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Trend of tested and slaughtered cattle for bovine tuberculosis in Iran during 2000–2014

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ARTICLE INFO

Article history:

Received 26 September 2016

Accepted 1 October 2016

Available online xxxx

Keywords:

Bovine

Control

Tuberculosis

ABSTRACT

Objective/Background: Bovine tuberculosis is one of the zoonotic diseases and important in terms of both public health and its impact on the decrease in animal products and heavy economic losses. Consequently, its control is warranted. The key in controlling bovine tuberculosis is to test and slaughter the infected cows. In this method, animals >3 months of age undergo a comparative tuberculin test, and the positive cases are sent to a slaughterhouse. This study reviews the trend of coverage process of testing and slaughtering of infected cows in Iran during 2000–2014 to evaluate the bovine tuberculosis control in this period.

Methods: In the current study, the data related to the control program of bovine tuberculosis and domestic animal population in Iran were taken from the Agriculture Ministry. Next, the yearly percentage of the tested cows and the proportion of positive cows to tested cows were calculated, and the process was drawn.

Results: The results show that the coverage of a tuberculin testing process has been constant. The lowest percentage of test coverage was in 2005 with 11.8%, and the highest percentage of test coverage was in 2008 with 19.2%. On average, 15.7% of cows underwent the program of tuberculin test over this period. The results showed that the proportion of positive cases to tested cows increased in 2008 and 2009, and subsequently decreased in the following years. In addition, 0.13% of tested cases in this period were positive.

Conclusion: The results of this study show that the coverage of a tuberculin testing process has been constant during this period. If more animals were covered by the program, more positive cases would have been detected and removed; this will have better effect in controlling the tuberculosis. The proportion of positive tests showed that it had been increasing in 2008 and 2009, and subsequently decreasing, which indicates decreased prevalence and efficacy of the bovine tuberculosis control program in the cattle herd that underwent the tuberculin test in these years.

Conflicts of interest

The authors have no conflicts of interest to declare.

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Peer review under responsibility of Asian African Society for Mycobacteriology.

<http://dx.doi.org/10.1016/j.ijmyco.2016.10.008>