

To the Editors:

## Hookworm infection as a cause of melaena

The case report by Lamabadasuriya and Perera (1) highlights an unusual manifestation of hookworm infection. However, melaena due to hookworm infection is not as rare as the authors seem to imply, especially in the paediatric age group. A review of infantile hookworm disease in China found that it has been reported in over 500 infants since the 1960s and melaena was the most frequent manifestation (in 75 to 100% of cases) which brought the baby to hospital (2).

There are some unusual features in their case report (1). Firstly, the age of the child: at 2 years, this child is older than those reported in China, nearly all of whom were below 12 months of age, including many who developed disease in the first month of life, perhaps from transmammary transmission. Secondly, the species of parasite: all except one of the Chinese cases were caused by *Ancylostoma duodenale*. This species is said to cause more blood loss and damage to the small intestinal mucosa than *Necator americanus*, the offending parasite in the local case report. Finally, the results of stool examination for helminth ova are most surprising: the initial report was *negative* for hookworm ova, and subsequent examination gave a count of 150 hookworm eggs / gram faeces. This count qualifies for classification only as a light infection, according to WHO criteria (< 2000 epg faeces) (3), and is not in accordance with the endoscopic findings of "a large number of worms

attached to the second part of the duodenal mucosa" (1). Melaena would not have occurred unless there was a sizeable population of adult hookworms present in the child's small intestine. It is unlikely that the low count was due to immaturity of the worm population, for the case history states that the child was at the Lady Ridgeway Hospital for over a month, giving ample time for maturation of female worms to the stage of egg production. The most probable explanation is that the first laboratory reports were incorrect.

This case report serves as a timely reminder that foci of intestinal nematode infections still remain in parts of Sri Lanka where socio-economic conditions are poor and latrines absent. It also emphasises the fact that personnel in Sri Lankan hospital laboratories should be better trained to carry out the simple, inexpensive laboratory tests for stool examination for intestinal nematode ova.

### References

1. Lamabadasuriya S, Perera S. An unusual cause of melaena in a child. *Ceylon Medical Journal* 2003; 48: 27-8.
2. Ye Sen-Hai, Jiang Ze-Xiao, Xu Long-Qi. Infantile hookworm disease in China. A review. *Acta Tropica* 1995; 59: 265-70.
3. Prevention and control of schistosomiasis and soil-transmitted helminthiasis. WHO Technical Report Series No. 912. Geneva, World Health Organisation, 2002, p 33.

Nilanthi de Silva, Department of Parasitology, Faculty of Medicine, University of Kelaniya. (Correspondence: E-mail: nrdes@sltnet.lk. Competing interests: None declared. Received 12 May 2003, accepted 19 May 2003).