

# Mansonella streptocerca

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## *Mansonella streptocerca*



Above: Map showing areas endemic for *Mansonella streptocerca* filariosis. Copyright ITM

Streptocercosis is caused by *Mansonella streptocerca* (formerly *Dipetalonema streptocerca*). This nematode is confined to Central and West Africa. The parasite is transmitted by *Culicoides* midges. It may be a zoonosis as morphologically identical parasites are found in chimpanzees. Adult worms live in the skin. Live worms' cause no lesions but a local inflammatory reaction occurs when they die, with

papules and possibly subsequent fibrosis. There are no eye lesions. Differentiation from onchocerciasis is necessary.

Many infected people are asymptomatic. The most frequent symptom is chronic pruritus. The skin is thickened and there are papules. Hypopigmented patches can occur which must be distinguished from leprosy, endemic treponematoses and onchocerciasis. Lymph nodes can be enlarged.

The microfilariae are found in the skin. Detection is as for onchocerciasis (skin snip, scarification with collection of dermal fluid). In the event of doubt or suspicion of leprosy, a biopsy is useful. DEC causes a Mazzotti reaction as in onchocerciasis.

DEC is micro- and macrofilaricidal for *Mansonella streptocerca*. Ivermectin is highly active against this parasite.

**Table: Overview of characteristics of microfilariae**

Species	Location	Sheath	Period	Length	Tail nucleus
<i>Loa loa</i>	blood	+	Day	275 µm	+ terminal
<i>W. bancrofti</i>	blood	+	Night (periodic strain)	260 µm	-
<i>Brugia malayi</i>	blood	+	Night (periodic strain)	220 µm	+ isolated
<i>Brugia timori</i>	blood	+	Night	290 µm	+ isolated
<i>M. ozzardi</i>	blood	-	-	200 µm	-
<i>M. perstans</i>	blood	-	-	<200 µm	+ double row
<i>M. streptocerca</i>	skin	-	-	210 µm	+ and hook
<i>O. volvulus</i>	skin	-	-	250 µm	-