
SHORT COMMUNICATION

A case of palpebral dirofilariasis

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PURPOSE. *Dirofilaria repens* infection is the most frequent and widespread dirofilariasis in the world. In Italy subcutaneous dirofilariasis is present especially in Northern-Central areas.

METHODS. A woman with a palpebral lump is presented.

RESULTS. After subcutaneous and muscular décollement, the authors found and removed a parasite. The final diagnosis was subcutaneous parasitosis due to *D. repens*.

CONCLUSIONS. Surgery was both diagnostic and therapeutic. (Eur J Ophthalmol 2005; 15: 407-8)

KEY WORDS. Palpebral dirofilariasis, Zoonoses, Nodular neofomation

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INTRODUCTION

Human dirofilariasis is an increasing zoonosis in Italy. It has been described in several areas of the world such as Latin America and Australia, and it is also present in many Mediterranean countries (1).

Some cases of human subcutaneous dirofilariasis were reported in the past in some Italian areas, especially in Northern-Central areas (2).

The first case of human palpebral dirofilariasis was reported by Abruzzo in 1990 (3).

In this article, we describe a case of palpebral subcutaneous dirofilariasis.

Case report

A 44-year-old woman in good health reported an unpleasant sensation in the upper level of her left eyelid which had started 7 days before. She also reported that previously (about 10 days before) a stray cat had scratched her left hand. She also complained of palpebral swelling and reddening.

On examination, there was slight redness and subedema in the left upper eyelid relative to a small hard-elastic nodular neofomation along the palpebral edge. On further examination a few hours later the same lump had changed position. The next day the patient underwent surgery.

After local anesthesia, we made a 3-cm-long incision in the cune along the palpebral plica of the left eye. After subcutaneous and muscular décollement, an amber-colored hard-elastic nodular neofomation similar to a small rolled up cord became visible (Fig. 1). We found and removed a single worm, and we marked the site for reference with synthetic stitch. The sample was sent to the parasitology branch of the hospital. The final diagnosis was subcutaneous parasitosis due to *Dirofilaria repens*, of female sex, 20 cm long and 0.5 cm wide (Fig. 2).

DISCUSSION

Human subcutaneous dirofilariasis is a somewhat rare infection caused by parasites of the *Dirofilaria* species.



Fig. 1 - Amber-colored hard-elastic nodular neformation similar to a small rolled up cord.



Fig. 2 - *Dirofilaria repens*, of female sex, 20 cm long and 0.5 cm wide.

The transmission of the parasite to man from domestic animals (cats and dogs) is due to mosquitoes of *Culex* or *Aedes* species (vectors). There are several ophthalmic localizations: e.g., the subcutaneous eyelid, the subconjunctiva, the orbit, the intraocular site (4). When the parasitosis is subcutaneous with the consequent appearance of a lump, a differential diagnosis with tumoral and inflammatory palpebral neformations is necessary (5).

To diagnose a parasitosis there are specific serologic tests such as enzyme-linked immunosorbent assay, Western blot, and immuno-enzymatic tests (*Dirofilaria* antibodies) (6); nevertheless in such cases surgical excision is both diagnostic and therapeutic.

After 6 months, the patient has no parasitosis, either cutaneous or general (7). In fact, the genus *D. repens*, as well as *D. immitis*, does not produce microfilariae in man.

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