

Journal Watch

Editor: Dr Mike Townend

A meta-analysis of the use of rifaximin to prevent travellers' diarrhoea.

Ng QX, CYX, Shin D, Venkatanarayanan N, Chan HW. *Journal of Travel Medicine*, Volume 24, Issue 5, 1 September 2017, tax025, <https://doi.org/10.1093/jtm/tax025>

The authors reviewed five double-blind, placebo-controlled, randomized trials with a total of 879 subjects and found significant reduction in risk of travellers' diarrhoea with rifaximin use compared to placebo with similar rates of adverse events were reported for the rifaximin and placebo group and no clinically significant or serious adverse events related to rifaximin use. They concluded that there is good evidence supporting the use of rifaximin as a chemoprophylactic agent against travellers' diarrhoea, especially in individuals who are at high risk of severe complications from acute infectious diarrhoea and that Rifaximin has an excellent tolerability/safety profile and efficacy against E coli and even enteroinvasive bacteria such as *Campylobacter*.

Comment

The use of antimicrobial agents for the treatment and/or prophylaxis of travellers' diarrhoea is, to say the least, controversial in view of the emergence of resistant strains. It appears from this review that rifaximin is a suitable alternative to other agents that are used more widely in the treatment of other types of infection when prophylaxis is indicated.

Single visit rabies pre-exposure priming induces a robust anamnestic antibody response after simulated post-exposure vaccination: results of a dose-finding study

Jonker EFF, Visser LG. *Journal of Travel Medicine*, Volume 24, Issue 5, 1 September 2017, tax033, <https://doi.org/10.1093/jtm/tax033>

The objective of this study was to determine the optimal pre-exposure priming regimen that would require only a single visit to the clinic in order to produce an adequate memory response in all subjects 1 year later. 30 volunteers were randomly assigned to 4 groups: 1 standard dose intramuscular dose of purified Vero cell rabies vaccine, Verorab, and 1/5th, 2/5th or 3/5th- fractional intradermal dose in a single visit. All subjects received a simulated rabies post-exposure prophylaxis (D0, D3) 1 year later. 28 out of 30 subjects (93%) seroconverted 1 month after primary vaccination; 1 subject in the 1-dose IM arm and 1 in the 1/5th-fractional dose ID arm did not. After 1 year, all 30 subjects mounted a booster response within 7

days after simulated PEP, with the highest titres found in the single dose IM group.

The authors concluded that priming with a single dose of rabies vaccine was sufficient to induce an adequate anamnestic antibody response to rabies PEP in all subjects 1 year later, even in those in whom the antibody threshold of 0.5IU/ml was not reached after primary vaccination.

Comment

What this study appears to show is that if a traveller is unable to attend for a full conventional course of pre-exposure rabies vaccination, a single dose of vaccine is able to produce an adequate response to post-exposure prophylaxis up to a year later. What it does not demonstrate is whether or not such a response can be produced over a longer period than a year.