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Answer to July 2020 Photo Quiz

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Answer to Photo Quiz: *Dirofilariasis* Due to *Dirofilaria repens*

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KEYWORDS **dirofilariasis**

The worm was submitted to the parasitology laboratory for identification. A diagnosis of probable dirofilariasis was considered and confirmed by positive PCR and DNA sequencing of the internal transcribed spacer 2 and 5S rRNA intergenic regions (GenBank accession numbers [MK942385](https://doi.org/10.1128/JCM.00470-19) and [MK956952](https://doi.org/10.1128/JCM.00470-19)). Treatment was then stopped, and the patient healed without sequelae. A few months later, no further clinical signs had occurred.

Dirofilaria repens is a mosquito-transmitted nematode. Dirofilariasis is considered an emerging vector-borne parasitic disease occurring mainly around the Mediterranean basin and central Europe (1).

Canids are the definitive host and mosquitoes the intermediate host of this parasite. A human being bitten by an infected mosquito (*Aedes*, *Anopheles*, *Culex*, *Mansonia*) is an accidental host. In most cases, transmitted larvae die quickly, leading to self-resolved asymptomatic infection. In some cases, a single worm develops and is responsible for symptoms. *D. repens* usually manifests as a migrating worm in subcutaneous tissue, causing itching and irritation (2). It can reach many body areas, especially the eyes, but generally without sequelae (3). After migration, the worm forms a granulomatous nodule and dies after 1 or 2 years.

Diagnosis is usually made by histopathologic analysis of internal morphology and, less frequently, by sequencing after surgical removal of the worm or after biopsy of a nodular mass, and treatment consists of surgical excision (1). In the case we have presented here, no surgical removal was necessary, because the worm (a female adult) exited naturally.

Data availability. Sequences were deposited in GenBank under accession numbers [MK942385](https://doi.org/10.1128/JCM.00470-19) and [MK956952](https://doi.org/10.1128/JCM.00470-19).

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See <https://doi.org/10.1128/JCM.00469-19> in this issue for photo quiz case presentation.

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