Parachute use to prevent death and major trauma related to gravitational challenge: Systematic review of randomised controlled trials

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FROM ABSTRACT

Objectives: To determine whether parachutes are effective in preventing major trauma related to gravitational challenge.

Design: Systematic review of randomised controlled trials.

Data sources: Medline, Web of Science, Embase, and the Cochrane Library databases; appropriate internet sites and citation lists.

Study selection: Studies showing the effects of using a parachute during free fall.

Main outcome measure: Death or major trauma, defined as an injury severity score > 15.

Results: We were unable to identify any randomised controlled trials of parachute intervention.

Conclusions: As with many interventions intended to prevent ill health, the effectiveness of parachutes has not been subjected to rigorous evaluation by using randomised controlled trials.

Advocates of evidence-based medicine have criticised the adoption of interventions evaluated by using only observational data. We think that everyone might benefit if the most radical protagonists of evidence based medicine organised and participated in a double blind, randomised, placebo controlled, crossover trial of the parachute.

THESE AUTHORS ALSO NOTE:

The parachute is used to reduce the risk of orthopaedic, head, and soft tissue injury after gravitational challenge, typically in the context of jumping from an aircraft.

"The perception that parachutes are a successful intervention is based largely on anecdotal evidence."

These authors undertook a systematic review of randomised controlled trials of parachutes. They excluded studies that had no control group. The major outcomes studied were death or major trauma. "Our search strategy did not find any randomised controlled trials of the parachute."

"It is a truth universally acknowledged that a medical intervention justified by observational data must be in want of verification through a randomised controlled trial."

"Parachutes reduce the risk of injury after gravitational challenge, but their effectiveness has not been proved with randomised controlled trials."

We accept that common sense might be applied when considering the potential risks and benefits of interventions.

"We feel assured that those who advocate evidence based medicine and criticise use of interventions that lack an evidence base will not hesitate to demonstrate their commitment by volunteering for a double blind, randomised, placebo controlled, crossover trial."

COMMENTS FROM DAN MURPHY

Every now and then I am asked if an opinion I express has been supported by a double blind, randomized, placebo controlled clinical trial. The point of this satirical article is that not everything can or needs be investigated with the holy grail of assessment protocols. Sometimes, common sense must be used. It is obvious that there are no double blind, randomized, placebo controlled clinical trials of the effectiveness of parachutes.

Chiropractors and others often base their clinical protocols on anecdotal evidence. As these authors note, "The perception that parachutes are a successful intervention is based largely on anecdotal evidence."