**#03-14**

| | |
|---|---|
| **Date:** | October 10, 2003 |
| **To:** | AABB Members |
| **From:** | Roger Y. Dodd, PhD - President<br>Karen Shoos Lipton, JD - Chief Executive Officer |
| **Re:** | Deferral for Risk of Leishmaniasis Exposure |

Due to the risk of transfusion-transmitted leishmania, blood collection facilities should begin deferring prospective donors who have been to Iraq as soon as possible, but no later than October 30, 2003. The deferral is effective for 12 months from the last date of departure from Iraq. The Armed Services Blood Program (ASBP) has reported cases of leishmaniasis among personnel stationed in Iraq and is implementing a 12-month deferral for individuals who have traveled to Iraq. The ASBP has required that this deferral be implemented by all armed services blood collection facilities by October 30, 2003.

Armed services personnel, especially members of the National Guard, often donate regularly at civilian facilities. Therefore, all blood collection facilities should implement this deferral no later than October 30, 2003, for consistency with the ASBP policy. The deferral applies to the whole country of Iraq and includes any civilians, contractors, or other individuals who have visited the country, in addition to service personnel stationed there.

A similar deferral was in effect from August 1, 1990 to January 1, 1993 as a result of Operation Desert Storm. As was the case from 1990 to 1993, blood collection facilities are not required to ask donors specifically whether they have visited Iraq because donors are asked about their travel outside of the United States and Canada in the past 3 years. A response that indicates the donor has traveled to Iraq should be considered reason for a 12-month deferral from the last date of departure from Iraq.

The impact of this deferral on the blood supply is expected to be significant, although it is difficult to project the exact number of donors who will be deferred. The heightened concern over Iraq is a result of the large number of individuals likely to have been exposed to leishmaniasis that are expected to return to the U.S. in the near future.

There are no expectations that look-back will be necessary at this time. In addition, it should be noted that donors of plasma intended for further manufacture need not be similarly deferred.

**Background**

*Leishmania* spp. are intracellular protozoan parasites that cause leishmaniasis. As a group, they cause a spectrum of disease in humans that ranges from simple, self-curing cutaneous lesions to visceral infections associated with parasitism of the reticuloendothelial system[1].

The *Leishmania* spp. are primarily endemic to the subtropical and tropical areas of the Middle East, Mediterranean coast, Asia, Africa, Central America and South America. The parasite is transmitted to humans through the bite of a *Leishmania*-infected sand fly. The incubation period can vary from days to years, but detectable infections generally

appear within months of infection. Thus, the one-year deferral period should be sufficient to prevent the collection of blood from a *Leishmania*-infected, yet asymptomatic donor, in virtually all cases. However, this deferral period does not rule out the possibility of rare, asymptomatic, chronic carriers, although scientific evidence of such carriers remains equivocal.

There have been at least 10 probable or confirmed cases of transfusion-transmitted leishmaniasis reported in the literature[2-9]. Several of these cases occurred more than 40 years ago and the majority of infected recipients were young children or neonates. In all cases where *Leishmania* spp. were identified, infections were attributed to either *L. donovani* or *L. infantum*, which cause visceral disease. In Iraq, leishmaniasis appears in cutaneous and visceral forms that are caused by several species of *Leishmania*. At this time it is unclear what species of *Leishmania* U.S. military personnel have been exposed to in Iraq, but based on the literature and past experience with *L. tropica*, all species should be of concern. *Leishmania tropica* has been proven to survive for at least 25 days in blood products stored under standard conditions[10].

Conditions in Iraq have produced an environment favorable to sand fly reproduction and positive vector monitoring indicates sand flies are infected with *Leishmania* spp. Several cases of leishmaniasis have recently been diagnosed in U.S. armed services personnel deployed to Iraq.

References


1. Herwaldt BL. Leishmaniasis. Lancet 1999;354:1191-9.
2. Magill AJ, Grögl M, Gasser RA, et al. Visceral infection caused by *Leishmania tropica* in veterans of Operation Desert Storm. N Engl J Med 1993;328:1383-7.
3. Chung H-L, Chow H-K, Lu J-P. The first two cases of transfusion kala-azar. Chinese Med J 1948;66:325-6.
4. André R, Brumpt L, Dreyfus B, et al. Cutaneous leishmaniasis, cutaneous-glandular leishmaniasis and transfusional kala-azar. Trop Dis Bull 1958;44:379-81.
5. Kostmann R, Barr M, Bengtsson E, et al. Kala-azar transferred by exchange blood transfusions in two Swedish infants. Proceedings of the Seventh International Congress of Tropical Medicine and Malaria. 1963;2:384.
6. Cohen C, Corazza F, De Mol P, Brasseur D. Leishmaniasis acquired in t Belgium (letter). Lancet 1991;338:128.
7. Mauny I, Blanchot I, Degeilh B, et al. [Visceral leishmaniasis in an infant in Brittany: Discussion on the modes of transmission outside of the endemic zone]. Pediatrie 1993;48:237-9.
8. Cummins D, Amin S, Halil O, et al. Visceral leishmaniasis after cardiac surgery. Arch Dis Child 1995;72:235-6.
9. Singh S, Chaudhry VP, Wali JP. Transfusion-transmitted kala-azar in India. Transfusion 1996;36:848-9.
10. Grögl M, Daugirda JL, Hoover DL, et al. Survivability and infectivity of viscerotropic *Leishmania tropica* from Operation Desert Storm participants in human blood products maintained under blood bank conditions. Am J Trop Med Hyg 1993;49:308-15.

Copyright © 2003 American Association of Blood Banks. All Rights Reserved.
**Terms of Use** | **Privacy Statement**