

Vaccination against ovine footrot in lactating ewes has only a transient effect on milk production.

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INTRODUCTION

A multivalent inactivated vaccine against ovine footrot (Footvax[®], MSD Animal Health) is indicated for immunization of sheep against footrot caused by *Dichelobacter nodosus*.

The need of a non-restrictive claim on lactating ewes becomes obvious to reduce the use of antibiotics, to avoid milk discard in relationship with milk antibiotic residues and minimise footrot impact on animal welfare.

OBJECTIVE

The aim of the study was to assess the immediate impact of vaccination against footrot in lactating ewes on their milk production.

MATERIALS AND METHODS

Forty-four lactating ewes were included and randomised (milk production) in one farm with no history of footrot.

Vaccinated group (n=22): vaccinated subcutaneously with the inactivated multivalent footrot vaccine (Footvax[®], MSD Animal Health) on D0 and D28.

Non-vaccinated control group (n=22): received a saline solution on the same days.

During the period following the vaccine injections, the milk production was individually measured daily for 42 days after the first injection.

Vaccination against ovine footrot (Footvax[®], MSD Animal Health) in lactating ewes was associated with transient milk drop which was very moderate compared to potential footrot related negative consequences such as economic impact, extra antimicrobial use and extra labour.



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RESULTS

Impact of 1st administration of the vaccine (D0):

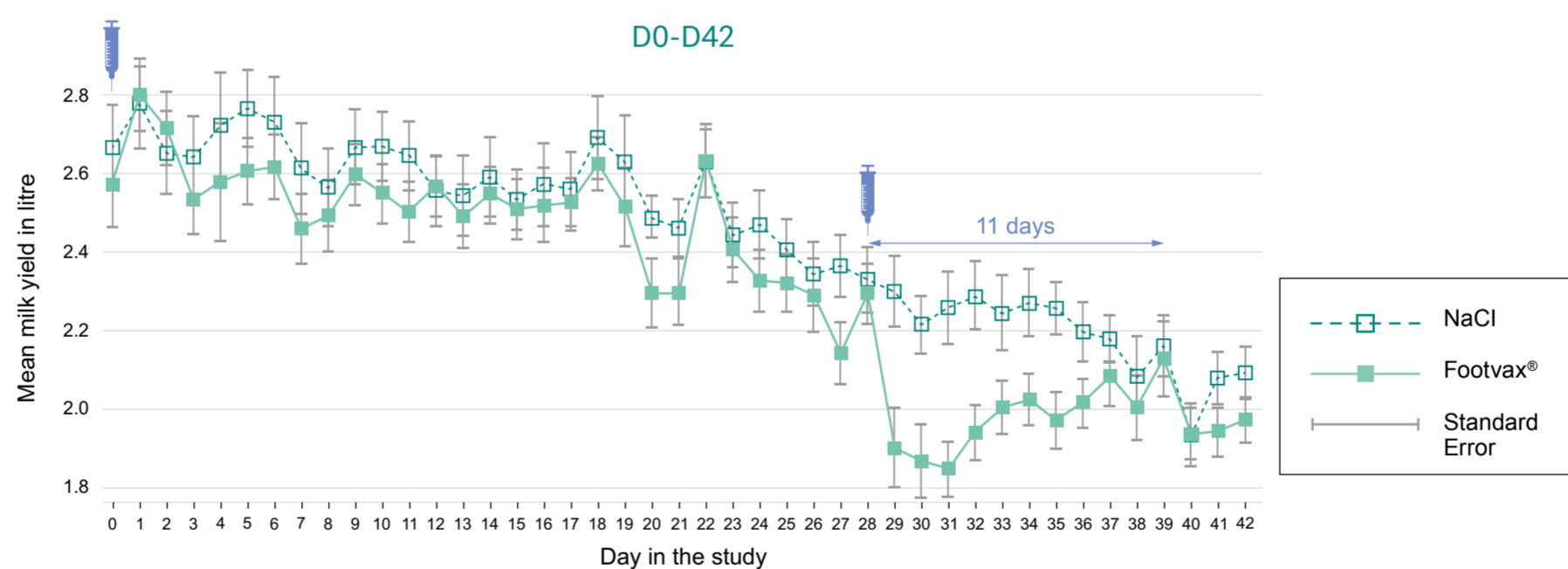
Cumulative milk yield by ewe (L/Ewe) was 2.9% lower in the vaccinated group (38.6 ± 4.9 L and 39.8 ± 6.1 L respectively) from 0 to 14 days after vaccination.

Impact of 2nd administration of the vaccine (D28):

There was a significant decrease in milk yield of 8.8% in the vaccinated group compared to the NaCl group from D28 till D42. The milk yield fully recovered 11 days after vaccination (Fig 1).

The 2nd vaccination is not commonly done in lactating ewes, as the basic repeated vaccination schedule is normally given to lambs at a younger age.

FIGURE 1. Mean daily milk yield per ewes in animals vaccinated against footrot and in unvaccinated controls. Vaccination timing marked with a syringe symbol.



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