tendon to bone healing, especially when used during the inflammatory phase of tissue repair. Most of the human research is in the area of bone healing and demonstrates that NSAIDs appear to interrupt bone remodelling. There was one study on ankle sprains, which demonstrated that NSAIDs result in an earlier return to work, though they also result in decreased range of motion and increased joint instability. The literature suggests that there are potentially long-term negative consequences to NSAID use in lower limb injuries. This creates an ethical dilemma for health care providers; should short-term gains trump a potential long-term increase in injury risk. This is especially difficult for military providers as they are often under pressure to return soldiers, sailors and airmen to duty as expediently as possible with potential career limiting results for the patients if they do not. The data should help guide these decisions; there is little evidence that NSAIDs do not have negative effects on healing and some evidence that they do. There is also evidence that alternative analgesics such as paracetamol are equally effective for some injuries. NSAIDs should be avoided until further studies are able to demonstrate the long-term effects of short-term use. If they must be used, they should be withheld until after the inflammatory phase. The overarching goal should always be to do what is in the best interests of the patient.

Biography

Corporal Joshua Sherwood is a passionate and motivated RNZAF Flight Medic with an interest in exercise medicine and emergency and austere medicine, especially in the aeromedical retrieval setting. He joined the RNZAF in 2010, graduating the New Zealand Defence Health School as a Medic in 2013, before training a Flight Medic and completing his Bachelor of Health Science in Paramedicine over the following years. He continues his pursuit of evidence-based practice and hopes to conduct research in the exercise medicine field in the future.

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Summer in the Tropics: A Non-Seasonal Influenza Outbreak Case Study

LTCOL Stewart Holmes-Brown[1]

1 *Joint Health Unit North Queensland*

Abstract

In the summer of 2019, long before the seasonal influenza vaccine was widely available, Lavarack Barracks was the site of a non-seasonal influenza outbreak. Initially confined to one unit, over just a week, the number of suspected (and subsequently confirmed) cases rapidly accelerated, threatening all resident units at Lavarack and necessitating the involvement of numerous stakeholders.

This presentation will outline the lifecycle of the outbreak, and the actions taken at various stages