To the Editors:

**Hookworm infection as a cause of melaena**

The case report by Lamabadusuriya 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 will 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**


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To the Editors:

**A pilot study of a low cost CLO test**

The preliminary results of a study conducted by us on McNulty’s solution (a cheap alternative to commercial CLO test) at the endoscopy unit, Colombo South Teaching Hospital show a similar pattern with regard to the time taken for a positive result to that conducted by Satarasinghe and others (1). The time taken for biopsies to give a positive result with McNulty’s solution is longer than that determined by McNulty (2). Of the 13 biopsies that gave a positive result with McNulty only 2 were positive within 2 hours, 9 in 6 hours, and 4 within 24 hours. These results persuaded us to carry out the following project to determine the minimal concentration of *Helicobacter pylori* and the time taken according to concentration to initiate a colour change, and to determine if Sri Lankan clinical strains differ from the control strain (NCTC11637) for a positive result by the McNulty urease test.

We took an initial concentration of $5 \times 10^6$ from the strain NCTC11637 and two (as culture is difficult we currently have only this number) clinical isolates from Sri Lanka. A serial dilution of 1 to 10 was done in isotonic saline. A 100 μl of each dilution was inoculated to McNulty solution. Time taken for the solution to undergo a colour change with and without incubation at 37°C was recorded.

The urease test made in our setting (McNulty’s solution) detected the presence of organisms in 5 minutes at $5 \times 10^6$ and within 2 hours at $5 \times 10^8$. However the test became positive only at 12 hours at $5 \times 10^5$. None of the other dilutions, including the negative control became positive even with 24 hours’ observation.

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98 Ceylon Medical Journal
We also observed that the intensity of the colour diminished with the concentration of the organism (visual reading). Incubation at 37°C did not give a faster positive result. Similar results were observed in both the control NCTC strain and in our Sri Lankan clinical isolates.

We concluded that a sufficient colonisation must be present to get positive results quickly as described by McNulty. Incubation for longer periods up to 24 hours may be necessary to detect a positive result if colonisation is low. Further testing with Sri Lankan isolates would enable us to determine if there is a difference in the urease production of local strains when compared to a control strain.

References

N Fernando, Senior Lecturer, Department of Microbiology, D Weerasekera, Senior Lecturer, Department of Surgery, F Meedin and A Bogahawatta, Technicians, Department of Microbiology, Faculty of Medical Sciences, University of Sri Jayewardenepura. (Correspondence: NF, telephone +94 1 7122 206 785, e-mail: neluka@eureka.lk. Competing interests: None declared. Received 21 July 2003, accepted 25 July 2003).

To the Editors:

Salmeterol multicentre asthma research trial (SMART): interim analysis shows increased risk of asthma related deaths

We refer to the paragraph with the above caption in the Ceylon Medical Journal 2003; 48: 30. This summary does not give a complete picture of the findings of the study.

We would like that the following be added. "The interim analysis did not show a statistically significant result for the primary endpoint - a combination of respiratory related deaths or intubations (or ventilatory failure). There was a trend, however, towards increases in asthma related deaths and serious asthma episodes when all patients in the study were considered, though again this did not reach statistical significance. A further analysis of the data suggested that the risk may be greater in African-American patients. Also, further analyses showed that patients not taking inhaled steroids at study entry appeared to have a greater risk for serious outcomes than those who were taking inhaled corticosteroids" (1).

FDA emphasises that based on available data, the benefits of salmeterol (Serevent) for the asthma population continue to outweigh the risks and that the serious adverse events reported in the trial were rare (1). The SMART study reiterates the recommendation that salmeterol should not be prescribed alone. It should always be combined with an inhaled corticosteroid.

Reference

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