

# Live 'Baby dance' among the red blood cells

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## DESCRIPTION

A 35-year-old woman presented to outpatients with a 1-week history of high-grade fever and generalised malaise. General and systemic examination was unremarkable. On evaluation, her complete haemogram was within normal limits; however peripheral smear revealed the presence of thread-like larval forms of filaria, belonging to the species *Wuchereria bancrofti*. A wet mount preparation of the centrifuged whole blood sample was done, which demonstrated 'dancing' microfilaria, recorded in real time (see online supplementary video 1).

Dancing adult worms can be visualised within the dilated lymphatic channels on high-resolution ultrasound by their characteristic wriggling type movements, known as the 'filarial dance sign'.<sup>1</sup> A wet mount of blood from a patient with microfilaraemia can demonstrate 'dance sign' of the baby worms under a microscope, identical to the parental wriggling movements. Microfilariae are larval forms, released into the blood from adult female worms inhabiting the regional lymphatic vessels. Circulating microfilariae are taken up by vector mosquitoes, only to infect another individual and develop as adult worms in a subsequent

host. Although wet mount preparations are used routinely for the diagnosis of intestinal parasitic infections, such preparations can also be used to see circulating microfilaria, which can be seen up to several months of acquiring infection and serve as a source of infection to others. Various methods like direct wet mount preparation, stained blood smear examination, citrate saponin acid method and modified Knott's method can be used to detect microfilaria.<sup>2</sup> Studies have shown that the efficacy of wet film examination is up to 65% and it is considered superior for microfilaria detection compared to Giemsa stained blood smears. Modified Knott's method demonstrates greater efficacy than the above mentioned methods.<sup>2</sup> A centrifuged wet mount preparation might increase the yield of microfilariae in patients with low parasitaemia, however, in the index case it was done to appreciate the characteristic 'microfilarial dance sign'.

**Contributors** PS drafted the manuscript; PR prepared the wet mount and recorded the video; VV picked up the diagnosis on blood smear; MUSS edited the manuscript.

**Competing interests** None declared.

**Patient consent** Obtained.

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## Learning points

- Wet mount smears of the centrifuged blood sample can also be helpful in diagnosis of filariasis.
- 'Microfilarial dance sign' is the characteristic motility of the larval form and is observed only in wet mount smears.



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