

Surveillance of tuberculosis in free ranging tigers of Madhya Pradesh

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ABSTRACT: The present study was conducted on the free ranging tigers of Madhya Pradesh covering Kanha Tiger Reserve, Bandhavgarh Tiger Reserve and Panna Tiger Reserve. The biological samples of blood, rectal swabs and tissue samples were collected from free ranging tigers and screened for tuberculosis based on acid fast staining, rapid TB Ab test and PCR. Polymerase Chain Reaction (PCR) was performed using IS6110 (*Mycobacterium tuberculosis complex*) and pncA gene (*Mycobacterium bovis*) and IS6110 (*Mycobacterium bovis*) primers on DNA extracted from blood. All the biological samples collected from free range tigers were found negative for tuberculosis, which might be due to scientific health management and steps initiated for prevention of this disease in big cats of Madhya Pradesh.

Key Words: Free ranging tigers, tuberculosis, PCR, *Mycobacterium* sp., acid fast bacilli.