

THE ISOLATION OF *LEISHMANIA DONOVANI* MON-18, FROM AN AIDS PATIENT IN PORTUGAL : POSSIBLE NEEDLE TRANSMISSION

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Summary :

The spread of HIV infection into leishmaniasis endemic areas has increased the incidence of immunosuppressed patients with kala-azar in Portugal.

The dermatropic zymodeme MON-24 of *Leishmania infantum* has been already isolated from a Portuguese AIDS patient, as in some other Mediterranean countries.

In this paper we report the isolation of *L. donovani* MON-18 from a drug addicted Portuguese patient with clinical visceral leishmaniasis and AIDS, that suggests a mechanically transmitted infection by the use of a shared needle or syringe.

KEY WORDS : AIDS. Kala-azar. Zymodeme MON-18. Portugal. *L. donovani*.

In Portugal *Leishmania infantum* zymodeme MON-1 has been isolated from humans, dogs, foxes (Abranches *et al.*, 1986) and phlebotomine sandflies (Pires *et al.*, 1991). *L. infantum* zymodeme MON-24 was isolated from phlebotomine sandflies (Pires *et al.*, 1991) and from an immunosuppressed patient (Campino *et al.*, 1994).

The spreading of HIV infection into leishmaniasis endemic areas has increased the prevalence of HIV-leishmania co-infections in Portugal and in other Mediterranean countries including Spain, France and Italy (Peters *et al.*, 1990; Altés *et al.*, 1991; Gradoni *et al.*, 1993).

In the present note, we report the isolation of *Leishmania donovani* (MHOM/PT/92/IMT180) from a 28-year old, drug addicted, Portuguese patient with clinical visceral leishmaniasis (VL) and AIDS. He was born in the Alto-Douro region, a well known endemic area of Portugal with the highest prevalence of VL (Abranches *et al.*, 1990). When aged four he moved to Lisbon, another endemic focus of VL. There is no record he ever had left Portugal.

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Résumé : *LEISHMANIA DONOVANI* MON-18 ISOLÉ CHEZ UN SIDÉEN AU PORTUGAL

L'incidence des co-infections *Leishmania*/VIH augmente au Portugal depuis l'extension de l'infection VIH aux zones endémiques de kala-azar dans ce pays.

Leishmania infantum MON-24, zymodème autochtone "dermotrope", a déjà été isolé d'un cas de co-infection *Leishmania*/VIH au Portugal.

Nous rapportons ici un cas similaire dû à *L. donovani* MON-18 chez un toxicomane portugais dont le mode de contamination pourrait s'expliquer par l'usage d'aiguilles ou de seringues contaminées.

MOTS CLES : SIDA. Kala-azar. Zymodème MON-18, Portugal. *L. donovani*.

This *Leishmania* strain was isolated from a bone marrow aspirate in Novy-MacNeal-Nicolle medium, and was identified at the Laboratoire d'Écologie Médicale, Montpellier, by isoenzyme electrophoresis using 15 enzymes¹ (Moreno *et al.*, 1960; Rioux *et al.*, 1990) as *L. donovani* zymodeme MON-18.

MHOM/FR/78/LEM 75 *L. infantum* MON-1 and MHOM/ET/67/HU 3 *L. donovani* were used as reference strains.

This is the first time that *L. donovani* has been isolated in Portugal.

Other strains of *L. donovani* MON-18 have been isolated in Ethiopia and Sudan from both humans and sandflies (Ashford *et al.*, 1992; El-Hassan *et al.*, 1993). Gramiccia *et al.* in 1982 have found in Italy three strains of *L. donovani* MON-18 from two dogs and a fox. These results have been considered as unexpected by Moreno *et al.* (1986).

This isolation of *L. donovani* MON-18 in a Portuguese human case of VL is highly questionable. A possible explanation is that this VL case was associated with a mechanically transmitted infection acquired by the

1. Aspartate aminotransferases 1 and 2 (E.C.2.6.1.1), glucose-phosphate isomerase (E.C.5.3.1.9), phosphoglucomutase (E.C.2.7.5.1), glucose-6-phosphate dehydrogenase (E.C.1.1.1.49), 6-Phosphogluconate dehydrogenase (E.C.1.1.1.44), malic enzyme (E.C.1.1.1.40), malate dehydrogenase (E.C.1.1.1.47), isocitrate dehydrogenase (E.C.1.1.1.42), purine nucleoside phosphorilases 1 and 2 (E.C.3.2.2.1), mannose-phosphate isomerase (E.C.5.3.1.8), fumarate hydratase (E.C.4.2.1.2), diaphorase (E.C.1.6.2.2) and glutamic dehydrogenase (E.C.1.4.1.3).

use of a needle or syringe shared by drug addicted partners as discussed by Alvar *et al.* (1994).

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