

ORIGINAL PAPER

The therapeutic effect of *Tarentula cubensis* extract (*Theranekron*[®]) in foot-and-mouth disease in cattle: a randomised trial in an endemic setting

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Background: Foot-and-mouth disease (FMD) is a contagious viral disease of ruminant animals. Eradication of disease in western countries is by slaughter of infected and in contact animals but this is not possible in endemic countries. There is no standard treatment for FMD in endemic countries, but anti-inflammatory drugs and mild disinfectant and protective dressing to inflamed areas to prevent secondary infection is recommended.

Method: A randomised controlled clinical trial of a homeopathic preparation of *Tarentula cubensis* (*Theranekron*[®]) was conducted during an outbreak of FMD in cattle in Iran. A single subcutaneous injection of *Theranekron*[®] was used as sole treatment in 50 infected animals (treatment group). The control group comprised 15 infected animals treated with standard medication including: daily injection of flunixin meglumine and oxytetracycline and daily dressing of lesions with 4% sodium carbonate. Systemic and local signs were recorded over 14 days.

Results: Rectal temperature in treatment group subsided to normal range within 1 day of homeopathic treatment, and was significantly lower in test group than in control group on several successive days ($P < 0.05$). Healing of inflamed mucosal areas and appetite score of the treatment was significantly better than control during first 3 days of treatment ($P < 0.05$).

Conclusion: It appears that *Theranekron*[®] is effective for treatment of systemic and local signs of FMD-infected cattle. Further research is justified. *Homeopathy* (2012) 101, 159–164.

Keywords: Foot-and-mouth disease; Cattle; *Tarentula cubensis*; *Theranekron*; Randomised trial; Iran

Introduction

Foot-and-mouth disease (FMD) is a highly contagious viral disease of all cloven-footed animals and is endemic in Africa, Asia, South America and parts of Europe.^{1,2} Foot-and-mouth disease virus (FMDV) is an aphthovirus

(family Picornaviridae) with seven major serotypes: A, O, C, SAT1, SAT2, SAT3 and Asia1. There are a number of immunologically and serologically distinct subtypes with different degrees of virulence, especially within the A and O types. There can be great changes in antigenicity between developing serotypes.¹ After an incubation period of 3–6 days the disease begins with fall in milk yield and high fever (40–41°C), accompanied by severe apathy and painful stomatitis. Vesicles and bulla appear on the buccal mucosa, dental pads, tongue as well as cleft and coronet of feet.^{2,3} In enzootic countries where a slaughter policy is not

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