

HUMAN THELAZIASIS FROM ZUNYI, CHINA: A CASE REPORT

Minghui Zheng^{1-7**}, Lingjun Wang^{1,7**}, Bing Jiang⁸, Xiaohong Ren¹, Yujuan Shen^{2-6*}
and Hui Liu^{1,7*}

¹Department of Parasitology, Zunyi Medical University, Zunyi; ²National Institute of Parasitic Diseases, Chinese Center for Disease Control and Prevention, Shanghai; ³Institute for Global Health, Chinese Center for Tropic Diseases Research, Shanghai Jiao Tong University School of Medicine, Shanghai; ⁴Key Laboratory of Parasite and Vector Biology, MOH, Shanghai; ⁵WHO Collaborating Centre for Tropical Diseases, Shanghai; ⁶National Center for International Research on Tropical Diseases, Ministry of Science and Technology, Shanghai; ⁷Key Characteristic Laboratory of Gene Testing and Therapy, Education Department of Guizhou Province; ⁸Department of Ophthalmology, the Affiliated Hospital, Zunyi Medical University, Zunyi, PR China

Abstract. Human thelaziasis has not been previously reported from Zunyi, Guizhou Province, China. We report here the case of thelaziasis from Zunyi, China. A 72-year-old male, who did farming in the mountains with poor sanitary conditions, and owned one raised dog, reported to the doctor with complaints of foreign body sensation, and occasionally some black object moving in front of the left eye. He had removed two thread-like worms from the left eye with his finger the week before coming to the hospital. Ophthalmologic examination revealed several thread-like worms moving in the outer canthus of his left eye. A total of 10 worms were found and retrieved. The worms were morphologically identified as *Thelazia callipaeda* (*T. californiensis*) and confirmed by mitochondrial *cox1* gene sequencing. Gene sequencing revealed to the worms have a novel haplotype not previously described. Thelaziasis due to *T. callipaeda* can infect humans in Zunyi, China. Physicians should be alerted to include thelaziasis as the possible cause of ocular infections in differential diagnosis.

Keywords: Human thelaziasis, *cox1* gene, human case, Zunyi

*Correspondence: Yujuan Shen, National Institute of Parasitic Diseases, Chinese Center for Disease Control and Prevention, Shanghai, 200025, PR China.

Tel: +86 (021) 64735258; Fax: +86 (021) 64376308;
E-mail: amyshyj12@163.com

Hui Liu, Department of Parasitology, Zunyi Medical University, Zunyi, 563000, PR China.

Tel: +86 (0851) 28643412; Fax: +86 (0851) 28642444; E-mail: liuhui191112@sina.com

Note: **These two authors contributed equally to this work.