

April 22-23, 2019
Athens, GreeceArch Clin Microbiol 2019, Volume:10
DOI: 10.4172/1989-8436-C1-018

ISOLATION AND IDENTIFICATION OF *MYCOBACTERIUM* FROM CAPTURED CATS BELONGING TO TUBERCULOSIS INFECTED FARMS

Khashaiar Mansouri¹ and Nader Mosavari²¹Islamic Azad University-Garmsar Branch, Iran²Razi Vaccine and Serum Research Institute-AREEO, Iran

Background & Aim: Bovine tuberculosis is one of the most important zoonotic diseases in Bovidae. Humans and animals that transit to the farm can transfer *Mycobacterium* to the cattle. Hence, the aim of this study is to evaluate the possible role of cats in transferring the *Mycobacterium* infection in dairy farms.

Methods: From a dairy cattle farm with more than 20% infection of *Mycobacterium*, seven cats were captured and their gastric juice cultured in the LJ and LG medium. The acid-fast staining of the isolates prepared to identify *Mycobacterium* and PCRs were carried out afterwards.

Results: Five out of seven cultures were positive in direct smear by acid fast staining and in PCR-16SrRNA, which indicates that the above-mentioned isolates belong to the *Mycobacterium* genus. Also, positive PCR-IS6110 confirmed that the isolate species are identified as *Mycobacterium tuberculosis* complex. Currently, we are conducting sequencing for the exact identification of these isolates.

Conclusion: Animals such as mice and cats that live in the farm can harbour *Mycobacterium*. In this study, it has been proven that cats certainly transfer *Mycobacterium* to the cattle farms.

khashaiar.mansouri.dvm@gmail.com