Ivermectin efficacy still imprecise for scables treatment

We thank Steer et al. for their comments.1 We do not agree with the statement that ivermectin was "suboptimally given" in our study.2 Indeed, a second dose of ivermectin was systematically given when a clinical failure was established at day 14, with the exception of the eight patients with a patent aggravation at day 7 who received a second dose earlier (at day 7). Therefore, all the failures observed with ivermectin at day 28 had received two ivermectin doses.

The 29 "bad compliants" with benzyl benzoate had either performed an excessive number of applications of benzyl benzoate (e.g. every day) or had not respected the scheduled periods of application. When considered separately, all except one were cured at day 28. Cases of irritant dermatitis seen in patients treated with benzyl benzoate were always mild.

When several family members were included simultaneously, all were given the same treatment to avoid confusion (i.e. either ivermectin or benzyl benzoate once or twice). On another hand, family members who were not included (the most likely situation) were all prescribed benzyl benzoate, once. Thus, case contacts in

the three arms benefited from identical procedures, with a similar compliance profile (P = 0.7), making asymmetric re-infection between arms unlikely.

We agree that blinding might have improved, to a certain extent, our observations' validity. However, we found it difficult to implement in this context, as it was also the case in three of the four studies cited by Steer et al. Above all, our criteria of cure seemed objective, especially superinfection that clearly occurred more commonly in the ivermectin arm, and this favours strongly a greater efficacy of benzyl benzoate at days 14 and 28 – although it is possible that delayed cures with ivermectin might have been missed.

It is striking that, 16 years after the first promising report on ivermectin efficacy in scabies,³ all the studies reporting high cure rates with that drug had some serious methodological biases,2,4 making its efficacy range in common scabies - noticeably its speed of action - still imprecise. We hope we contributed to fill in that gap. All that, in addition to higher cost and questionable availability of ivermectin, certainly makes benzyl benzoate the first-line treatment of common scabies in Senegal.

Antoine Mahé, Fatimata Ly & Eric Caumes^b

References

- 1. Steer AC, Kearns T, Andrews RM, McCarthy JS, Carapetis JR, Currie BJ. Ivermectin worthy of further investigation. Bull World Health Organ 2009;87:804. doi:10.2471/BLT.09.070540
- 2. Ly F, Caumes E, Ndaw CA, Ndiaye B, Mahé A. Ivermectin versus benzyl benzoate applied once or twice to treat human scabies in Dakar, Senegal: a randomized controlled trial. Bull World Health Organ 2009;87:424-30. PMID:19565120 doi:10.2471/BLT.08.052308
- Glaziou P, Cartel JL, Alzieu P, Briot C, Moulia-Pelat JP, Martin PM. Comparison of ivermectin and benzyl benzoate for treatment of scabies. Trop Med Parasitol 1993;44:331-2. PMID:8134777
- Strong M, Johnstone PW. Interventions for treating scabies. Cochrane Database Syst Rev 2007;3:CD00320.

^a Institut d'Hygiène Sociale, Dakar, Senegal.

^b Hôpital de la Pitié-Salpêtrière, Paris, France.