

Unsheathed blood microfilaria

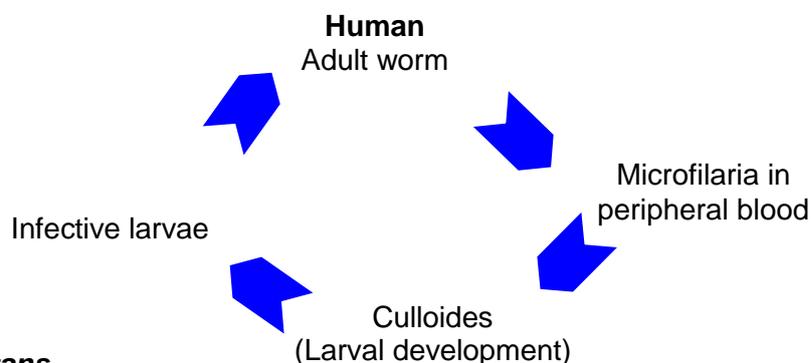
Introduction

Members of the genus *Mansonella* are filarial nematodes which rarely cause serious disease. However, they can be found in geographical areas where *Wuchereria bancrofti*, *Loa loa* and *Onchocerca volvulus* also occur and therefore must be differentiated from these pathogenic microfilariae. Unlike the pathogenic blood filariae, they do not exhibit periodicity. The characteristics of the three species are summarised in the table below.

Morphology

The 2 *Mansonella* sp. found in the blood species are unsheathed and can be differentiated by the position of nuclei in the tail.

Life cycle



Mansonella perstans

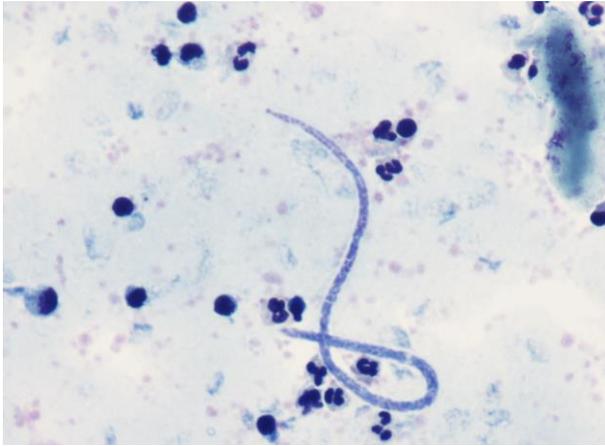
The microfilariae of *M. perstans* were first reported by Manson in 1891 when examining a blood smear from an African patient. Since then it has also been reported in South America. There is little literature associated with the pathology caused by these filarial nematodes thus it is difficult to evaluate their pathogenicity. However pruritis, fever and subcutaneous swellings have been associated with infection of *M. perstans*. The adult worm appears to cause little or no host reaction. Eosinophilia is common.

Mansonella ozzardi

The microfilaria of *M. ozzardi* was first noted by Ozzard in South America. This filarial nematode is confined to the New world and West Indies. Infections caused by *M. ozzardi* are generally symptomless, however lymphadenopathy, arthralgia, fever and eosinophilia have been reported.

Laboratory diagnosis

When filariasis is suspected, a geographical and clinical history helps to determine the most appropriate collection time. Thick and thin blood films can be examined. However this is an insensitive method due to the low microfilaraemia, and larger volumes of blood need to be examined.



Mansonella perstans