Treatment of visceral leishmaniasis

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Letter to the Editor

I have read Dilber et al.'s paper entitled "Visceral leishmaniasis and Coombs' positive hemolytic anemia: a rare association in an infant treated with liposomal amphotericin B" in the recent issue of the Journal (2002; 44: 354-356).

The authors should be congratulated for their success with liposomal amphotericin B (L-AmB) in the treatment of an infant with visceral leishmaniasis (VL) Cooms' positive hemolytic anemia and marked hypoalbuminuria (1 g/dl).

I agree with the authors statement, "It is an important alternative especially in patient who did not respond to conventional pentavalent antimony therapy given alone or in combination with other agents". But they stated their experience with L-AmB treatment without trying conventional treatment. Therefore I am not in agreement with their belief that "this drug may be the first choice of treatment in VL" with a single case experience.

Conventional pentavalent antimony (PA) has been successfully used by us for VL treatment in more than 156 patients, with ages ranging from 7 months to 8 years, in only one center in our country[1-3]. Twenty-three (15%) of these children were treated with only PA [11 received stibosamine (Neostibosan), 12 were given meglumine antimonite (MA) (Glucantime) and 133 (85%) were treated with MA followed by pentamidine isethionate (PI) every other day, for a total of 15 doses (2.5 mg/kg per dose)]. MA treatment was begun with a dose of 20 mg/kg per day for 3 days, increased to 30 mg/kg per day for 3 days, and then increased to 60 mg/kg per day for 2 weeks (a total of 20 days). With this regimen only 5 patients experienced failure (3.2%) and 6 patients (3.9%) died early, during treatment; 2 of those children died of sepsis most likely due to treatment-related severe leukopenia[4], and the other children died of intercurrent infections. Most of the side effects of MA treatment were not observed in our patients, except for fever and leukopenia in a few cases[4]. Our treatment failure rate (<4%) was lower than that of others (57%) who used the same drug in 20 mg/kg doses or who used interferon gamma (24% failure rate), which is very expensive[5]. Our observations show that the relapse rate would be lower with PI administration[6], and according to Totan et al's[7] experience, most cases of VL could be treated with MA only if appropriate doses are used.

Ragusa et al.[8] used higher doses of MA (100 mg/kg per day for 3 weeks) than ours alone or combined also support that higher doses of MA are better. Since combination of allopurinol with MA is cheaper than of MA+PI treatment, it is therefore more cost effective. Cheaper treatments should be preferred in the treatment of VL because it is more prevalent in economically deprived areas of the world. Expensive treatment should be saved for resistant cases to conventional treatment, if it occurs.

REFERENCES

1. Özsoylu Ş, Treatment of visceral leishmaniasis. Am J Dis Child 1992; 146: 1021 (Letter).
2. Hiçsönmez G, Özsoylu Ş. Kala-azar in childhood: a survey of clinical and laboratory findings and prognosis in 44 childhood cases. Clin Pediatr 1972; 11: 465-467.
3. Hiçsönmez G, Özsoylu Ş. Studies of the anemia of Kala-azar in 68 childhood cases: specific antiparasitic chemotherapy is the most effective treatment. Clin Pediatr 1977; 16: 733-736.
4. Hiçsönmez G, Jam H, Özsoylu Ş. Severe leukopenia during treatment of visceral leishmaniasis. Trans R Soc Trop Med Hyg 1988; 82: 417.
5. Badaro R, Falcoff E, Badaro FS, et al. Treatment of visceral leishmaniasis with pentavalent antimony and interferon gamma. N Engl J Med 1990; 122: 16-21.
6. Özsoylu Ş, Hiçsönmez G. Visceral leishmaniasis. Arch Dis Child 1984; 59: 391 (Letter).
7. Totan M, DağdemirA, Muslu A, Albayrak D. Visceral childhood leishmaniasis in Turkey. Acta Paediatr 2002;