Preventing strongyloidiasis in the immunosuppressed

Sir,

We are writing this letter in response to the case report "Fatal disseminated strongyloidiasis in patients on immunosuppressive therapy: report of two cases" published in the IJDVL of Jan-Feb 2005.[1] We congratulate the authors for this report.

Recently, there was another report of death due to strongyloidiasis hyperinfection in a leprosy patient on treatment with corticosteroids for a type II lepra reaction.[2] These articles highlight the importance of remembering common as well as often neglected infestations that can potentially cause morbidity and mortality in patients of dermatological disorders and in organ transplant recipients on immunosuppressive therapy.

Strongyloidiasis is endemic in tropical and subtropical countries. It is estimated to affect more than 70 million people worldwide. Its prevalence rates are as high as 40% in certain areas, especially West Africa, the Caribbean, and Southeast Asia, including India. Hence, although strongyloidiasis is not given much importance in India, the search for strongyloidiasis in patients with predisposing factors is important. These predisposing factors include any cause of immunosuppression, e.g. use of immunosuppressive agents, malignancy, HIV infection, collagen vascular disease, diabetes mellitus, malnutrition, and advanced age. In patients who were exposed to the parasite, the likelihood of strongyloidiasis should be carefully assessed before immunosuppressive therapy is started.[3] In a case-control study, corticosteroid users were shown to have 3.3 times greater risk of developing strongyloidiasis.[4] Hyperinfection with strongyloidiasis has a high mortality rate (up to 80%) because the diagnosis is often delayed due to the nonspecific presentation in a patient who is immunocompromised. Most immunocompetent patients have asymptomatic chronic infections causing negligible morbidity.[5]

That strongyloidiasis should be excluded before initiating immunosuppressive therapy is widely known. In Indian leprosy manuals, strongyloidiasis is mentioned as a contraindication for steroid therapy in patients of leprosy. However, the fact that strongyloidiasis should be treated before initiating steroid therapy is not emphasized. In Cambodia, where strongyloidiasis is rife, its national leprosy progamme is considering the inclusion of albendazole in the pre-packed steroid blister packs as it is considered cost effective to treat strongyloidiasis than to screen all leprosy patients for it.[2]

Similarly, the logic of treating patients empirically with albendazole or ivermectin for strongyloidiasis also holds good for other dermatological diseases where long term immunosuppressive therapy is indicated. The recommended dose of albendazole for intestinal strongyloidiasis is 400 mg orally twice daily for 5 days. Ivermectin is the drug of choice for the treatment of strongyloidiasis in the WHO's list of essential drugs, the dose for intestinal infection being 200 mcg/kg per day as a single dose.[6] A single dose of ivermectin produced 94% cure rates in intestinal strongyloidiasis.[7] In strongyloidiasis hyperinfection, although the efficacy of ivermectin is yet to be established, the dose should be repeated on days 2, 15 and 16; it may be necessary to prolong treatment with ivermectin or change to thiabendazole (5 to 7 days or longer).

Strongyloidiasis hyperinfection is rarely reported in leprosy, but this may be due to under-reporting as the diagnosis could be missed.[2] Similarly it may be underreported in patients on immunosuppressive drugs as it can manifest with central nervous system, hematological, gastrointestinal, respiratory or cutaneous involvement. The search and treatment of strongyloidiasis should be made a part of the routine protocol in all immunosuppressed patients and in those in whom immunosuppressive therapy is to be initiated. Such a protocol would prevent the potentially fatal complications of hyperinfection due to an otherwise benign nematode.

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REFERENCES

1. Reddy IS, Swarnalata G. Fatal disseminated strongyloidiasis in patients on immunosuppressive therapy: Report of two cases. Indian J Dermatol Venereol Leprol 2005;71:38-40.
2. Leang B, Lynen L, Tootill R, Griffiths A, Monchy D. Death caused by strongyloidiasis hyperinfection in a leprosy patient on treatment for type II leprosy reaction. Lepr Rev 2004;75:398-403.
3. Tarlow MM, Schwartz RA. Strongyloidiasis. http://www.emedicine.com/derm/topic838.h Last accessed: 15.3.2004
4. Davidson RA, Fletcher RH, Chapman LE. Risk factors for strongyloidiasis, a case control study. Arch Intern Med 1984;144:321-4.
5. Polenakovik H, Polenakovik S. Strongyloidiasis. http://www.emedicine.com/derm/topic838. h last accessed: 15.3.2004.
6. Siddiqui AA Berk SI. Diagnosis of *Strongyloidiasis stercoralis* infection. Clin Infect Dis 2001;33:1040-7.
7. Naquira C, Jimenez G, Guerra JG, Bernal R, Nalin DR, Neu D, *et al*. Ivermectin for human strongyloidiasis and other intestinal infections. Am J Trop Med Hyg 1989;40:304-9.

Wood's lamp: A modified method of examination

Sir,

Wood's lamp is an important diagnostic tool in dermatology. It was invented in 1903 by a Baltimore physicist, Robert W Wood.[1] The first reported use of this lamp was in 1925 for the detection of tinea capitis. It is mainly used in the diagnosis of bacterial infection, fungal infection and pigmentary disorders.

Successful use of Wood's lamp depends on three essentials: a totally dark room, a totally dark-adapted retina and a lamp operating at full power.[2] Although the instrument is simple to use, dermatologists do not routinely use it, mainly because a dark windowless room is required for its use.

To overcome this, a simple modification can be made so that even in illuminated rooms this instrument can